

Título	The effect of maternal SARS-CoV-2 infection timing on birth outcomes: a retrospective multicentre cohort study
Autor(es)	Samantha N Piekos, Ryan T Roper, Yeon Mi Hwang, Tanya Sorensen, Nathan D Price, Leroy Hood, Jennifer J Hadlock
Resumo	The impact of maternal SARS-CoV-2 infection remains unclear. In this study, we evaluated the risk of maternal SARS-CoV-2 infection on birth outcomes and how this is modulated by the pregnancy trimester in which the infection occurs. We also developed models to predict gestational age at delivery for people following a SARS-CoV-2 infection during pregnancy.
Referências	PIEKOS, S. N. <i>et al.</i> The effect of maternal SARS-CoV-2 infection timing on birth outcomes: a retrospective multicentre cohort study. The Lancet. Digital health , [United Kingdom], p. S2589750021002508, Jan. 13, 2022. DOI: 10.1016/S2589-7500(21)00250-8. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2589750021002508 . Acesso em: 14 jan. 2022.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900250-8



Título	Risk of serious COVID-19 outcomes among adults with asthma in Scotland: a national incident cohort study
Autor(es)	Ting Shi, Jiafeng Pan, Eleftheria Vasileiou, Chris Robertson, Aziz Sheikh, on behalf of Public Health Scotland and the EAVE II Collaborators
Resumo	There is considerable uncertainty over whether adults with asthma should be offered booster vaccines against SARS-CoV-2 and, if so, who should be prioritised for booster vaccination. We were asked by the UK's Joint Commission on Vaccination and Immunisation to undertake an urgent analysis to identify which adults with asthma were at an increased risk of serious COVID-19 outcomes to inform deliberations on booster COVID-19 vaccines.
Referências	TING, Shi <i>et al.</i> Risk of serious COVID-19 outcomes among adults with asthma in Scotland: a national incident cohort study. The Lancet. Respiratory medicine , [Netherlands], p. S2213260021005439, Jan. 13, 2022. DOI: 10.1016/S2213-2600(21)00543-9. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2213260021005439 . Acesso em: 14 jan. 2022.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900543-9



Título	Prevalence of antibodies against SARS-CoV-2 among pregnant women in Norway during the period December 2019 through December 2020
Autor(es)	Anne Eskild, Lars Morkrid, Siri Beisland Mortensen, Truls Michael Leegaard5
Resumo	We studied SARS-CoV-2 seroprevalence among pregnant women in Norway by including all women who were first trimester pregnant (n=6520), each month from December 2019 through December 2020, in the catchment region of Norway's second largest hospital. We used sera that had been frozen stored after compulsory testing for syphilis antibodies in antenatal care. The sera were analyzed with the Elecsys® Anti-SARS-CoV-2 immunoassay (Roche Diagnostics, Cobas e801). This immunoassay detects IgG/IgM against SARS-CoV-2 nucleocapsid antigen. Sera with equivocal or positive test results were retested with the Liaison® SARS-CoV-2 S1/S2 IgG (DiaSorin), which detects IgG against the spike (S)1 and S2 protein on the SARS-CoV-2 virus. In total, 98 women (adjusted prevalence 1.7%) had SARS CoV-2 antibodies. The adjusted seroprevalence increased from 0.3% (1/445) in December 2019 to 5.7% (21/418) in December 2020. Out of the 98 seropositive women, 36 (36.7%) had serological signs of current SARS-CoV-2 infection at the time of serum sampling, and the incidence remained low during the study period. This study suggests that SARS CoV-2 was present in the first half of December 2019, six weeks before the first case was recognized in Norway. The low occurrence of SARS-CoV-2 infection during 2020, may be explained by high compliance to extensive preventive measures implemented early in the epidemic.
Referências	ESKILD, A. <i>et al.</i> Prevalence of antibodies against SARS-CoV-2 among pregnant women in Norway during the period December 2019 through December 2020. Epidemiology and infection , [United Kingdom], p. 1–9, Jan. 13, 2022. DOI: 10.1017/S0950268822000073. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268822000073/type/journal article . Acesso em: 14 jan. 2022.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/0178544CC4F04FC0A55C7B0BD5F28AB8/S0950268822000073a.pdf/prevalence of antibodies against sarscov2 among pregnant women in norway during the period december 2019 through december 2020.pdf



Título	Management research contributions to the COVID-19: a bibliometric literature review and analysis of the contributions from the Journal of Management & Organization
Autor(es)	Oluremi B. Ayoko , Andrea Caputo, John Mendy
Resumo	The COVID-19 health crisis triggered changes in the workplace. This paper explores the insights from scholarly work published in the Journal of Management and Organization (JMO) and systematizes this body of knowledge to build a scientific overview that looks at how the COVID-19 health crisis and its repercussions may be managed by organizations. We conducted a bibliometric investigation of JMO's most influential papers published from 1995 to June 2020 that offers insights into the management of the COVID-19 crisis. Our bibliometric investigation reveals six clusters: (1) conservation of resources theory, entrepreneurs, gender and work–family conflict; (2) corporate governance, corporate social responsibility and stakeholder salience; (3) family firms, innovation and research methods; (4) creativity, leadership and organizational change; (5) job satisfaction and psychological empowerment; and (6) team performance. We discuss the theoretical and practical implications of our findings.
Referências	AYOKO, O. B.; CAPUTO, A.; MENDY, J. Management research contributions to the COVID-19: a bibliometric literature review and analysis of the contributions from the Journal of Management & Organization. Journal of management & organization, [Australia], p. 1–27, Jan. 10, 2022. DOI: 10.1017/jmo.2021.70. Disponível em: https://www.cambridge.org/core/journals/journal-of-management-and-organization/article/management-research-contributions-to-the-covid19-a-bibliometric-literature-review-and-analysis-of-the-contributions-from-the-journal-of-management-organization/FF5C5A6E305D37EC34ADC587C2A2840F">https://www.cambridge.org/core/journals/journal-of-management-and-organization/article/management-research-contributions-to-the-covid19-a-bibliometric-literature-review-and-analysis-of-the-contributions-from-the-journal-of-management-
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/FF5C5A6E305D37EC34ADC587C2A2840F/S1833367221000705a.pdf/management_research_contributions_to_the_covid19_a_bibliometric_l_iterature_review_and_analysis_of_the_contributions_from_the_journal_of_management_organization.pdf



Título	Knowledge, attitude, practice, behavior and risk perception of COVID-19 pandemic among University Students of Pakistan
Autor(es)	Madeeha Fatima, Aamna Habib , Saira Khan , Muhammad Hammad Butt , Tauqeer Hussain Mallhi, Yusra Habib Khan , Asifa Zaheer , Muhammad Umar Habib , Abdul Qayyum Khan , Muhammad Imran Khan , Azhar Iqbal , Malik Hassan Mehmood, Imran Masood
Resumo	Objective: Coronavirus disease 2019 (COVID-19) pandemic has substantially affected students around the globe due to the closure of educational institutes. However, student involvements and contributions are important in combating the disease for this reason current study was designed to assess the knowledge-attitude-practice (KAP), preventive behavior, and risk perception among university students. Methods: A cross-sectional survey-based study was conducted among university students of Punjab, Pakistan from April 1st to June 30th, 2020. The 68 items questionnaire was used to evaluated responses using statistical approaches (student's t-test, regression-analysis and corelation analysis) by considering p-value <0.05 statistically significant. Results: A total of 503 university students (medical and non-medical) were selected with the majority of participants were females (83%) and 64.5% were of age ranged from 16 to 21 years old. The participants (80%) reported good disease knowledge with a mean score of 12.06 ± 1.75 (p<0.05), which substantially higher among medical students. Most of the respondents (72%) believed that COVID-19 will be effectively controlled through precautionary measures. In correlation subgroup analysis, a significant relationship (p=0.025) between knowledge and positive attitude were indicated. Fear and knowledge of COVID-19 emerged as strong predictors (p<0.001) of preventive behaviors towards disease. Conclusion: This study demonstrated satisfactory knowledge, positive attitudes, and suitable practices among students towards COVID-19. University students can be involved in public education to aid the health authorities in achieving the targets of educational campaigns with maximum population coverage.
Referências	FATIMA, M. <i>et al.</i> Knowledge, attitude, practice, behavior and risk perception of COVID-19 pandemic among University Students of Pakistan. Disaster medicine and public health preparedness, [United States], p. 1–12, Jan. 10, 2022. DOI: 10.1017/dmp.2022.1. Disponível em: https://www.cambridge.org/core/product/identifier/S1935789322000015/type/journal_article . Acesso em: 14 jan. 2022.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/3FE12E8D6F4F840352F637CAFEB596E8/S1935789322000015a.pdf/knowledge_attitude_practice_behavior_and_risk_perception_of_covid1_9_pandemic_among_university_students_of_pakistan.pdf



Título	Does risk perception motivate preventive behavior during a pandemic? A longitudinal study in the United States and China
Autor(es)	Li, Ying Luan, Shenghua Li, Yugang Wu, Junhui Li, Wenqi Hertwig, Ralph
Resumo	Controlling the spread of an infectious disease depends critically on the general public's adoption of preventive measures. Theories of health behavior suggest that risk perceptions motivate preventive behavior. The supporting evidence for this causal link is, however, of questionable validity. The COVID-19 pandemic provides a rare opportunity to examine how risk perceptions, preventive behavior, and the link between them develop in a fast-changing risky environment. In a 4-wave longitudinal study conducted in the United States and China, we found that for Chinese participants, there was little relationship between risk perceptions and preventive behavior. This may be a result of the Chinese government's strict control and containment policies and a collectivistic culture that encourages conforming to norms—both of which limit individuals' nonconformist behavior. For U.S. participants, risk perceptions did motivate preventive behavior in the early stage of the pandemic; however, as time went by and the risk of COVID-19 persisted, preventive behavior also led to perception of higher infection risk, which in turn further motivated preventive behavior. Thus, instead of the presumed unidirectional influence from perception to behavior, our results indicate that the two could mutually reinforce each other. Overall, our findings suggest that risk perceptions—at least in the context of a dynamic health hazard—may only motivate preventive behavior at specific stages and under specific conditions. They also highlight the importance of early interventions in promoting preventive behavior. (PsycInfo Database Record (c) 2021 APA, all rights reserved)
Referências	LI, Ying et al. Does risk perception motivate preventive behavior during a pandemic? A longitudinal study in the United States and China. American psychologist, US, Dec., 2021. DOI: 10.1037/amp0000885. Disponível em: https://psycnet.apa.org/fulltext/2022-16338-001.pdf . Acesso em: 14 jan. 2022.
Fonte	https://psycnet.apa.org/search/display?id=040abd60-7557-11ec-8130-8143cc1e14ce&recordId=10&tab=PA&page=1&display=25&sort=PublicationYearMSSort%20desc,AuthorSort%20asc&sr=1



Título	Omicron variant genome evolution and phylogenetics
Autor(es)	Mahmoud Kandeel, Maged E. M. Mohamed, Hany M. Abd El-Lateef, Katharigatta N. Venugopala, Hossam S. El-Beltagi
Resumo	Following the discovery of the SARS-CoV-2 Omicron variant (B.1.1.529), the global COVID-19 outbreak has resurfaced after appearing to be relentlessly spreading over the past 2 years. This new variant showed marked degree of mutation, compared with the previous SARS-CoV-2 variants. This study investigates the evolutionary links between Omicron variant and recently emerged SARS-CoV-2 variants. The entire genome sequences of SARS-CoV-2 variants were obtained, aligned using Clustal Omega, pairwise comparison was computed, differences, identity percent, gaps, and mutations were noted, and the identity matrix was generated. The phylogenetics of Omicron variants were determined using a variety of evolutionary substitution models. The ultrametric and metric clustering methods, such as UPGMA and neighbor-joining (NJ), using nucleotide substitution models that allowed the inclusion of nucleotide transitions and transversions as Kimura 80 models, revealed that the Omicron variant forms a new monophyletic clade that is distant from other SARS-CoV-2 variants. In contrast, the NJ method using a basic nucleotide substitution model such as Jukes—Cantor revealed a close relationship between the Omicron variant and the recently evolved Alpha variant. Based on the percentage of sequence identity, the closest variants were in the following order: Omicron, Alpha, Gamma, Delta, Beta, Mu, and then the SARS-CoV-2 USA isolate. A genome alignment with other variants indicated the greatest number of gaps in the Omicron variant's genome ranging from 43 to 63 gaps. It is possible, given their close relationship to the Alpha variety, that Omicron has been around for much longer than predicted, even though they created a separate monophyletic group. Sequencing initiatives in a systematic and comprehensive manner is highly recommended to study the evolution and mutations of the virus.
Referências	KANDEEL, M. et al. Omicron variant genome evolution and phylogenetics. Journal of medical virology , [United States], Dec, 2021., Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1002/jmv.27515 . Acesso em: 6 jan. 2022.
Fonte	https://onlinelibrary.wiley.com/doi/10.1002/jmv.27515



Título	Estimating COVID-19 infections, hospitalizations, and deaths following the US vaccination campaigns during the pandemic
Autor(es)	Thomas N. Vilches, Seyed M. Moghadas, Pratha Sah, Meagan C. Fitzpatrick, ; Affan Shoukat, Abhishek Pandey, ; Alison P. Galvani
Resumo	Introduction The COVID-19 pandemic has caused more than 745 000 deaths in the US. However, the toll might have been higher without the rapid development and delivery of effective vaccines. As of October 28, 2021, 69% of 258 million US adults had been fully vaccinated. Quantifying the population impact of COVID-19 vaccination can inform future vaccination strategies. Randomized clinical trials have established individual-level efficacy of authorized vaccines against the original strain, which exceeds 90% in preventing symptomatic and severe disease. However, the population-level effectiveness of the vaccination campaign in the US, in terms of association with reduced infections, hospitalizations, and deaths, is not as well documented, and we evaluated this using a simulation model.
Referências	VILCHES, T. N. <i>et al.</i> Estimating COVID-19 infections, hospitalizations, and deaths following the US vaccination campaigns during the pandemic. JAMA network open , [United States], v. 5, n. 1, p. e2142725, Jan. 11, 2022. DOI: 10.1001/jamanetworkopen.2021.42725. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.42725 . Acesso em: 14 jan. 2022.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787935



Título	Outcomes of SARS-CoV-2—positive youths tested in emergency departments: the global PERN—COVID-19 study
Autor(es)	Anna L. Funk, Todd A. Florin, Nathan Kuppermann, Daniel J. Tancredi, Jianling Xie, Kelly Kim, Mark I. Neuman, Lilliam Ambroggio, Amy C. Plint, Santiago Mintegi, Terry P. Klassen, Marina I. Salvadori, Richard Malley, Daniel C. Payne, Norma-Jean Simon, Adriana Yock-Corrales, Jasmine R. Nebhrajani, Pradip P. Chaudhari, Kristen A. Breslin, Yaron Finkelstein, Carmen Campos, Kelly R. Bergmann, Maala Bhatt, Fahd A. Ahmad, Michael A. Gardiner, Usha R. Avva, Nipam P. Shah, Laura F. Sartori, Vikram J. Sabhaney, Kerry Caperell, Nidhya Navanandan, Meredith L. Borland, Claudia R. Morris, Iker Gangoiti, Viviana Pavlicich, Nirupama Kannikeswaran, Maren M. Lunoe, Pedro B. Rino, April J. Kam, Jonathan C. Cherry, Alexander J. Rogers, Shu-Ling Chong, Laura Palumbo, Carlos M. Angelats, Andrea K. Morrison, Maria Y. Kwok, Sarah M. Becker, Andrew C. Dixon, Naveen Poonai, Michelle Eckerle, Muhammad Wassem, Stuart R. Dalziel, Stephen B. Freedman, for the Pediatric Emergency Research Network-COVID-19 Study Team
Resumo	Severe outcomes among youths with SARS-CoV-2 infections are poorly characterized. To estimate the proportion of children with severe outcomes within 14 days of testing positive for SARS-CoV-2 in an emergency department (ED). This prospective cohort study with 14-day follow-up enrolled participants between March 2020 and June 2021. Participants were youths aged younger than 18 years who were tested for SARS-CoV-2 infection at one of 41 EDs across 10 countries including Argentina, Australia, Canada, Costa Rica, Italy, New Zealand, Paraguay, Singapore, Spain, and the United States. Statistical analysis was performed from September to October 2021. Acute SARS-CoV-2 infection was determined by nucleic acid (eg, polymerase chain reaction) testing. Severe outcomes, a composite measure defined as intensive interventions during hospitalization (eg, inotropic support, positive pressure ventilation), diagnoses indicating severe organ impairment, or death. Among 3222 enrolled youths who tested positive for SARS-CoV-2 infection, 3221 (>99.9%) had index visit outcome data available, 2007 (62.3%) were from the United States, 1694 (52.6%) were male, and 484 (15.0%) had a self-reported chronic illness; the median (IQR) age was 3 (0-10) years. After 14 days of follow-up, 735 children (22.8% [95% CI, 21.4%-24.3%]) were hospitalized, 107 (3.3% [95% CI, 2.7%-4.0%]) had severe outcomes, and 4 children



Resumo	0.51 [95% CI, 0.27-0.98]). Among a subgroup of 2510 participants discharged home from the ED after initial testing and who had complete follow-up, 50 (2.0%; 95% CI, 1.5%-2.6%) were eventually hospitalized and 12 (0.5%; 95% CI, 0.3%-0.8%) had severe outcomes. Compared with hospitalized SARS-CoV-2—negative youths, the risk of severe outcomes was higher among hospitalized SARS-CoV-2—positive youths (risk difference, 3.9%; 95% CI, 1.1%-6.9%).In this study, approximately 3% of SARS-CoV-2—positive youths tested in EDs experienced severe outcomes within 2 weeks of their ED visit. Among children discharged home from the ED, the risk was much lower. Risk factors such as age, underlying chronic illness, and symptom duration may be useful to consider when making clinical care decisions. FUNK, A. L. <i>et al.</i> Outcomes of SARS-CoV-2—positive youths tested in emergency departments: the global PERN–COVID-19 study. JAMA network open, [United States], v. 5, n. 1, p. e2142322, Jan. 11, 2022. DOI: 10.1001/jamanetworkopen.2021.42322. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.42322.
Fonte	Disponível em: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787931



Título	Assessment of administration and receipt of COVID-19 vaccines by race and ethnicity in US federally qualified health centers
Autor(es)	Megan B. Cole, Julia R. Raifman, Sabrina A. Assoumou, June-Ho Kim
Resumo	Introduction Federally qualified health centers (FQHCs) care for low-income, racially and ethnically diverse, medically underserved populations disproportionately affected by COVID-19 and its associated health inequities. As trusted, accessible entities, FQHCs may mitigate further inequities by providing access to COVID-19 vaccination in communities most affected by COVID-19 that have often been least likely to have access to vaccines. The objectives of this study were to examine (1) COVID-19 vaccination administration rates at US FQHCs by race and ethnicity and (2) the racial and ethnic equity in vaccine receipt at FQHCs.
Referências	COLE, M. B. <i>et al.</i> Assessment of administration and receipt of COVID-19 vaccines by race and ethnicity in US federally qualified health centers. JAMA network open , [United States], v. 5, n. 1, p. e2142698, Jan. 10, 2022. DOI: 10.1001/jamanetworkopen.2021.42698. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.42698 . Acesso em: 14 jan. 2022.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787771



Título	Trajectory of viral rna load among persons with incident SARS-CoV-2 G614 infection (Wuhan Strain) in association with COVID-19 symptom onset and severity
Autor(es)	Helen C. Stankiewicz Karita, Tracy Q. Dong, Christine Johnston, Kathleen M. Neuzil, Michael K. Paasche-Orlow, Patricia J. Kissinger, Anna Bershteyn, Lorna E. Thorpe, Meagan Deming, Angelica Kottkamp, Miriam Laufer, Raphael J. Landovitz, Alfred Luk, Risa Hoffman, Pavitra Roychoudhury, Craig A. Magaret, Alexander L. Greninger, Meei-Li Huang, Keith R. Jerome, Mark Wener, Connie Celum, Helen Y. Chu, Jared M. Baeten, Anna Wald, Ruanne V. Barnabas, Elizabeth R. Brown
	The SARS-CoV-2 viral trajectory has not been well characterized in incident infections. These data are needed to inform natural
	history, prevention practices, and therapeutic development. To characterize early SARS-CoV-2 viral RNA load (hereafter referred to
	as viral load) in individuals with incident infections in association with COVID-19 symptom onset and severity. This prospective
	cohort study was a secondary data analysis of a remotely conducted study that enrolled 829 asymptomatic community-based
	participants recently exposed (<96 hours) to persons with SARS-CoV-2 from 41 US states from March 31 to August 21, 2020. Two
Resumo	cohorts were studied: (1) participants who were SARS-CoV-2 negative at baseline and tested positive during study follow-up, and
	(2) participants who had 2 or more positive swabs during follow-up, regardless of the initial (baseline) swab result. Participants
	collected daily midturbinate swab samples for SARS-CoV-2 RNA detection and maintained symptom diaries for 14 days.Laboratory-
	confirmed SARS-CoV-2 infection. The observed SARS-CoV-2 viral load among incident infections was summarized, and piecewise
	linear mixed-effects models were used to estimate the characteristics of viral trajectories in association with COVID-19 symptom
	onset and severity. A total of 97 participants (55 women [57%]; median age, 37 years [IQR, 27-52 years]) developed incident
	infections during follow-up. Forty-two participants (43%) had viral shedding for 1 day (median peak viral load cycle threshold [Ct]
	value, 38.5 [95% CI, 38.3-39.0]), 18 (19%) for 2 to 6 days (median Ct value, 36.7 [95% CI, 30.2-38.1]), and 31 (32%) for 7 days or
	more (median Ct value, 18.3 [95% CI, 17.4-22.0]). The cycle threshold value has an inverse association with viral load. Six
	participants (6%) had 1 to 6 days of viral shedding with censored duration. The peak mean (SD) viral load was observed on day 3 of
	shedding (Ct value, 33.8 [95% CI, 31.9-35.6]). Based on the statistical models fitted to 129 participants (60 men [47%]; median age,



Resumo	38 years [IQR, 25-54 years]) with 2 or more SARS-CoV-2—positive swab samples, persons reporting moderate or severe symptoms tended to have a higher peak mean viral load than those who were asymptomatic (Ct value, 23.3 [95% Cl, 22.6-24.0] vs 30.7 [95% Cl, 29.8-31.4]). Mild symptoms generally started within 1 day of peak viral load, and moderate or severe symptoms 2 days after peak viral load. All 535 sequenced samples detected the G614 variant (Wuhan strain). This cohort study suggests that having incident SARS-CoV-2 G614 infection was associated with a rapid viral load peak followed by slower decay. COVID-19 symptom onset generally coincided with peak viral load, which correlated positively with symptom severity. This longitudinal evaluation of the SARS-CoV-2 G614 with frequent molecular testing serves as a reference for comparing emergent viral lineages to inform clinical trial designs and public health strategies to contain the spread of the virus.
Referências	STANKIEWICZ KARITA, H. C. <i>et al.</i> Trajectory of viral rna load among persons with incident SARS-CoV-2 G614 infection (Wuhan Strain) in association with COVID-19 symptom onset and severity. JAMA network open , [United States], v. 5, n. 1, p. e2142796, Jan. 10, 2022. DOI: 10.1001/jamanetworkopen.2021.42796. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.42796 . Acesso em: 14 jan. 2022.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787768



Título	Optical genome mapping identifies rare structural variations as predisposition factors associated with severe COVID-19.
Autor(es)	Nikhil Shri Sahajpal, Chi-Yu Jill Lai, Alex Hastie, Ashis K Mondal, Siavash Raeisi Dehkordi, Caspar I. van der Made, Olivier Fedrigo, Farooq Al-Ajli, Sawan Jalnapurkar, Marta Byrska-Bishop, Rashmi Kanagal-Shamanna, Brynn Levy, Maximilian Schieck, Thomas Illig, Silviu-Alin Bacanu, Janet S. Chou, Adrienne G. Randolph, Amyn M. Rojiani, Michael C Zody, Catherine A. Brownstein, Alan H. Beggs, Vineet Bafna, Erich D. Jarvis, Alexander Hoischen, Alka Chaubey, Ravindra Kolhe and the COVID19hostgenomesv 9 consortium.
Resumo	Impressive global efforts have identified both rare and common gene variants associated with severe COVID-19 using sequencing technologies. However, these studies lack the sensitivity to accurately detect several classes of variants, especially large structural variants (SVs), which account for a substantial proportion of genetic diversity including clinically relevant variation. We performed optical genome mapping on severely-ill COVID-19 patients to identify rare/unique SVs as decisive predisposition factors associated with COVID-19. We identified 7 SVs involving genes implicated in two key host-viral interaction pathways: innate immunity and inflammatory response, and viral replication and spread in 9 patients, of which SVs in STK26 and DPP4 genes are the most intriguing candidates. This study is the first to systematically assess the potential role of SVs in the pathogenesis of COVID-19 severity and highlights the need to evaluate SVs along with sequencing variants to comprehensively associate genomic information with inter-individual variability in COVID-19 phenotypes.
Referências	SAHAJPAL, N. S. <i>et al.</i> Optical genome mapping identifies rare structural variations as predisposition factors associated with severe COVID-19. iScience , [Netherlands], p. 103760, Jan. 10, 2022. DOI: 10.1016/j.isci.2022.103760. Disponível em: https://www.cell.com/iscience/abstract/S2589-0042(22)00030-X . Acesso em: 14 jan. 2022.
Fonte	https://www.cell.com/action/showPdf?pii=S2589-0042%2822%2900030-X



Título	Immunity to SARS-CoV-2 up to 15 months after infection
Autor(es)	Harold Marcotte, Antonio Piralla, Fanglei Zuo, Likun Du, Irene Cassaniti, Hui Wan, Makiko Kumagai-Braesh, Juni Andréll, Elena Percivalle, Josè Camilla Sammartino, Yating Wang, Stelios Vlachiotis, Janine Attevall, Federica Bergami, Alessandro Ferrari, Marta Colaneri, Marco Vecchia, Margherita Sambo, Valentina Zuccaro, Erika Asperges, Raffaele Bruno, Tiberio Oggionni, Federica Meloni, Hassan Abolhassani, Federico Bertoglio, Maren Schubert, Luigi Calzolai, Luca Varani, Michael Hust, Yintong Xue, Lennart Hammarström, Fausto Baldanti, and Qiang Pan-Hammarström
Resumo	Information concerning the longevity of immunity to SARS-CoV-2 following natural infection may have considerable implications for durability of immunity induced by vaccines. Here, we monitored the SARS-CoV-2 specific immune response in COVID-19 patients followed up to 15 months after symptoms onset. Following a peak at day 15-28 post-infection, the IgG antibody response and plasma neutralizing titers gradually decreased over time but stabilized after 6 months. Compared to G614, plasma neutralizing titers were more than 8-fold lower against variants Beta, Gamma and Delta. SARS-CoV-2-specific memory B and T cells persisted in the majority of patients up to 15 months although a significant decrease in specific T cells, but not B cells, was observed between 6 and 15 months. The antiviral specific immunity especially memory B cells in COVID-19 convalescent patients is long-lasting, but some variants of concern may at least partially escape the neutralizing activity of plasma antibodies.
Referências	MARCOTTE, H. <i>et al.</i> Immunity to SARS-CoV-2 up to 15 months after infection. iScience , [Netherlands], p. 103743, Jan. 6, 2022. DOI: 10.1016/j.isci.2022.103743. Disponível em: https://www.cell.com/iscience/abstract/S2589-0042(22)00013-X . Acesso em: 14 jan. 2022.
Fonte	https://www.cell.com/action/showPdf?pii=S2589-0042%2822%2900013-X



Título	Understanding the implications of SARS-CoV-2 re-infections on immune response milieu, laboratory tests and control measures against COVID-19
Autor(es)	Jelili Olaide Mustapha, Idris Nasir Abdullahi, Odunayo O.R. Ajagbe , Anthony Uchenna Emeribe, Samuel Ayobami Fasogbon, Solomon Oloche Onoja, Charles Egede Ugwu, Chikodi Modesta Umeozuru, Folake Olubunmi Ajayi, Wudi Natasha Tanko, Pius Omoruyi Omosigho, Abdulmumuni Samuel Aliyu, Halima Ali Shuwa, Justin Onyebuchi Nwofe, Amos Dangana , Ovye Alaba , Peter Elisha Ghamba, Yakubu Ibrahim, Dorcas Aliyu , Olawale Sunday Animasaun , Nkechi Blessing Ugboaja, Mala Alhaji Baba Mallam , Sharafudeen Dahiru Abubakar , Maijidda Saidu Aminu , Hadiza Yahaya , Silifat Oyewusi
Resumo	Several months after the emergence of severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), cases of re-infection after recovery were reported. The extent and duration of protective immunity after SARS-CoV-2 infection is not fully understood. As such, the possibility of re-infection with SARS-CoV-2. Furthermore, cases of re-infection were mainly due to different variants or mutant SARS-CoV-2. Following the fast and pandemicscale spread of COVID-19, mutations in SARS-CoV-2 have raised new diagnostic challenges which include the redesign of the oligonucleotide sequences used in RT-PCR assays to avoid potential primer—sample mismatches, and decrease sensitivities. Since the initial wave of the pandemic, some regions had experienced fresh outbreaks, predisposing people to be susceptible to SARS-CoV-2 re-infection. Hence, this article sought to offer detailed biology of SARS-CoV-2 re-infections and their implications on immune response milieu, diagnostic laboratory tests and control measures against COVID-19.
Referências	MUSTAPHA, J. O. <i>et al.</i> Understanding the implications of SARS-CoV-2 re-infections on immune response milieu, laboratory tests and control measures against COVID-19. Heliyon , [United Kingdom], v. 7, n. 1, p. e05951, Jan. 9, 2021. DOI: 10.1016/j.heliyon.2021.e05951. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2405844021000566 . Acesso em: 14 jan. 2022
Fonte	https://www.cell.com/action/showPdf?pii=S2405-8440%2821%2900056-6



Título	COVID-19 Vaccine Acceptance is associated with Vaccine Hesitancy, Perceived Risk and Previous Vaccination Experiences
Autor(es)	İlknur Dolu, Zeynep Turhan, Hacer Yalnız Dilcen
Resumo	Objective: This study examines the factors associated with the willingness to get the coronavirus vaccine among individuals aged 18 and above. Methods: This cross-sectional study was conducted in Turkey. The participants aged 18 and older were recruited between December 2020 and January 2021 through conventional social media sites. Snowball sampling was used. An anonymous questionnaire consisted of demographics, vaccination experiences, and perceived risk of coronavirus disease. Results: 1202 women and 651 men were included in the data analysis. Findings showed that demographics, vaccinations experience, and perceived risk of getting COVID-19 were explained 37% of the variance in people's willingness to get the COVID-19 vaccination according to hierarchical logistic regression. Furthermore, increasing age, being male, acquiring positive information about COVID-19 vaccines, having a lower level of vaccine hesitancy, the high level of worry about the COVID-19 and low level of perceptions of the possibility of becoming infected by the COVID-19 were the main predictors of COVID-19 vaccine willingness. Conclusions: Factors affecting adults' willingness to be inoculated with COVID-19 vaccines were related to demographics, vaccination experiences, and perceived risk of getting COVID-19. We recommend that public health authorities and practitioners should consider these multiple factors regarding vaccine confidence to achieve herd immunity.
Referências	DOLU, İ.; TURHAN, Z.; YALNIZ DILCEN, H. COVID-19 Vaccine acceptance is associated with vaccine hesitancy, perceived risk and previous vaccination experiences. Disaster medicine and public health preparedness, [United States], p. 1–23, Dec. 23, 2021. DOI: 10.1017/dmp.2021.370. Disponível em: https://www.cambridge.org/core/journals/disaster-medicine-and-public-health-preparedness/article/covid19-vaccine-acceptance-is-associated-with-vaccine-hesitancy-perceived-risk-and-previous-vaccination-experiences/6C0DC1C6B30766A6DB85CF2E343AEBD7. Accesso em: 6 jan. 2022.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/6C0DC1C6B30766A6DB85CF2E343AEBD7/S1935789321003700a.pdf/covid19_vaccine_acceptance_is_associated_with_vaccine_hesitancy_p_erceived_risk_and_previous_vaccination_experiences.pdf



Título	Spatial and temporal effects on SARS-CoV-2 contamination of the healthcare environment
Autor(es)	Matthew J. Ziegler, Emily Reesey, Michael Z. David, Brendan J. Kelly
Resumo	Background:The spatial and temporal extent of SARS-CoV-2 environmental contamination has not been precisely defined. We sought to elucidate contamination of different surface types and how contamination changes over time. Methods: We sampled surfaces longitudinally within COVID-19 patient rooms, performed quantitative RT-PCR for the detection of SARS-CoV-2 RNA, and modeled distance, time, and severity of illness on the probability of detecting SARS-CoV-2 using a mixed-effects binomial model. Results: The probability of detecting SARS-CoV-2 RNA in a patient room did not vary with distance. However, we found that surface type predicted probability of detection, with floors and high-touch surfaces having the highest probability of detection (floors odds ratio (OR) 67.8 (95% CrI 36.3 to 131); high-touch elevated OR 7.39 (95% CrI 4.31 to 13.1)). Increased surface contamination was observed in room where patients required high-flow oxygen, positive airway pressure, or mechanical ventilation (OR 1.6 (95% CrI 1.03 to 2.53)). The probability of elevated surface contamination decayed with prolonged hospitalization, but the probability of floor detection increased with duration of the local pandemic wave. Conclusions: Distance from patient's bed did not predict SARS-CoV-2 RNA deposition in patient rooms, but surface type, severity of illness, and time from local pandemic wave predicted surface deposition.
Referências	ZIEGLER, M. J. <i>et al.</i> Spatial and temporal effects on SARS-CoV-2 contamination of the healthcare environment. Infection control and hospital epidemiology , [United Kingdom], p. 1–16, Dec. 27, 2021. DOI: 10.1017/ice.2021.530. Disponível em:



Título	Comparison of four different threshold values of shock index in predicting mortality of COVID-19 patients
Autor(es)	Rohat Ak, Fatih Doğanay
Resumo	Objective: The object of this study was to examine the accuracy in pre-hospital shock index (SI) for predicting intensive care unit (ICU) requirement and 30-day mortality among from COVID-19 patients transported to the hospital by ambulance. Method: All consecutive patients who were the age ≥18 years, transported to the emergency department (ED) by ambulance with a suspected or confirmed COVID-19 in the pre-hospital frame were included in the study. Four different cut-off points were compared (0.7, 0.8, 0.9, and 1.0) to examine the predictive performance of both the mortality and ICU requirement of the SI. The receiver operating characteristic (ROC) curve and the area under the curve (AUC) was employed to evaluate each cut-off value discriminatory for predicting 30-day mortality and ICU admission. Results: The total of 364 patients was included in this study. The median age in the study population was 69 (55-80), of which 196 were men and 168 were women. AUC values for 30-day mortality outcome were calculated as 0.672, 0.674, 0.755, and 0.626, respectively, for threshold values of 0.7, 0.8, 0.9 and 1.0. ICU admission was more likely for the patients with pre-hospital SI> 0.9. Similarly, the mortality rate was higher in patients with pre-hospital SI> 0.9. Conclusion: Early triage of COVID-19 patients will ensure efficient use of healthcare resources. The SI could be a helpful, fast and powerful tool for predicting mortality status and ICU requirements of adult COVID-19 patients. It was concluded that the most useful threshold value for the shock index in predicting the prognosis of COVID-19 patients is 0.9.
Referências	AK, R.; DOĞANAY, F. Comparison of four different threshold values of shock index in predicting mortality of COVID-19 patients. Disaster medicine and public health preparedness , [United States], p. 1–15, Dec. 23, 2021. DOI: 10.1017/dmp.2021.374. Disponível em: https://www.cambridge.org/core/product/identifier/S1935789321003748/type/journal_article . Acesso em: 6 jan. 2022.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/1C3CBD193C429E38A77DA2DE985DCF69/S1935789321003748a.pdf/comparison_of_four_different_threshold_values_of_shock_index_in_p_redicting_mortality_of_covid19_patients.pdf



Título	Initial impacts of the COVID-19 pandemic on sexual and reproductive health service use and unmet need in Britain: findings from a quasi-representative survey (Natsal-COVID)
Autor(es)	Emily Dema, Jo Gibbs, Soazig Clifton, Andrew J Copas, Clare Tanton, Julie Riddell, Raquel Bosó Pérez, David Reid, Chris Bonell, Magnus Unemo, Catherine H Mercer, Kirstin R Mitchell, Pam Sonnenberg, Nigel Field
Resumo	The COVID-19 pandemic has affected sexual and reproductive health (SRH) service use and unmet need, but the impact is unknown. We aimed to determine the proportion of participants reporting sexual risk behaviours, SRH service use and unmet need, and to assess remote sexually transmitted infection (STI) testing service use after the first national lockdown in Britain.
Referências	DEMA, E. <i>et al.</i> Initial impacts of the COVID-19 pandemic on sexual and reproductive health service use and unmet need in Britain: findings from a quasi-representative survey (Natsal-COVID). The Lancet. Public health , [United Kingdom], v. 7, n. 1, p. e36–e47, Jan. 1, 2022. DOI: 10.1016/S2468-2667(21)00253-X. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S246826672100253X . Acesso em: 6 jan. 2022.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2468-2667%2821%2900253-X



Título	COVID-19 deaths helped drive largest drop in US life expectancy in more than 75 years
Autor(es)	Joan Stephenson
Resumo	Mortality rates for US residents 15 years or older increased sharply in 2020, fueled by nearly 351 000 deaths attributed to COVID-19 during the year. As a result, average US life expectancy at birth declined by nearly 2 years from that in 2019, according to a data brief from the Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS). The NCHS report, an analysis of finalized data collected from the nation's death certificates, noted that 3 383 729 resident deaths were registered in the US, nearly 529 000 more deaths than in 2019. The analysis showed that the average life expectancy for the US population in 2020 was 77.0 years, a decrease of 1.8 years from 2019 and the largest 1-year decline in more than 75 years.
Referências	STEPHENSON, J. COVID-19 deaths helped drive largest drop in US life expectancy in more than 75 Years. JAMA health forum, [United States], v. 3, n. 1, p. e215286, Jan. 4, 2022. DOI: 10.1001/jamahealthforum.2021.5286. Disponível em: https://doi.org/10.1001/jamahealthforum.2021.5286 . Acesso em: 6 jan. 2022.
Fonte	https://jamanetwork.com/journals/jama-health-forum/fullarticle/2787892



Título	The intensifying threat of COVID-19 among first nations people of Australia: making up for lost time
Autor(es)	Lyndon Reilly, Mick Adams, Susan J. Rees
Resumo	Australia reached a tragic milestone on August 29, 2021, with the first COVID-19 death among the First Nations people. Since then, the SARS-CoV-2 Delta variant has infected First Nations people at twice the rate of other Australians. By mid-October 2021, there were an additional 12 deaths, more than 4500 cases, and 550 hospitalized among the First Nations people. A major concern is that Australia's states and territories will emerge from lockdown, with the expected surge in cases, when only 47% of Indigenous people (≥16 years old) have received 2 doses of an mRNA vaccine (vs 74% of the general population).
Referências	REILLY, L.; ADAMS, M.; REES, S. J. The Intensifying Threat of COVID-19 Among First Nations People of Australia: Making Up for Lost Time. JAMA health forum , [United States], v. 2, n. 12, p. e214356, Dec. 30, 2021. DOI: 10.1001/jamahealthforum.2021.4356. Disponível em: https://doi.org/10.1001/jamahealthforum.2021.4356 . Acesso em: 6 jan. 2022.
Fonte	https://jamanetwork.com/journals/jama-health-forum/fullarticle/2787659



Título	Feasibility of SARS-CoV-2 surveillance testing among children and childcare workers at German day care centers: a nonrandomized controlled trial
Autor(es)	Johannes Forster, Andrea Streng, Paul Rudolph, Viktoria Rücker, Julia Wallstabe, Sandra Timme, Franziska Pietsch, Katrin Hartmann, Maike Krauthausen, Dipl Julia Schmidt, Timo Ludwig; David Gierszewski, Thomas Jans, Geraldine Engels, Benedikt Weißbrich, Marcel Romanos, ; Lars Dölken, Peter Heuschmann, Christoph Härtel, Ildikó Gágyor, Marc Thilo Figge, Oliver Kurzai, Johannes Liese, for the Wü-KiTa-CoV Study Group
Resumo	Closure of day care centers has been implemented globally to contain the COVID-19 pandemic but has negative effects on children's health and psychosocial well-being. To investigate the feasibility of surveillance among children and childcare workers and to model the efficacy of surveillance on viral spread prevention. This nonrandomized controlled trial was conducted at 9 day care centers in Wuerzburg, Germany, from October 2020 to March 2021. Participants included children attending day care, childcare workers, and household members. Participating day care centers were assigned to different surveillance modules in a nonrandomized feasibility study. A mathematical model for SARS-CoV-2 spread in day care centers was developed to identify optimal surveillance. Modules 1, 2, and 3 involved continuous surveillance of asymptomatic children and childcare workers by SARS-CoV-2 polymerase chain reaction testing of either midturbinate nasal swabs twice weekly (module 1) or once weekly (module 2) or self-sampled saliva samples twice weekly (module 3). Module 4 involved symptom-based, on-demand testing of children, childcare workers, and their household members by oropharyngeal swabs. All participants underwent SARS-CoV-2 antibody status testing before and after the sampling period. Questionnaires on attitudes and perception of the pandemic were administered in weeks 1, 6, and 12. Mathematical modeling was used to estimate SARS-CoV-2 spread in day care centers. The primary outcomes were acceptance of the respective surveillance protocols (feasibility study) and the estimated number of secondary infections (mathematical modeling). Of 954 eligible individuals (772 children and 182 childcare workers), 592 (62%), including 442 children (median [IQR] age, 3 [2-4] years; 214 [48.6%] female) and 150 childcare workers (median [IQR] age, 29 [25-44] years; 129 [90.8%] female) participated in the surveillance. In total, 4755 tests for SARS-CoV-2 detected 2 infections (1 childcare worker and 1 adult



Fonte
Referências
Resumo



Título	Association of birth during the COVID-19 pandemic with neurodevelopmental status at 6 months in infants with and without in utero exposure to maternal SARS-CoV-2 infection
Autor(es)	Lauren C. Shuffrey, Morgan R. Firestein, Margaret H. Kyle, Andrea Fields, Carmela Alcántara, Dima Amso, Judy Austin, Jennifer M. Bain, Jennifer Barbosa, Mary Bence, Catherine Bianco, Cristina R. Fernández, Sylvie Goldman, Cynthia Gyamfi-Bannerman, Violet Hott, Yunzhe Hu, Maha Hussain, Pam Factor-Litvak, Maristella Lucchini, Arthur Mandel, Rachel Marsh, Danielle McBrian, Mirella Mourad, Rebecca Muhle, Kimberly G. Noble, Anna A. Penn, Cynthia Rodriguez, Ayesha Sania, Wendy G. Silver, Kally C. O'Reilly, Melissa Stockwell, Nim Tottenham, Martha G. Welch, Noelia Zork, William P. Fifer, Catherine Monk, Dani Dumitriu
Resumo	Associations between in utero exposure to maternal SARS-CoV-2 infection and neurodevelopment are speculated, but currently unknown. To examine the associations between maternal SARS-CoV-2 infection during pregnancy, being born during the COVID-19 pandemic regardless of maternal SARS-CoV-2 status, and neurodevelopment at age 6 months. A cohort of infants exposed to maternal SARS-CoV-2 infection during pregnancy and unexposed controls was enrolled in the COVID-19 Mother Baby Outcomes Initiative at Columbia University Irving Medical Center in New York City. All women who delivered at Columbia University Irving Medical Center with a SARS-CoV-2 infection during pregnancy were approached. Women with unexposed infants were approached based on similar gestational age at birth, date of birth, sex, and mode of delivery. Neurodevelopment was assessed using the Ages & Description of the Sampital Sampit



Resumo	cohort, infants born during the pandemic had significantly lower scores on gross motor (mean difference, -5.63; 95% CI, -8.75 to
	-2.51; F1,267 = 12.63; P<.005), fine motor (mean difference, -6.61 ; 95% CI, -10.00 to -3.21 ; F1,267 = 14.71; P < .005), and
	personal-social (mean difference, -3.71 ; 95% CI, -6.61 to -0.82 ; F1,267 = 6.37; P<.05) subdomains in fully adjusted models. In this
	study, birth during the pandemic, but not in utero exposure to maternal SARS-CoV-2 infection, was associated with differences in
	neurodevelopment at age 6 months. These early findings support the need for long-term monitoring of children born during the
	COVID-19 pandemic.
	SHUFFREY, L. C. et al. Association of birth during the COVID-19 pandemic with neurodevelopmental status at 6 months in infants
	with and without in utero exposure to maternal SARS-CoV-2 infection. JAMA pediatrics , [United States], p. e215563, Jan. 4, 2022.
	DOI: 10.1001/jamapediatrics.2021.5563. Disponível em: https://doi.org/10.1001/jamapediatrics.2021.5563 . Acesso em: 6 jan.
Referências	2022.
Fonte	https://jamanetwork.com/journals/jamapediatrics/fullarticle/2787479



Título	Lottery-based incentives and COVID-19 vaccination rates in the US
Autor(es)	Anica C. Law, Daniel Peterson, Allan J. Walkey, Nicholas A. Bosch
Resumo	On May 12, 2021, Ohio announced a lottery system incentivizing residents to receive COVID-19 vaccinations; several US states subsequently introduced similar programs. Although analysis of vaccination rates from Ohio suggested that lottery-based incentives were not associated with increased vaccination rates, responses to lottery programs across other states are unclear. In this study, we assessed changes in COVID-19 vaccination rates across US states with lottery-based vaccine incentives.
Referências	LAW, A. C. <i>et al.</i> Lottery-based incentives and COVID-19 vaccination rates in the US. JAMA internal medicine , [United States], Jan. 4, 2022. DOI: 10.1001/jamainternmed.2021.7052. Disponível em: https://doi.org/10.1001/jamainternmed.2021.7052 . Acesso em: 6 jan. 2022.
Fonte	https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2787782



Título	Characteristics and outcomes of hospitalized patients in South Africa during the COVID-19 Omicron wave compared with previous waves
Autor(es)	Caroline Maslo, Richard Friedland, Mande Toubkin, Rpaeds; Anchen Laubscher, Teshlin Akaloo, Boniswa Kama
Resumo	On November 24, 2021, a SARS-CoV-2 variant of concern, Omicron (B.1.1.529), was identified in South Africa as responsible for a fourth wave of COVID-19. The high number of spike mutations has raised concerns about its ability to evade vaccine and spread. We assessed hospitalized patients with a positive SARS-CoV-2 test result during the fourth wave compared with previous waves.
Referências	MASLO, C. <i>et al.</i> Characteristics and outcomes of hospitalized patients in South Africa during the COVID-19 Omicron wave compared with previous waves. JAMA , [United States], Dec. 30, 2021. DOI: 10.1001/jama.2021.24868 . Disponível em: https://doi.org/10.1001/jama.2021.24868 . Acesso em: 6 jan. 2022.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2787776



Título	Belief in having had COVID-19 linked with long COVID symptoms
Autor(es)	Anita Slomski
Resumo	People who thought they'd been infected with SARS-CoV-2 had more persistent symptoms than those whose infections were confirmed by antibody testing in a recent study.Researchers analyzed survey data and serology results from 26 823 adults in France. They found no relationship between the participants' belief about whether they'd had COVID-19 and their antibody test results from blood samples collected between May and November 2020. In fact, about half of participants who believed that they'd had COVID-19 tested negative for SARS-CoV-2 antibodies. False-negative results were unlikely to have influenced the associations substantially, according to the authors.
Referências	SLOMSKI, A. Belief in having had COVID-19 linked with long COVID symptoms. JAMA , [United States], v. 327, n. 1, p. 26, Jan. 14, 2022. DOI: 10.1001/jama.2021.23318. Disponível em: https://doi.org/10.1001/jama.2021.23318 . Acesso em: 6 jan. 2022.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2787741



Título	[Production_in_progress]
	COVID-19 vaccination uptake amongst ethnic minority communities in England: a linked study exploring the drivers of differential
	vaccination rates
	Charlotte Hannah Gaughan, Cameron Razieh, Kamlesh Khunti, Amitava Banerjee, Yogini V Chudasama, Melanie J Davies, Ted Dolby,
Autor(es)	Clare L Gillies, Claire Lawson, Evgeny M Mirkes, Jasper Morgan, Karen Tingay, Francesco Zaccardi, Thomas Yates, Vahe Nafilyan
	Despite generally high coronavirus disease 2019 (COVID-19) vaccination rates in the UK, vaccination hesitancy and lower take-up
	rates have been reported in certain ethnic minority communities. Methods: We used vaccination data from the National
	Immunisation Management System (NIMS) linked to the 2011 Census and individual health records for subjects aged ≥40 years (n =
Resumo	24 094 186). We estimated age-standardized vaccination rates, stratified by ethnic group and key sociodemographic characteristics,
Resultio	such as religious affiliation, deprivation, educational attainment, geography, living conditions, country of birth, language skills and
	health status. To understand the association of ethnicity with lower vaccination rates, we conducted a logistic regression model
	adjusting for differences in geographic, sociodemographic and health characteristics. Results: All ethnic groups had lower age-
	standardized rates of vaccination compared with the white British population, whose vaccination rate of at least one dose was 94%
	(95% CI: 94%–94%). Black communities had the lowest rates, with 75% (74–75%) of black African and 66% (66–67%) of black
	Caribbean individuals having received at least one dose. The drivers of these lower rates were partly explained by accounting for
	sociodemographic differences. However, modelled estimates showed significant differences remained for all minority ethnic
	groups, compared with white British individuals. Conclusions: Lower COVID-19 vaccination rates are consistently observed amongst
	all ethnic minorities.



Referências	GAUGHAN, Charlotte Hannah <i>et al.</i> COVID-19 vaccination uptake amongst ethnic minority communities in England: a linked study exploring the drivers of differential vaccination rates. Journal of public health , [United Kingdom], Jan. 6, 2022. DOI: 10.1093/pubmed/fdab400. Disponível em: http://fdslive.oup.com/www.oup.com/pdf/production in progress.pdf. Acesso em: 6 jan. 2022.
Fonte	https://academic.oup.com/jpubhealth/advance-article/doi/10.1093/pubmed/fdab400/6498223?searchresult=1



Título	Predicting death from COVID-19 using pre-existing conditions: implications for vaccination triage
Autor(es)	Shujie Xiao, Neha Sahasrabudhe, Samantha Hochstadt, Whitney Cabral, Samantha Simons, Mao Yang, David E Lanfear, L Keoki Williams
Resumo	Introduction: Global shortages in the supply of SARS-CoV-2 vaccines have resulted in campaigns to first inoculate individuals at highest risk for death from COVID-19. Here, we develop a predictive model of COVID-19-related death using longitudinal clinical data from patients in metropolitan Detroit. Methods: All individuals included in the analysis had a laboratory-confirmed SARS-CoV-2 infection. Thirty-six pre-existing conditions with a false discovery rate p<0.05 were combined with other demographic variables to develop a parsimonious prediction model using least absolute shrinkage and selection operator regression. The model was then prospectively validated in a separate set of individuals with confirmed COVID-19. Results: The study population consisted of 15 502 individuals with laboratory-confirmed SARS-CoV-2. The main prediction model was developed using data from 11 635 individuals with 709 reported deaths (case fatality ratio 6.1%). The final prediction model consisted of 14 variables with 11 comorbidities. This model was then prospectively assessed among the remaining 3867 individuals (185 deaths; case fatality ratio 4.8%). When compared with using an age threshold of 65 years, the 14-variable model detected 6% more of the individuals who would die from COVID-19. However, below age 45 years and its risk equivalent, there was no benefit to using the prediction model over age alone. Discussion: Using a prediction model, such as the one described here, may help identify individuals who would most benefit from COVID-19 inoculation, and thereby may produce more dramatic initial drops in deaths through targeted vaccination.



Referências	SHUJIE, Xiao <i>et al</i> . Predicting death from COVID-19 using pre-existing conditions: implications for vaccination triage. BMJ open respiratory research , [United Kingdom], v. 8, n. 1, p. e001016, 2021. DOI: 10.1136/bmjresp-2021-001016. Disponível em: https://bmjopenrespres.bmj.com/lookup/doi/10.1136/bmjresp-2021-001016 . Acesso em: 6 jan. 2022.
Fonte	https://bmjopenrespres.bmj.com/content/bmjresp/8/1/e001016.full.pdf



Título	Epidemiological changes of common respiratory viruses in children during the COVID-19 pandemic
Autor(es)	Qing Ye,Dongjie Wang
Resumo	A variety of non-pharmaceutical interventions (NPIs) have been implemented to control the transmission of COVID-19 in China. The effect of NPIs on other common respiratory viruses in children of different age groups has not been examined thus far. Respiratory specimens of children were collected to detect common childhood respiratory viruses, including influenza A (FluA), influenza B (FluB), adenovirus (ADV), and respiratory syncytial virus (RSV), at the Children's Hospital of Zhejiang University School of Medicine from January 1, 2019, to December 31, 2020. The epidemiological characteristics of the respiratory viruses in 2020 were compared with those in 2019. From January 2019 to December 2020, 165622 specimens were collected. The proportion of infants aged 0-28 days (683, 2.24% vs 1295, 0.96%, <i>P</i> =0.000) and 1-12 months (8560, 28.12% vs 20875, 15.43%, <i>P</i> =0.000) in 2020 increased significantly compared with that in 2019. There were two obvious increases in April and September in the number of specimens in children aged 4-6 years and >7 years. FluA, FluB, and RSV's age distribution patterns were surprisingly consistent with each other in 2020, and the positive rates of children aged 1-12 months were the highest in all age groups (FluA: 4.45%, FluB: 3.30%, RSV: 7.35%). Our study further confirms that the NPIs significantly decreased the transmission of common childhood respiratory viruses. The change in circulation characteristics of common respiratory viruses of children in different age groups varied. Therefore, we recommend that different protection strategies should be introduced for children of different age groups.
Referências	QING, Ye; DONGJIE, Wang. Epidemiological changes of common respiratory viruses in children during the COVID-19 pandemic. Journal of medical virology , [United States], Jan. 4, 2022. DOI: 10.1002/jmv.27570. Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1002/jmv.27570 . Acesso em: 6 jan. 2022.
Fonte	https://onlinelibrary.wiley.com/doi/10.1002/jmv.27570



Título	Humoral immune response to Covid-19 vaccination in diabetes: age-dependent but independent of type of diabetes and glycaemic control - the prospective COVAC-DM cohort study
Autor(es)	Caren Sourij, Norbert J Tripolt, Faisal Aziz, Felix Aberer, Patrick Forstner, Anna M Obermayer, Harald Kojzar, Barbara Kleinhappl, Peter N Pferschy, Julia K Mader, Gerhard Cvirn, Nandu Goswami, Nadine Wachsmuth, Max L. Eckstein, Alexander Müller, Farah Abbas Jacqueline Lenz, Michaela Steinberger, Lisa Knoll, Robert Krause, Martin Stradner, Peter Schlenke, Nazanin Sareban, Barbara Prietl, Susanne Kaser, Othmar Moser, Ivo Steinmetz, Harald Sourij
Resumo	Aims Immune response to COVID-19 vaccination and a potential impact of glycaemia on antibody levels in people with diabetes remains unclear. We investigated the seroconversion following first and second COVID-19 vaccination in people with type 1 and type 2 diabetes in relation to glycaemic control prior to vaccination and analysed the response in comparison to individuals without diabetes. Materials and Methods This prospective, multicenter cohort study analysed people with type 1 and type 2 diabetes and an HbA1c ≤7.5% (58 mmol/mol) or >7.5% (58 mmol/mol), respectively and healthy controls. Roche's Elecsys anti-SARS-CoV-2 S immunoassay targeting the receptor-binding domain was used to quantify anti-spike protein antibodies 7-14 days after the first and 14-21 days after the second vaccination. Results 86 healthy controls and 161 participants with diabetes were enrolled, 150 (75 with type 1 diabetes and 75 with type 2 diabetes) were eligible for the analysis. After the first vaccination, only 52.7% in the type 1 diabetes group and 48.0% in the type 2 diabetes group showed antibody levels above the cut-off for positivity. Antibody levels after the second vaccination were similar in people with type1, type 2 diabetes and healthy controls if adjusted for age, sex and multiple testing (p>0.05). Age (r=-0.45, p<0.001) and glomerular filtration rate (r=0.28, p=0.001) were significantly associated with antibody response. Conclusions Anti-SARS-CoV-2 S receptor-binding domain antibody levels after the second vaccination were comparable in healthy controls, people with type 1 and type 2 diabetes, irrespective of glycaemic control. Age and renal function correlated significantly with the extent of antibody levels. This article is protected by copyright. All rights reserved.
Referências	SOURIJ, C. <i>et al.</i> Humoral immune response to Covid-19 vaccination in diabetes: age-dependent but independent of type of diabetes and glycaemic control - the prospective COVAC-DM cohort study. Diabetes, obesity and metabolism , [United Kingdom], Jan. 4, 2022. DOI: 10.1111/dom.14643. Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1111/dom.14643 . Acesso em: 6 jan. 2022.
Fonte	https://dom-pubs.onlinelibrary.wiley.com/doi/10.1111/dom.14643



Título	Omicron variant genome evolution and phylogenetics
Autor(es)	Mahmoud Kandeel, Maged E. M. Mohamed, Hany M. Abd El-Lateef, Katharigatta N. Venugopala, Hossam S. El-Beltagi
Resumo	Following the discovery of the SARS-CoV-2 Omicron variant (B.1.1.529), the global COVID-19 outbreak has resurfaced after appearing to be relentlessly spreading over the past 2 years. This new variant showed marked degree of mutation, compared with the previous SARS-CoV-2 variants. This study investigates the evolutionary links between Omicron variant and recently emerged SARS-CoV-2 variants. The entire genome sequences of SARS-CoV-2 variants were obtained, aligned using Clustal Omega, pairwise comparison was computed, differences, identity percent, gaps, and mutations were noted, and the identity matrix was generated. The phylogenetics of Omicron variants were determined using a variety of evolutionary substitution models. The ultrametric and metric clustering methods, such as UPGMA and neighbor-joining (NJ), using nucleotide substitution models that allowed the inclusion of nucleotide transitions and transversions as Kimura 80 models, revealed that the Omicron variant forms a new monophyletic clade that is distant from other SARS-CoV-2 variants. In contrast, the NJ method using a basic nucleotide substitution model such as Jukes—Cantor revealed a close relationship between the Omicron variant and the recently evolved Alpha variant. Based on the percentage of sequence identity, the closest variants were in the following order: Omicron, Alpha, Gamma, Delta, Beta, Mu, and then the SARS-CoV-2 USA isolate. A genome alignment with other variants indicated the greatest number of gaps in the Omicron variant's genome ranging from 43 to 63 gaps. It is possible, given their close relationship to the Alpha variety, that Omicron has been around for much longer than predicted, even though they created a separate monophyletic group. Sequencing initiatives in a systematic and comprehensive manner is highly recommended to study the evolution and mutations of the virus.
Referências	KANDEEL, M. et al. Omicron variant genome evolution and phylogenetics. Journal of medical virology , [United States], Dec. 10, 2021. DOI: 10.1002/jmv.27515. Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1002/jmv.27515 . Acesso em: 6 jan. 2022.
Fonte	https://onlinelibrary.wiley.com/doi/10.1002/jmv.27515



Título	Emergence of new SARS-CoV-2 Variant of Concern Omicron (B.1.1.529) - highlights Africa's research capabilities, but exposes major knowledge gaps, inequities of vaccine distribution, inadequacies in global COVID-19 response and control efforts
Autor(es)	Eskild Petersen, Francine Ntoumi, David S Hui, Aisha Abubakar, Laura D Kramer, Christina Obiero, Paul Anantharajah Tambyah, Lucille Blumberg, Richard Yapi, Seif Al-Abri, Tatiana de Castro Abreu Pinto, Dorothy Yeboah-Manu, Najmul Haider, Danny Asogun, Thirumalaisamy P Velavan, Nathan Kapata, Matthew Bates, Rashid Ansumana, Chiara Montaldo, Luchenga Mucheleng'anga, John Tembo, Peter Mwaba, Cordelia M Himwaze, Muzamil Mahdi Abdel Hamid, Sayoki Mfinanga, Leonard Mboera, Tajudeen Raj, Eleni Aklillu, Francisco Veas, Sarah Edwards, Pontiano Kaleebu, Timothy D McHugh, Jeremiah Chakaya, Thomas Nyirenda, Moses Bockarie, Peter S Nyasulu, Christian Wejse, Jean-Jacques Muyembe-Tamfum, Esam I Azhar, Markus Maeurer, Jean B Nachega, Richard Kock, Giuseppe Ippolito, Alimuddin Zumla
Resumo	Introduction Nearly two years since the start of the SARS-CoV-2 pandemic, which has caused over 5 million deaths, the world continues to be on high COVID-19 alert. The World Health Organization (WHO), in collaboration with national authorities, public health institutions and scientists have been closely monitoring and assessing the evolution of SARS-CoV-2 since January 2020 []
Referências	PETERSEN, E. <i>et al.</i> Emergence of new SARS-CoV-2 Variant of Concern Omicron (B.1.1.529) - highlights Africa's research capabilities, but exposes major knowledge gaps, inequities of vaccine distribution, inadequacies in global COVID-19 response and control efforts. International journal of infectious diseases , [Netherlands], v. 114, p. 268–272, Jan. 1, 2022. DOI: 10.1016/j.ijid.2021.11.040. Disponível em: https://pubmed.ncbi.nlm.nih.gov/34863925/ . Acesso em: 6 jan. 2022.
Fonte	https://www.ijidonline.com/article/S1201-9712(21)00888-2/fulltext



Título	Decreased severity of disease during the first global omicron variant covid-19 outbreak in a large hospital in tshwane, south Africa
Autor(es)	F. Abdullah , J. Myers , D. Basu , G. Tintinger , V. Ueckermann , M. Mathebula , R. Ramlall , S. Spoor , T. de Villiers , Z. Van der Walt , J. Cloete , P. Soma-Pillay , P. Rheeder , F. Paruk , A. Engelbrecht , V. Lalloo , M. Myburg , J. Kistan , W. von Hougenhouck-Tulleken , M.T. Boswell , G. Gray , R. Welch , L. Blumberg , W. Jassat
Resumo	METHODS: 466 hospital COVID-19 admissions since 14 November 2021 were compared to 3976 prior admissions since 4 May 2020. Ninety-eight patient records at peak bed occupancy during the outbreak were reviewed for primary indication for admission, clinical severity, oxygen supplementation level, vaccination and prior COVID-19 infection. Provincial and city-wide daily cases and reported deaths hospitalizations and excess deaths data were sourced from the NICD, the National Department of Health and the South African Medical Research Council. RESULTS Deaths and ICU admissions were 4.5% vs 21.3% (p<0.00001), and 1% vs 4.3% (p<0.00001); length of stay was 4.0 days vs 8.8 days; and mean age was 39 years vs 49 years for the Omicron and previous waves respectively. Admissions peaked and declined rapidly with peak bed occupancy at 51% of highest previous peak. Sixty two (63%) patients in COVID-19 wards had incidental COVID-19 following a positive SARS-CoV-2 PCR test . Only one third (36) had COVID-19 pneumonia, of which 72% had mild to moderate disease. The remaining 38% required high care or ICU admission. Fewer than half (45%) of patients in COVID-19 wards compared to 99.5% in the first wave required oxygen supplementation. City and provincial rates show decoupling of cases, hospitalisations and deaths compared to previous waves, corroborating the clinical findings of milder omicron disease in the hospital.CONCLUSION: There was decreased severity of disease in the Omicron driven fourth wave in the City of Tshwane, its first global epicentre.
Referências	ABDULLAH, F. et al. Decreased severity of disease during the first global omicron variant covid-19 outbreak in a large hospital in tshwane, south Africa. International journal of infectious diseases, [Netherlands], p. S120197122101256X, Dec. 28, 2021. DOI: 10.1016/j.ijid.2021.12.357. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S120197122101256X. Acesso em: 6 jan. 2022.
Fonte	https://www.ijidonline.com/article/S1201-9712(21)01256-X/fulltext#relatedArticles



Título	La variante delta del COVID-19: ¿qué podemos esperar?
Autor(es)	Javier Hernández Fernández
Resumo	La covid-19 ha infectado y se ha diseminado por todo el planeta. Se han confirmado más de 221 millones de casos en todo el mundo, con más de 4,5 millones de muertes y un poco más de 2.000 millones de personas vacunadas con dosis completa y cerca de 1.000 millones con dosis parcial, marcando con ello un récord impresionante. Se estima que 40,6 % de la población mundial ha recibido por lo menos una dosis de la vacuna y que 5.500 millones de dosis han sido administradas. No obstante, la desigualdad es la norma en materia de vacunación, puesto que solo 1,9 % de los habitantes de países de bajos ingresos ha recibido al menos una dosis. En América, los países que tienen el mayor promedio de vacunación son Uruguay (166 dosis/100 habitantes), Chile (155 dosis/100 habitantes) y Canadá (142 dosis/100 habitantes). Por su parte, Estados Unidos reporta un cifra de 111 dosis/100 habitantes y Colombia 70 dosis/100 habitantes (Our World in Data). En varios países ya se habla de administrar una tercera dosis a todos las personas previamente vacunadas.
Referências	FERNÁNDEZ, J. H. La variante delta del COVID-19: ¿qué podemos esperar? Mutis- Revista de arte y ciencia de la Universidad Jorge Tadeo Lozano , [Colombia], v. 11, n. 2, p. 5–7, 2021. DOI: 10.21789/22561498.1809 . Disponível em: https://revistas.utadeo.edu.co/index.php/mutis/article/view/variante-delta-COVID-19-%C2%BFque-podemos-esperar%3F . Acesso em: 17 dez. 2021.
Fonte	https://revistas.utadeo.edu.co/index.php/mutis/article/view/variante-delta-COVID-19-%C2%BFque-podemos-esperar%3F



Título	How can risk of COVID-19 transmission be minimised in domiciliary care for older people: development, parameterization and initial results of a simple mathematical model
Autor(es)	István Z. Kiss, Konstantin B. Blyuss, Yuliya N. Kyrychko , Jo Middleton, Daniel Roland, Lavinia Bertini, Leanne Bogen-Johnston, Wendy Wood , Rebecca Sharp, Julien Forder, Jackie A Cassell
Resumo	This paper proposes and analyses a stochastic model for the spread of an infectious disease transmitted between clients and care workers in the UK domiciliary (home) care setting. Interactions between clients and care workers are modelled using specially generated networks, with network parameters reflecting realistic patterns of care needs and visit allocation. These networks are then used to simulate and SEIR-type epidemic dynamics with different numbers of infectious and recovery stages. The results indicate that with the same overall capacity provided by care workers, the minimum peak proportion of infection, and the smallest overall size of infection are achieved for the highest proportion of overlap between visit allocation, i.e. when care workers have the highest chances of being allocated a visit to the same client they have visited before. An intuitive explanation of this is that while providing the required care coverage, maximising overlap in visit allocation reduces the possibility of an infectious care worker inadvertently spreading the infection to other clients. The model is generic and can be adapted to any directly transmitted infectious disease, such as, more recently, COVID-19, provided accurate estimates of disease parameters can be obtained from real data.
Referências	KISS, I. Z. et al. How can risk of COVID-19 transmission be minimised in domiciliary care for older people: development, parameterization and initial results of a simple mathematical model. Epidemiology and infection, [United Kingdom], p. 1–22, Dec. 17, 2021. DOI: 10.1017/S0950268821002727. Disponível em:



Título	A novel statistical method predicts mutability of the genomic segments of the SARS-CoV-2 virus
Autor(es)	Amir Hossein Darooneh, Michelle Przedborski, Mohammad Kohandel
Resumo	The COVID-19 disease that is caused by the SARS-CoV-2 virus has exploded into a global pandemic. This is the largest pandemic of the 21st century, with over 50 million cases and 1.2 million fatalities in a time span of approximately only 11 months. Scientists all around the world are racing to develop vaccines and new pharmaceuticals to overcome the pandemic and offer effective treatments for COVID-19 disease. Consequently, there is an essential need to better understand how the pathogenesis of SARS-CoV-2 is affected by viral mutations and to determine the conserved segments in the viral genome that can serve as stable targets for novel therapeutics. Here, we introduce a text-mining method to estimate the mutability of genomic segments directly from a reference (ancestral) whole genome sequence. The method relies on calculating the importance of genomic segments based on their spatial distribution and frequency over the whole genome. To validate our approach, we perform a largescale analysis of the viral mutations in nearly 80,000 publicly-available SARS-CoV-2 predecessor whole genome sequences and show that these results are highly correlated with the segments predicted by the statistical method used for keyword detection. Importantly, these correlations are found to hold at the codon and gene levels, as well as for gene coding regions. Using the text-mining method, we further identify codon sequences that are potential candidates for siRNA-based antiviral drugs. Significantly, one of the candidates identified in this work corresponds to the first seven codons of an epitope of the spike glycoprotein, which is the only SARS-CoV-2 immunogenic peptide without a match to a human protein.
Referências	DAROONEH, A. H.; PRZEDBORSKI, M.; KOHANDEL, M. A novel statistical method predicts mutability of the genomic segments of the SARS-CoV-2 virus. QRB discovery , [United Kingdom], p. 1–37, Dec. 13, 2021. DOI: 10.1017/qrd.2021.13. Disponível em: https://www.cambridge.org/core/product/identifier/S2633289221000132/type/journal_article . Acesso em: 17 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/D7CAD85EC4870A1B840BF4B5C2056F36/S2633289221000132a.pdf/novel statistical method predicts mutability of the genomic segme nts of the sarscov2 virus.pdf



Título	Two multistate outbreaks of a reoccurring Shiga toxin-producing Escherichia coli strain associated with romaine lettuce — United States, 2018–2019
Autor(es)	Michelle A. Waltenburg, Colin Schwensohn, Asma Madad, Sharon L. Seelman, Vi Peralta, Sarah E. Koske, Michelle M. Boyle, Katherine Arends, Kane Patel, Mia Mattioli, Laura Gieraltowski, Karen P. Neil, Outbreak Investigation Team
Resumo	Leafy green vegetables are a common source of Shiga toxin-producing Escherichia coli O157:H7 (STEC O157) foodborne illness outbreaks. Ruminant animals, primarily cattle, are the major reservoir of STEC O157. Epidemiological, traceback, and field investigations were conducted to identify potential outbreak sources. Product and environmental samples were tested for STEC. A reoccurring strain of STEC O157 caused two multistate outbreaks linked to romaine lettuce in 2018 and 2019, resulting in 234 illnesses in 33 states. Over 80% of patients interviewed consumed romaine lettuce before illness. The romaine lettuce was sourced from two California growing regions: Santa Maria and Salinas Valley in 2018 and Salinas Valley in 2019. The outbreak strain was isolated from environmental samples collected at sites >90 miles apart across growing regions, as well as from romaine-containing products in 2019. Although the definitive route of romaine contamination was undetermined, use of a contaminated agricultural water reservoir in 2018 and contamination from cattle grazing on adjacent land in 2019 were suspected as possible factors. Preventing lettuce contamination from growth to consumption is imperative to preventing illness. These outbreaks highlight the need to further understand mechanisms of romaine contamination, including the role of environmental or animal reservoirs for STEC O157.
Referências	WALTENBURG, M. A. <i>et al.</i> Two multistate outbreaks of a reoccurring Shiga toxin-producing Escherichia coli strain associated with romaine lettuce — United States, 2018–2019. Epidemiology and infection , [United Kingdom], p. 1–22, Dec. 13, 2021. DOI: Disponível em: <a .="" 17="" 2021.<="" a="" acesso="" dez.="" em:="" href="https://www.cambridge.org/core/journals/epidemiology-and-infection/article/two-multistate-outbreaks-of-a-reoccurring-shiga-toxinproducing-escherichia-coli-strain-associated-with-romaine-lettuce-united-states-20182019/62D6FC79BC61C777C0A7BE8E5EAA8A50">
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/62D6FC79BC61C777C0A7BE8E5EAA8A50/S0950268821002703a.pdf/two multistate outbreaks of a reoccurring shiga toxinproducing escherichia coli strain associated with romaine lettuce united states 20182019.pdf



Título	Application of Exponentially Modified Gaussian Cumulative curve to simplified short-term prediction of COVID-19 daily cases in Poland Epidemiology & Infection Cambridge Core
Autor(es)	Mieczysław R. Bałys, Adrian Lubecki, Jakub Szczurowski, Ewelina Brodawka, Katarzyna Zarębska
Resumo	In March 2020, rapidly spreading across the world, the SARS-CoV-2 coronavirus reached Poland. Since then, many efforts have been made to develop methods to forecast the COVID-19 pandemic spread and to prevent its negative consequences. In this paper, we presented one of such methods, a simplified way of building a data-driven model for predicting the daily number of new coronavirus infections.
Referências	BAŁYS, M. R. <i>et al.</i> Application of Exponentially Modified Gaussian Cumulative curve to simplified short-term prediction of COVID-19 daily cases in Poland. Epidemiology and infection , [United Kingdom], p. 1–12, Dec. 9, 2021. DOI: 10.1017/S0950268821002454. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002454/type/journal_article . Acesso em: 17 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/E82D8455C803BB884DA94295438F39DC/S0950268821002454a.pdf/application_of_exponentially_modified_g_aussian_cumulative_curve_to_simplified_shortterm_prediction_of_covid19_daily_cases_in_poland.pdf



Título	Respiratory virus coinfections with severe acute respiratory coronavirus virus 2 (SARS-CoV-2) continue to be rare one year into the coronavirus disease 2019 (COVID-19) pandemic in Alberta, Canada (June 2020–May 2021)
Autor(es)	Jamil N. Kanji, Nathan Zelyas, Kanti Pabbaraju, David Granger, Anita Wong, Stephanie A. Murphy, Emily Buss, Clayton MacDonald, Byron M. Berenger, Mathew A. Diggle, Natalie C. Marshall, John M. Conly, Graham Tipples
Resumo	To assess the burden of respiratory virus coinfections with severe acute respiratory coronavirus virus 2 (SARS-CoV-2), this study reviewed 4,818 specimens positive for SARS-CoV-2 and tested using respiratory virus multiplex testing. Coinfections with SARS-CoV-2 were uncommon (2.8%), with enterovirus or rhinovirus as the most prevalent target (88.1%). Respiratory virus coinfection with SARS-CoV-2 remains low 1 year into the coronavirus disease 2019 (COVID-19) pandemic.
Referências	KANJI, J. N. <i>et al.</i> Respiratory virus co-infections with SARS-CoV-2 continue to be rare one year into the pandemic in Alberta, Canada (June 2020 – May 2021). Infection control and hospital epidemiology , [United Kingdom], p. 1–21, Dec. 6, 2021. DOI: 10.1017/ice.2021.495. Disponível em:



Título	Determinants of all-cause in-hospital mortality among patients who presented with COVID-19 to a community teaching hospital in Michigan
Autor(es)	Ali Zakaria, Marc Piper, Lahib Douda, Nancy M. Jackson, Jeffrey C. Flynn, Dawn P. Misra, Joseph Gardiner, Abdulghani Sankari
Resumo	Background & objectives: Race plays an important role in healthcare disparities, often resulting in worse health outcomes. It is unclear if other patient factors and race interactions may influence mortality in patients with COVID-19. We aimed to evaluate how multiple determinants of all-cause in-hospital mortality from COVID-19 were linked to race. Methods: A retrospective observational study was conducted at two hospitals in metropolitan Detroit. We identified patients aged !18 years-old who had tested positive for COVID-19 and were admitted between March 9 through May 16, 2020. Multivariable logistic regression was performed assessing predictors of all-cause in-hospital mortality in COVID-19.Results: We identified 1064 unique patients; 74% were African Americans (AA). The all-cause in-hospital mortality was 21.7%, with the majority of deaths seen in AA (65.4%, P ½ 0.002) and patients 80 years or older (52%, P < 0.0001). AA women had lower all-cause mortality than AA men, white women, and white men based on racegender interactions. In multivariable logistic regression analysis, older age (>80-year-old), dementia, and chronic kidney disease were associated with worse all-cause in-hospital mortality. Adjusted for race and body mass index (BMI), the main odds ratios (OR) and 95% confidence intervals (CI) are: Age 80 and older vs < 60 in females: OR ½ 7.4, 95% CI: 2.9, 18.7; in males OR ½ 7.3, 95% CI: 3.3, 16.2; Chronic Kidney Disease (CKD): OR ½ 1.7, 95% CI: 1.2, 2.6; Dementia: OR ½ 2.2, 95% CI: 1.5, 3.3. Conclusion: Gender significantly modified the association of race and COVID-19 mortality. African American females had the lowest all-cause in-hospital mortality risk compared to other gender-race groups.
Referências	ZAKARIA, A. <i>et al.</i> Determinants of all-cause in-hospital mortality among patients who presented with COVID-19 to a community teaching hospital in Michigan. Heliyon , [United Kingdom], v. 7, n. 12, Dec. 8, 2021. DOI: 10.1016/j.heliyon.2021.e08566. Disponível em: https://www.cell.com/heliyon/abstract/S2405-8440(21)02669-4 . Acesso em: 17 dez. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S2405-8440%2821%2902669-4



Título	Changes in ambient particulate matter during the COVID-19 and associations with biomass burning and Sahara dust in northern Colombia
Autor(es)	Roberto Rojanoa, Heli Arregocésa, Eider Gámez Frías
Resumo	The restriction of mobility due to preventive social isolation has improved air quality in many regions of the world. At the same time, global and regional atmospheric phenomena such as biomass burning or dust transport from Sahara can exacerbate particulate matter (PM) mass. In this study, PM10 and PM2.5 concentrations were evaluated in industrial and urban areas during the lockdown period due to COVID-19 in northern Colombia. Aerosol Optical Depth (AOD) observations obtained from the spaceborne MODIS (MOD04-3k) and the active fire data was obtained from VIIRS Active Fire. We measured surface contamination at several stations to quantify the PM10 and PM2.5 changes associated with the general closure of anthropogenic and industrial activities driven by COVID-19 and by the macroscale and/or mesoscale contributions. In the industrial zone, a slight decrease in daily concentrations was detected at the stations located near the mining operations. In the urban area, the decrease is more salient in COVID-19 lockdown. A reduction rate in the daily averages of PM10 of 23.3%, 6.0%, and 19.0% was observed in the Sca, SBi, and SUn stations, respectively. The biomass burning episode has contributed 52% to the daily average of PM10 and 45% to the daily average of PM2.5. The episode due to the passage of Saharan dust through the Caribbean Sea has contributed 79% to the daily average of PM10 (150.75 µg/m3 39) and on 57% to the daily average of PM2.5.
Referências	ROJANO, R.; ARREGOCÉS, H.; FRÍAS, E. G. Changes in ambient particulate matter during the COVID-19 and associations with biomass burning and Sahara dust in northern Colombia. Heliyon , [United Kingdom], Dec. 14, 2021. DOI: 10.1016/j.heliyon.2021.e08595. Disponível em: https://www.cell.com/heliyon/abstract/S2405-8440(21)02698-0 . Acesso em: 17 dez. 2021.
Fonte	https://www.cell.com/mwg-internal/de5fs23hu73ds/progress?id=jsVTeqyAWr2W4Kv1kZFdphZa1lPuqmPcdKP862SyxMY,&dl



Título	Safety and immunogenicity of seven COVID-19 vaccines as a third dose (booster) following two doses of ChAdOx1 nCov-19 or BNT162b2 in the UK (COV-BOOST): a blinded, multicentre, randomised, controlled, phase 2 trial
Autor(es)	Alasdair P S Munro, Leila Janani, Victoria Cornelius, Parvinder K Aley, Gavin Babbage, David Baxter, Marcin Bula, Katrina Cathie, Krishna Chatterjee, Kate Dodd, Yvanne Enever, Karishma Gokani, Anna L Goodman, Christopher A Green, Linda Harndahl, John Haughney, Alexander Hicks, Agatha A van der Klaauw, Jonathan Kwok, Teresa Lambe, Vincenzo Libri, Martin J Llewelyn, Alastair C McGregor, Angela M Minassian, Patrick Moore, Mehmood Mughal, Yama F Mujadidi, Jennifer Murira, Orod Osanlou, Rostam Osanlou, Daniel R Owens, Mihaela Pacurar, Adrian Palfreeman, Daniel Pan, Tommy Rampling, Karen Regan, Stephen Saich, Jo Salkeld, Dinesh Saralaya, Sunil Sharma, Ray Sheridan, Ann Sturdy, Emma C Thomson, Shirley Todd, Chris Twelves, Robert C Read, Sue Charlton, Bassam Hallis, Mary Ramsay, Nick Andrews, Jonathan S Nguyen-Van-Tam, Matthew D Snape, Xinxue Liu, Saul N Faust
Resumo	Few data exist on the comparative safety and immunogenicity of different COVID-19 vaccines given as a third (booster) dose. To generate data to optimise selection of booster vaccines, we investigated the reactogenicity and immunogenicity of seven different COVID-19 vaccines as a third dose after two doses of ChAdOx1 nCov-19 (Oxford–AstraZeneca; hereafter referred to as ChAd) or BNT162b2 (Pfizer–BioNtech, hearafter referred to as BNT).
Referências	MUNRO, A. P. S. <i>et al.</i> Safety and immunogenicity of seven COVID-19 vaccines as a third dose (booster) following two doses of ChAdOx1 nCov-19 or BNT162b2 in the UK (COV-BOOST): a blinded, multicentre, randomised, controlled, phase 2 trial. Lancet , [United Kingdom], v. 398, n. 10318, p. 2258–2276, 2021. DOI: 10.1016/S0140-6736(21)02717-3. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S0140673621027173 . Acesso em: 17 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2902717-3



Título	Differences in SARS-CoV-2 infections during the first and second wave of SARS-CoV-2 between six ethnic groups in Amsterdam, the Netherlands: A population-based longitudinal serological study
Autor(es)	Liza Coyer, Anders Boyd, Janke Schinkel, Charles Agyemang, Henrike Galenkamp, Anitra Koopman, Tjalling Leenstra, Yvonne T.H.P. van Duijnhoven, Eric P. Moll van Charante, Bert-Jan H. van den Born, Anja Lok, Arnoud Verhoeff, Aeilko H. Zwinderman, Suzanne Jurriaans, Karien Stronks, d Maria Prins
	Surveillance data in high-income countries have reported more frequent SARS-CoV-2 diagnoses in ethnic minority groups. We
Resumo	examined the cumulative incidence of SARS-CoV-2 and its determinants in six ethnic groups in Amsterdam, the Netherlands.
Referências	COYER, L. <i>et al.</i> Differences in SARS-CoV-2 infections during the first and second wave of SARS-CoV-2 between six ethnic groups in Amsterdam, the Netherlands: A population-based longitudinal serological study. The Lancet regional health. Europe , [United Kingdom], v. 13, Dec. 13, 2021. Disponível em: https://www.thelancet.com/journals/lanepe/article/PIIS2666-7762(21)00270-2/fulltext . Acesso em: 17 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900270-2



Título	Monitoring populations at increased risk for SARS-CoV-2 infection in the community using population-level demographic and behavioural surveillance
Autor(es)	Emma Pritchard, Joel Jones, c Karina-Doris Vihta, Nicole Stoesser, Prof Philippa C. Matthews, David W. Eyre, Thomas House, John I Bell, Prof John N Newton, Jeremy Farrar, Prof Derrick Crook, Susan Hopkins, Duncan Cook, Emma Rourke, Ruth Studley, Prof Ian Diamond, Prof Tim Peto, f Koen B. Pouwels, Prof A. Sarah Walker
Resumo	The COVID-19 pandemic is rapidly evolving, with emerging variants and fluctuating control policies. Real-time population screening and identification of groups in whom positivity is highest could help monitor spread and inform public health messaging and strategy.
Referências	PRITCHARD, E. <i>et al.</i> Monitoring populations at increased risk for SARS-CoV-2 infection in the community using population-level demographic and behavioural surveillance. The Lancet regional health. Europe , [United Kingdom], v. 13, p. 100282, Dec. 11, 2022. DOI: 10.1016/j.lanepe.2021.100282. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2666776221002684 . Acesso em: 17 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900268-4



Título	Rehabilitation needs following COVID-19: Five-month post-discharge clinical follow-up of individuals with concerning self-reported symptoms
Autor(es)	Carl Wahlgren,a Anestis Divanoglou,a Melanie Larsson,a Emma Nilsson,a A se Ostholm Balkhed, € b Katarina Niward,b Ulrika Birberg Thornberg,a Eva Lilliecreutz Gudmundsson,a and Richard Levi,
Resumo	This report describes and objectivizes reported problems among a cohort of previously hospitalized COVID-19 patients by clinical examination and determination of the required level of rehabilitation sevices.
Referências	WAHLGREN, C. <i>et al.</i> Rehabilitation needs following COVID-19: Five-month post-discharge clinical follow-up of individuals with concerning self-reported symptoms. EClinicalMedicine , [Netherlands], v. 43, p. 101219, Dec. 4, 2021. DOI: 10.1016/j.eclinm.2021.101219. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2589537021005009 . Acesso em: 17 dez. 2021.
Fonte	https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(21)00500-9/fulltext



Título	The effect of the COVID-19 pandemic on influenza-related hospitalization, intensive care admission and mortality in children in Canada: A population-based study
Autor(es)	Helen E. Groves, Jesse Papenburg, Kayur Mehta, Julie A. Bettinger, Manish Sadarangani, Scott A. Halperind Shaun K. Morris
Resumo	The COVID-19 pandemic resulted in unprecedented implementation of wide-ranging public health measures globally. During the pandemic, dramatic decreases in seasonal influenza virus detection have been reported worldwide. Information on the impact on paediatric influenza-related hospitalisations is limited. We describe influenza-related hospitalisation in children in Canada following the onset of the COVID-19 pandemic. Methods Data on influenza-related hospitalisations, intensive care unit (ICU) admissions and in-hospital deaths in children across Canada were obtained from the Canadian Immunisation Monitoring Program, ACTive (IMPACT). This national active surveillance initiative comprises 90% of all tertiary care paediatric beds in Canada. The study period included eleven influenza seasons, from the 2010/2011 season until the 2020/2021 season inclusive. Time series modelling was used to compare the observed to predicted influenza-related hospitalisations following the COVID-19 pandemic. The Lancet Regional Health - Americas 2022;7: 100132 Published online xxx https://doi.org/10.1016/j.lana.2021.100132 . Results Following the COVID-19 pandemic there was a significant decrease in paediatric influenza-related hospitalisations compared to predicted influenza-related hospitalisations for this time period (p < 0½ 0001). No paediatric influenzarelated hospitalisations, ICU admission or deaths were reported for the 2020/2021 influenza season. Conclusions We show complete absence of paediatric influenza infection-related hospitalisation in a Canadian National Surveillance Network during the 2020/2021 influenza season. This significant decrease is likely related in large part to non-pharmacological public health interventions implemented during the COVID-19 pandemic, although the potential role of viral interference is unknown.
Referências	GROVES, H. E. <i>et al.</i> The effect of the COVID-19 pandemic on influenza-related hospitalization, intensive care admission and mortality in children in Canada: A population-based study. The Lancet regional health. Americas , [United Kingdom], v. 7, p. 100132, Dec. 4, 2021. DOI: 10.1016/j.lana.2021.100132. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2667193X21001289 . Acesso em: 17 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2667-193X%2821%2900128-9



Título	Association of Complement and MAPK Activation With SARS-CoV-2—Associated Myocardial Inflammation
Autor(es)	Ludwig T. Weckbach, Lisa Schweizer, Angelina Kraechan, Stephanie Bieber, Hellen Ishikawa-Ankerhold, Jörg Hausleiter, Steffen Massberg, Tobias Straub, Karin Klingel, Ulrich Grabmaier, Maximilian Zwiebel, Matthias Mann, Christian Schulz, BEM Study Group
Resumo	Myocardial injury is a common feature of patients with SARS-CoV-2 infection. However, the cardiac inflammatory processes associated with SARS-CoV-2 infection are not completely understood.To investigate the inflammatory cardiac phenotype associated with SARS-CoV-2 infection compared with viral myocarditis, immune-mediated myocarditis, and noninflammatory cardiomyopathy by integrating histologic, transcriptomic, and proteomic profiling. This case series was a cooperative study between the Ludwig Maximilian University Hospital Munich and the Cardiopathology Referral Center at the University of Tübingen in Germany. A cohort of 19 patients with suspected myocarditis was examined; of those, 5 patients were hospitalized with SARS-CoV-2 infection between March and May 2020. Cardiac tissue specimens from those 5 patients were compared with specimens from 5 patients with immune-mediated myocarditis, 4 patients with non–SARS-CoV-2 viral myocarditis, and 5 patients with noninflammatory cardiomyopathy, collected from January to August 2019. Endomyocardial biopsy. The inflammatory cardiac phenotypes were measured by immunohistologic analysis, RNA exome capture sequencing, and mass spectrometry—based proteomic analysis of endomyocardial biopsy specimens. Among 19 participants, the median age was 58 years (range, 37-76 years), and 15 individuals (79%) were male. Data on race and ethnicity were not collected. The abundance of CD163+ macrophages was generally higher in the cardiac tissue of patients with myocarditis, whereas lymphocyte counts were lower in the tissue of patients with SARS-CoV-2 infection vs patients with non–SARS-CoV-2 virus-associated and immune-mediated myocarditis. Among those with SARS-CoV-2 infection, components of the complement cascade, including C1q subunits (transcriptomic analysis: 2.5-fold to 3.6-fold increase; proteomic analysis: 2.0-fold to 3.4-fold increase) and serine/cysteine proteinase inhibitor clade G member 1



	(transcriptomic analysis: 1.7-fold increase; proteomic analysis: 2.6-fold increase), belonged to the most commonly upregulated transcripts and differentially abundant proteins. In cardiac macrophages, the abundance of C1q was highest in SARS-CoV-2 infection. Assessment of important signaling cascades identified an upregulation of the serine/threonine mitogen-activated protein kinase pathways. This case series found that the cardiac immune signature varied in inflammatory conditions with different etiologic characteristics. Future studies are needed to examine the role of these immune pathways in myocardial inflammation.
Referências	WECKBACH, L. T. <i>et al.</i> Association of Complement and MAPK Activation With SARS-CoV-2—Associated Myocardial Inflammation. JAMA Cardiology , [United States], Dec. 15, 2021. DOI: 10.1001/jamacardio.2021.5133 . Disponível em: https://doi.org/10.1001/jamacardio.2021.5133 . Acesso em: 17 dez. 2021.
Fonte	https://jamanetwork.com/journals/jamacardiology/fullarticle/2786891



Título	Delta Variant Wasn't Linked With More Severe Disease
Autor(es)	Bridget M. Kuehn
Resumo	Although COVID-19—related hospitalizations rose in the US after the SARS-CoV-2 B.1.617.2 (Delta) variant emerged this past summer, a recent analysis reported that the variant wasn't linked with more severe disease among hospitalized patients. Studies in Scotland and Canada have suggested that the Delta variant is associated with a higher risk of hospitalization, but it's not certain whether the variant causes more severe disease in adults. To address that question, the CDC's COVID-19—Associated Hospitalization Surveillance Network analyzed trends in disease severity among 7615 patients hospitalized with COVID-19 from January 1 through August 2021. The analysis found no difference in intensive care unit admissions, the need for invasive mechanical ventilation, or deaths in July and August compared with previous months when the Delta variant wasn't the predominant strain.
Referências	KUEHN, B. M. Delta Variant Wasn't Linked With More Severe Disease. JAMA , [United States], v. 326, n. 22, p. 2251, Dec. 14, 2021. DOI: 10.1001/jama.2021.21803. Disponível em: https://doi.org/10.1001/jama.2021.21803 . Acesso em: 17 dez. 2021.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2787105



Título	Global Percentage of Asymptomatic SARS-CoV-2 Infections Among the Tested Population and Individuals With Confirmed COVID-19 Diagnosis: A Systematic Review and Meta-analysis
Autor(es)	Qiuyue Ma, Jue Liu, Qiao Liu, Liangyu Kang, Runqing Liu, Wenzhan Jing, ; Yu Wu, Min Liu
Resumo	Asymptomatic infections are potential sources of transmission for COVID-19.To evaluate the percentage of asymptomatic infections among individuals undergoing testing (tested population) and those with confirmed COVID-19 (confirmed population). PubMed, EMBASE, and ScienceDirect were searched on February 4, 2021. Cross-sectional studies, cohort studies, case series studies, and case series on transmission reporting the number of asymptomatic infections among the tested and confirmed COVID-19 populations that were published in Chinese or English were included. This meta-analysis was conducted following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guideline. Random-effects models were used to estimate the pooled percentage and its 95% CI. Three researchers performed the data extraction independently. The percentage of asymptomatic infections among the tested and confirmed populations. Ninety-five unique eligible studies were included, covering 29 776 306 individuals undergoing testing. The pooled percentage of asymptomatic infections among the tested population was 0.25% (95% CI, 0.23%-0.27%), which was higher in nursing home residents or staff (4.52% [95% CI, 4.15%-4.89%]), air or cruise travelers (2.02% [95% CI, 1.66%-2.38%]), and pregnant women (2.34% [95% CI, 1.89%-2.78%]). The pooled percentage of asymptomatic infections among the confirmed population was 40.50% (95% CI, 36.08%-69.73%]), and nursing home residents or staff (47.53% [95% CI, 36.36%-58.70%]). In this meta-analysis of the percentage of asymptomatic infections was 0.25% among populations tested for and with confirmed COVID-19, the pooled percentage of asymptomatic infections was 0.25% among the tested population and 40.50% among the confirmed population. The high percentage of asymptomatic infections highlights the potential transmission risk of asymptomatic infections in communities.



Referências	QIUYUE, Ma <i>et al.</i> Global Percentage of Asymptomatic SARS-CoV-2 Infections Among the Tested Population and Individuals With Confirmed COVID-19 Diagnosis: A Systematic Review and Meta-analysis. JAMA network open , [United States], v. 4, n. 12, p. e2137257, Dec. 14, 2021. DOI: 10.1001/jamanetworkopen.2021.37257. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.37257 . Acesso em: 17 dez. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787098



Título	Assessment of a multifaceted approach, including frequent PCR testing, to mitigation of COVID-19 transmission at a residential historically black university
Autor(es)	Neil G. Hockstein, LaKresha Moultrie, Michelle Fisher, R. Christopher Mason, Derrick C. Scott, Joan F. Coker, Autumn Tuxward, Juliana Terheyden, Nolan Canter, Michael Coons, Saundra DeLauder, Tony Allen
Resumo	COVID-19 posed an unprecedented threat to residential colleges in the fall of 2020. While there were mathematical models of COVID-19 transmission, there were no established or tested protocols of COVID-19 testing or mitigation for school administrators to follow.To investigate the association of a multifaceted COVID-19 mitigation strategy using social, behavioral, and educational interventions and a program of frequent testing with prevalence of disease spread.This cohort study was conducted as a retrospective review of COVID-19 positivity from August 16, 2020, to April 30, 2021, at Delaware State University, a publicly funded historically Black university. Participants included all students, faculty, and staff members with a campus presence. Positivity rates after use of mitigation strategies and testing on campus were compared with those of the surrounding community. Data were analyzed from July through September 2021.Mitigation strategies included education and outreach about social distancing, masking, and handwashing, and a COVID-19 testing plan consisted of twice-weekly polymerase chain reaction (PCR) screening using anterior nasal samples (fall and early spring semester) and then saliva-based samples (middle to late spring semester).Cumulative tests, infections, daily quarantine, and isolation residence hall occupancy were measured, and comparisons were made with statewide COVID-19 positivity rates.The campus cohort included 2320 individuals (1575 resident students, 415 nonresident students, and 330 faculty or staff members). There were 1488 (64.1%) women and 832 (35.9%) men; mean (SD) age was 27.5 (12.9) years. During the fall semester, 36 500 COVID-19 PCR tests were performed. Weekly positivity rates ranged from 0 of 372 tests to 16 of 869 tests (1.8%) (mean [SD] positivity rate, 0.5% [0.5%]; 168 positive results and 36 312 negative results). During the same period, statewide positivity ranged from 589 of 25 120 tests (2.3%) to 5405 of 54 596 tests (9.9%) (mean [SD] positivity rate, 4.8%



Resumo	[2.6%]). In the spring semester, 39 045 PCR tests were performed. Weekly positivity rates ranged from 4 of 2028 tests (0.2%) to 36 of 900 tests (4.0%) (mean [SD] positivity rate, 0.8% [0.9%]; 267 positive results and 38 767 negative results). During the same period, statewide positivity ranged from 1336 of 37 254 tests (3.6%) to 3630 of 42 458 tests (8.5%) (mean [SD] positivity rate, 5.1% [1.3%]). Compared with statewide rates, campus positivity rates were mean (SD) 4.4 (2.6) percentage points lower during the fall semester (P &It .001) and mean (SD) 5.6 (1.6) percentage points lower during the spring semester (P &It .001). Total daily quarantine and isolation residence hall occupancy ranged from 0 to 43 students in the fall and 1 to 47 students during the spring. This study found that the combination of campuswide mitigation policies and twice-weekly COVID-19 PCR screening was associated with a significant decrease in COVID-19 positivity at a residential historically Black university campus compared with the surrounding community. Given the socioeconomic demographics of many students at historically Black colleges and universities, keeping these resident campuses open is critical not only to ensure access to educational resources, but also to provide housing and food security.
Referências	HOCKSTEIN, N. G. <i>et al.</i> Assessment of a multifaceted approach, including frequent PCR testing, to mitigation of COVID-19 transmission at a residential historically black university. JAMA network open , [United States], v. 4, n. 12, p. e2137189, Dec. 13, 2021. DOI: 10.1001/jamanetworkopen.2021.37189. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.37189 . Acesso em: 17 dez. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787071



Título	COVID-19 and Pregnancy
Autor(es)	Kristin Walte
Resumo	Pregnant and recently pregnant individuals who become infected with the COVID-19 virus are at high risk of requiring extra medical care. According to the Centers for Disease Control and Prevention (CDC), between January 22, 2020, and November 29, 2021, 148 327 pregnant individuals had documented infection with SARS-CoV-2 (the virus that causes COVID-19) and 241 had died of COVID-19. Of the 121 973 pregnant people with information on hospitalization available, 20.6% were hospitalized with COVID-19 or pregnancy-related conditions.
Referências	WALTER, K. COVID-19 and Pregnancy. JAMA, [United States], Dec. 10, 2021. Disponível em: https://doi.org/10.1001/jama.2021.22679 . Acesso em: 17 dez. 2021
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2787240



Título	Assessment of a hotel-based protective housing program for incidence of SARS-CoV-2 infection and management of chronic illness among persons experiencing homelessness
Autor(es)	Thomas D. Huggett, Elizabeth L. Tung, Megan Cunningham, Isaac Ghinai, Heather L. Duncan, Maura E. McCauley, Wayne M. Detmer
Resumo	Persons experiencing homelessness (PEH) are at higher risk for SARS-CoV-2 infection and severe illness due to COVID-19 because of a limited ability to physically distance and a higher burden of underlying health conditions. To describe and assess a hotel-based protective housing intervention to reduce incidence of SARS-CoV-2 infection among PEH in Chicago, Illinois, with increased risk of severe illness due to COVID-19. This retrospective cohort study analyzed PEH who were provided protective housing in individual hotel rooms in downtown Chicago during the COVID-19 pandemic from April 2 through September 3, 2020. Participants were PEH at increased risk for severe COVID-19, defined as (1) aged at least 60 years regardless of health conditions, (2) aged at least 55 years with any underlying health condition posing increased risk, or (3) aged less than 55 years with any underlying health condition posing substantially increased risk (eg, HIV/AIDS).Participants were housed in individual hotel rooms to reduce the risk of SARS-CoV-2 infection; on-site health care workers provided daily symptom monitoring, regular SARS-CoV-2 testing, and care for chronic health conditions. Additional on-site services included treatment of mental health and substance use disorders and social services. The main outcome measured was SARS-CoV-2 incidence, with SARS-Cov2 infection defined as a positive upper respiratory specimen using any polymerase chain reaction diagnostic assay authorized for emergency use by the Food and Drug Administration. Secondary outcomes were blood pressure control, glycemic control as measured by hemoglobin A1c, and housing placements at departure. Of 259 participants from 16 homeless shelters in Chicago, 104 (40.2%) were aged at least 65 years, 190 (73.4%) were male, 185 (71.4%) were non-Hispanic Black, and 49 (18.9%) were non-Hispanic White. There was an observed



Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787067
Referências	HUGGETT, T. D. <i>et al.</i> Assessment of a hotel-based protective housing program for incidence of SARS-CoV-2 infection and management of chronic illness among persons experiencing homelessness. JAMA network open , [United States], v. 4, n. 12, p. e2138464, Dec. 13, 2021. DOI: 10.1001/jamanetworkopen.2021.38464. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.38464 . Acesso em: 17 dez. 2021.
Resumo	reduction in SARS-CoV-2 incidence during the study period among the protective housing cohort (54.7 per 1000 people [95% CI, 22.4-87.1 per 1000 people]) compared with citywide rates for PEH residing in shelters (137.1 per 1000 people [95% CI, 125.1-149.1 per 1000 people]; P = .001). There was also an adjusted change in systolic blood pressure at a rate of –5.7 mm Hg (95% CI, –9.3 to –2.1 mm Hg) and hemoglobin A1c at a rate of –1.4% (95% CI, –2.4% to –0.4%) compared with baseline. More than half of participants (51% [n = 132]) departed from the intervention to housing of some kind (eg, supportive housing). This cohort study found that protective housing was associated with a reduction in SARS-CoV-2 infection among high-risk PEH during the first wave of the COVID-19 pandemic in Chicago. These findings suggest that with appropriate wraparound supports (ie, multisector services to address complex needs), such housing interventions may reduce the risk of SARS-CoV-2 infection, improve noncommunicable disease control, and provide a pathway to permanent housing.



Título	Estimated effectiveness of COVID-19 messenger rna vaccination against SARS-CoV-2 infection among older male veterans health administration enrollees, January to September 2021
Autor(es)	Yinong Young-Xu, Gabrielle M. Zwain, Ethan I. Powell, Jeremy Smith
Resumo	Introduction In a recent study that estimated COVID-19 messenger RNA (mRNA) vaccine effectiveness, we found that the mRNA-1273 (Moderna) and BNT162b2 (Pfizer-BioNTech) vaccines were highly effective against SARS-CoV-2 infection before June 2021 among 1 363 180 US veterans who were vaccinated in January and February of 2021. Transmission of the SARS-CoV-2 Delta variant increased rapidly during the summer of 2021, and waning COVID-19 mRNA vaccine effectiveness has been reported. Therefore, we reexamined the estimated effectiveness of the 2 COVID-19 mRNA vaccines (mRNA-1273 and BNT162b2) during July to September 2021 among fully vaccinated male veterans aged 65 years or older.
Referências	YINONG, Young-Xu <i>et al.</i> Estimated effectiveness of COVID-19 messenger rna vaccination against SARS-CoV-2 infection among older male veterans health administration enrollees, January to September 2021. JAMA network open , [United States], v. 4, n. 12, p. e2138975, Dec. 10, 2021. DOI: 10.1001/jamanetworkopen.2021.38975. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.38975 . Acesso em: 17 dez. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2787183



Título	Standards for objectivity and reproducibility in high-impact developmental studies—The COVID-19 pandemic and beyond
Autor(es)	Moriah E. Thomason
Resumo	At the time of this writing, more than a year has passed since COVID-19 pandemic shutdowns began, and research on the effect of these shutdowns on child neurodevelopment is beginning to be published. Review of literature from prior epidemics suggests we are likely to be awash in studies reporting that the COVID-19 pandemic has resulted in severe emotional disorders and a greater risk of developmental delays in childhood. How does the expectation that we will observe these effects shape our research? Initial response to an article that was published on a preprint server in August 2021 suggests we will promulgate studies that fulfill the prophecy that the COVID-19 pandemic has harmed this generation of children. The article concluded that "the environmental changes associated [with the] COVID-19 pandemic [are] significantly and negatively affecting infant and child development." The study received news coverage despite being published without formal review by experts in the field. Undeniably, preprint servers represent a great asset in the movement toward open science; however, rapid and broad dissemination of results that have yet to be peer-reviewed may change the scientific landscape, and this potentiality requires careful consideration.
Referências	THOMASON, M. E. Standards for objectivity and reproducibility in high-impact developmental studies—The COVID-19 pandemic and beyond. JAMA pediatrics , [United States], Dec. 13, 2021. Disponível em: https://doi.org/10.1001/jamapediatrics.2021.5168 . Acesso em: 17 dez. 2021.
Fonte	https://jamanetwork.com/journals/jamapediatrics/fullarticle/2786782



Título	Persistence of Infectivity in Elderly Individuals Diagnosed with SARS-CoV-2 Infection 10 Days after Onset of Symptoms: A Cross-Sectional Study
Autor(es)	Yves Longtin, Leighanne Parkes, Hugues Charest, Stacy Rajarison, Gerasimos J. Zaharatos, Judith Fafard, ; Michel Roger, Gaston De Serres
Resumo Referências	We performed viral culture of nasopharyngeal specimens in individuals aged 79 and older, infected with SARS-CoV-2, 10 days after symptom onset. A positive viral culture was seen in 10/22 participants (45%), including 4/12 (33%) individuals with improving symptoms. This small study suggests that infectivity may be prolonged among older individuals. LONGTIN, Y. et al. Persistence of Infectivity in Elderly Individuals Diagnosed with SARS-CoV-2 Infection 10 Days after Onset of Symptoms: A Cross-Sectional Study. Infection control and hospital epidemiology, [United Kingdom], p. 1–11, Dec. 6, 2021. DOI: 10.1017/ice.2021.502. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X2100502X/type/journal_article . Acesso em: 10 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge- core/content/view/14F9EC3B2B1CD5AB097D3671058A2F00/S0899823X2100502Xa.pdf/persistence of infectivity in elderly individuals diagnosed with sarscov2 infection 10 days after onset of symptoms a crosssectional study.pdf



Título	Outbreak of SARS-CoV-2 in hospitalized hemodialysis patients: an epidemiologic and genomic investigation
Autor(es)	Charles E. Marvil, Ahmed Babiker, Aaron Preston, Andrew Webster, Jeannette Guarner, Kari Love, Elham Ghonim, Paulina A. Rebolledo, Yun F. Wang, Robert A. Arthur, H. Richard Johnston, Jesse J. Waggoner, Anne Piantadosi, Jesse T. Jacob
Resumo	We performed an epidemiological investigation and SARS-CoV-2 genome sequencing to define the source and scope of an outbreak in a cluster of hospitalized patients. Lack of appropriate respiratory hygiene led to SARS-CoV-2 transmission to patients and healthcare workers during a single hemodialysis session, highlighting the importance of infection prevention precautions.
Referências	MARVIL, C. E. <i>et al.</i> Outbreak of SARS-CoV-2 in hospitalized hemodialysis patients: an epidemiologic and genomic investigation. Infection control and hospital epidemiology, [United Kingdom], p. 1–14, Dec. 6, 2021. DOI: 10.1017/ice.2021.465. https://www.cambridge.org/core/product/identifier/S0899823X21004657/type/journal_article . Disponível em: Acesso em: 10 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/2B79F62942671CE4E14618B0778F750B/S0899823X21004657a.pdf/outbreak_of_sarscov2_in_hospitalized_he_modialysis_patients_an_epidemiologic_and_genomic_investigation.pdf



Título	Is COVID-19 vaccination rate among healthcare personnel reflective of their respective community? An evaluation of a multistate healthcare system
Autor(es)	Mohamad G. Fakih, Richard Fogel, Allison Ottenbacher, Collin Miller, Angela L. Winegar, Shanda C. Price, Fredrick A. Masoudi, Joseph Cacchione
Resumo Referências	COVID-19 vaccination rates of a large health system reflected their respective service areas but varied by work role. Nurse vaccination rates were higher (56.9%) while nursing support personnel were lower (38.6%) than their communities (51.7%; P <0.001). Physician vaccination rates were highest (71.6%) and not associated with community vaccination levels. FAKIH, M. G. <i>et al.</i> Is COVID-19 vaccination rate among healthcare personnel reflective of their respective community? An evaluation of a multistate healthcare system. <i>Infection control and hospital epidemiology</i> , [United Kingdom], p. 1–9, Dec. 2, 2021. DOI: 10.1017/ice.2021.485. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004852/type/journal_article . Acesso em: 10 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/DB10C6AF56973E6822E9984015307D02/S0899823X21004852a.pdf/is covid19 vaccination rate among healt hcare personnel reflective of their respective community an evaluation of a multistate healthcare system.pdf



Título	Evolution of SARS-CoV-2 Seroprevalence Among Employees of a United States Academic Children's Hospital During the COVID-19 Pandemic
Autor(es)	Brian T. Fisher, Anna Sharova, , Craig L. K. Boge, Sigrid Gouma, Audrey Kamrin, , Jesse Blumenstock, Sydney Shuster, Lauren Gianchetti, Danielle Collins, Elikplim Akaho, Madison E. Weirick, Christopher M. McAllister Marcus J. Bolton, Claudia P. Arevalo, Eileen C. Goodwin, Elizabeth M. Anderson, Shannon R. Christensen, Fran Balamuth, Audrey R. Odom John, Yun Li, Susan Coffin, Jeffrey S. Gerber, Scott E. Hensley
Resumo	Objectives: Describe cumulative seroprevalence of SARS-CoV-2 antibodies during the COVID19 pandemic among employees of a large pediatric healthcare system. Design, Setting, and Participants: Prospective observational cohort study open to adult employees at Children's Hospital of Philadelphia, conducted April 20 – December 17, 2020.Methods: Employees were recruited starting with high-risk exposure groups, utilizing emails, flyers, and announcements at virtual town halls. At baseline, 1-month, 2-month, and 6-month timepoints, participants reported occupational and community exposures and gave a blood sample for SARS-CoV-2 antibody measurement by enzyme-linked immunosorbent assays (ELISAs). A post hoc Cox proportional hazards regression model was performed to identify factors associated with increased risk for seropositivity. Results: 1740 employees were enrolled. At 6-months, cumulative seroprevalence was 5.3%, below estimated community point seroprevalence; seroprevalence was 5.8% and 3.4% among employees with and without direct patient care, respectively. Most participants seropositive at baseline remained positive at follow-up assessments. In post hoc analysis, direct patient care (HR: 1.95, 95% CI: 1.03 to 3.68), Black race (HR: 2.70, 95% CI: 1.24 to 5.87), and exposure to a confirmed case in a non-healthcare setting (HR: 4.32, 95% CI: 2.71 to 6.88) were associated with statistically significant increased risk for seropositivity.Conclusions: Employee SARS-CoV-2 seroprevalence rates remained below the surrounding community's point prevalence rates. Provision of direct patient care, Black race, and exposure to a confirmed case in non-healthcare setting conferred increased risk. These data can inform occupational protection measures to maximize protection of employees within the workplace during future COVID waves or other epidemics.
Referências	FISHER, B. T. et al. Evolution of SARS-CoV-2 Seroprevalence Among Employees of a United States Academic Children's Hospital During the COVID-19 Pandemic. Infection control and hospital epidemiology, [United Kingdom], p. 1–24, Dec. 2, 2021. DOI: 10.1017/ice.2021.487. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004876/type/journal_article . Acesso em: 10 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/C1D84A56F55615C09B088C91FFF2B431/S0899823X21004876a.pdf/evolution of sarscov2 seroprevalence among employees of a unite d states academic childrens hospital during the covid19 pandemic.pdf



Título	Protection from SARS-CoV-2 Delta one year after mRNA-1273 vaccination in rhesus macaques is coincident with anamnestic antibody response in the lung
Autor(es)	Matthew Gagne, Kizzmekia S. Corbett, Barbara J. Flynn, Kathryn E. Foulds, Danielle A. Wagner, Shayne F. Andrew, John-Paul M. Todd, Christopher Cole Honeycutt, Lauren McCormick, Saule T. Nurmukhambetova, Meredith E. Davis-Gardner, Laurent Pessaint, Kevin W. Bock, Bianca M. Nagata, Mahnaz Minai, Anne P. Werner, Juan I. Moliva, Courtney Tucker, Cynthia G. Lorang, Bingchun Zhao, Elizabeth McCarthy, Anthony Cook, Alan Dodson, I-Ting Teng, Prakriti Mudvari, Jesmine Roberts-Torres, Farida Laboune, Lingshu Wang, Adrienne Goode, Swagata Kar, Seyhan BoyogluBarnum, Eun Sung Yang, Wei Shi, Aurélie Ploquin, Nicole Doria-Rose, Andrea Carfi, John R. Mascola, Eli A. Boritz, Darin K. Edwards, Hanne Andersen, Mark G. Lewis, Mehul S. Suthar, Barney S. Graham, Mario Roederer, Ian N. Moore, Martha C. Nason, Nancy J. Sullivan, Daniel C. Douek, Robert A. Seder
Resumo	mRNA-1273 vaccine efficacy against SARS-CoV-2 Delta wanes over time; however, there are limited data on the impact of durability of immune responses on protection. Here, we immunized rhesus macaques and assessed immune responses over one year in blood, upper and lower airways. Serum neutralizing titers to Delta were 280 and 34 reciprocal ID50 at weeks (peak) 6 and 48 (challenge), respectively. Antibody binding titers also decreased in bronchoalveolar lavage (BAL). Four days after Delta challenge, virus was unculturable in BAL and subgenomic RNA declined by ~3-log10 compared to control animals. In nasal swabs, sgRNA was reduced by 1-log10 and virus remained culturable. Anamnestic antibodies (590-fold increased titer) but not T cell responses were detected in BAL by day 4 post-challenge. mRNA-1273-mediated protection in the lungs is durable but delayed and potentially dependent on anamnestic antibody responses. Rapid and sustained protection in upper and lower airways may eventually require a boost.
Referências	GAGNE, M. <i>et al.</i> Protection from SARS-CoV-2 Delta one year after mRNA-1273 vaccination in rhesus macaques is coincident with anamnestic antibody response in the lung. Cell , [United States], p. S0092867421014057, Dec. 2, 2021. DOI: 10.1016/j.cell.2021.12.002. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S0092867421014057 . Acesso em: 10 dez. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S0092-8674%2821%2901405-7



Título	COVID-19 wastewater epidemiology: a model to estimate infected populations
Autor(es)	Christopher S McMahan, Stella Self, Lior Rennert, Corey Kalbaugh, David Kriebel, Duane Graves, Cameron Colby, Jessica A Deaver, Sudeep C Popat, Tanju Karanfil, David L Freedman
Resumo	Wastewater-based epidemiology provides an opportunity for near real-time, cost-effective monitoring of community-level transmission of SARS-CoV-2. Detection of SARS-CoV-2 RNA in wastewater can identify the presence of COVID-19 in the community, but methods for estimating the numbers of infected individuals on the basis of wastewater RNA concentrations are inadequate.
Referências	MCMAHAN, C. S. <i>et al.</i> COVID-19 wastewater epidemiology: a model to estimate infected populations. The Lancet. Planetary health , [United Kingdom.], v. 5, n. 12, p. e874–e881, Dec. 2021. DOI: 10.1016/S2542-5196(21)00230-8. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2542519621002308 . Acesso em: 10 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2542-5196%2821%2900230-8



Título	Immunogenicity and safety of a third dose of CoronaVac, and immune persistence of a two-dose schedule, in healthy adults: interim results from two single-centre, double-blind, randomised, placebo-controlled phase 2 clinical trials
Autor(es)	Gang Zeng, Qianhui Wu, Hongxing Pan, Minjie Li, Juan Yang, Lin Wang, Zhiwei Wu, Deyu Jiang, Xiaowei Deng, Kai Chu, Wen Zheng, Lei Wang, Wanying Lu, Bihua Han, Yuliang Zhao, Fengcai Zhu, Hongjie Yu, Weidong Yin
Resumo	Large-scale vaccination against COVID-19 is being implemented in many countries with CoronaVac, an inactivated vaccine. We aimed to assess the immune persistence of a two-dose schedule of CoronaVac, and the immunogenicity and safety of a third dose of CoronaVac, in healthy adults aged 18 years and older.
Referências	GANG, Zeng <i>et al.</i> Immunogenicity and safety of a third dose of CoronaVac, and immune persistence of a two-dose schedule, in healthy adults: interim results from two single-centre, double-blind, randomised, placebo-controlled phase 2 clinical trials. The Lancet. Infectious diseases , [United Kingdom], p. S1473309921006812, Dec. 7, 2021. DOI: 10.1016/S1473-3099(21)00681-2. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S1473309921006812 . Acesso em: 10 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900681-2



Título	Immunogenicity and safety of two doses of the CoronaVac SARS-CoV-2 vaccine in SARS-CoV-2 seropositive and seronegative patients with autoimmune rheumatic diseases in Brazil: a subgroup analysis of a phase 4 prospective study
Autor(es)	Nadia E Aikawa, Leonard V K Kupa, Sandra G Pasoto, Ana C Medeiros-Ribeiro, Emily F N Yuki, Carla G S Saad, Tatiana Pedrosa, Ricardo Fuller, Samuel K Shinjo, Percival D Sampaio-Barros, Danieli C O Andrade, Rosa M R Pereira, Luciana P C Seguro, Juliana M L Valim, Filipe Waridel, Ana Marli C Sartori, Alberto J S Duarte, Leila Antonangelo, Ester C Sabino, Paulo Rossi Menezes, Esper G Kallas, Clovis A Silva, Eloisa Bonfa
Resumo	We aimed to examine the immunogenicity pattern induced by the inactivated SARS-CoV-2 vaccine CoronaVac (Sinovac Life Sciences, Beijing, China) in SARS-CoV-2 seropositive patients with autoimmune rheumatic diseases compared with seropositive controls, seronegative patients with autoimmune rheumatic diseases, and seronegative controls.
Referências	AlKAWA, N. E. <i>et al.</i> Immunogenicity and safety of two doses of the CoronaVac SARS-CoV-2 vaccine in SARS-CoV-2 seropositive and seronegative patients with autoimmune rheumatic diseases in Brazil: a subgroup analysis of a phase 4 prospective study. The Lancet. Rheumatology , [United Kingdom], p. S2665991321003271, Dec. 3, 2021. DOI: 10.1016/S2665-9913(21)00327-1. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2665991321003271 . Acesso em: 10 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2665-9913%2821%2900327-1



Título	Respiratory virus co-infections with SARS-CoV-2 continue to be rare one year into the pandemic in Alberta, Canada (June 2020 – May 2021)
Autor(es)	Jamil N Kanji, Nathan Zelyas, Kanti Pabbaraju, David Granger, , Anita Wong, , Stephanie A. Murphy, Emily Buss, Clayton MacDonald, Byron M. Berenger, Mathew A. Diggle, Natalie C. Marshall, John M Conly, Graham Tipples
Resumo	To assess the burden of respiratory virus co-infections with SARS-CoV-2, this study reviewed 4,818 specimens positive for SARS-CoV-2 and tested using respiratory virus multiplex testing. Co-infections with SARS-CoV-2 were uncommon (2.8%), with rhinovirus/enterovirus as the most prevalent target (88.1%). Respiratory virus co-infections with SARS-CoV-2 remain low one-year into the pandemic.
Referências	KANJI, J. N. <i>et al.</i> Respiratory virus co-infections with SARS-CoV-2 continue to be rare one year into the pandemic in Alberta, Canada (June 2020 – May 2021). Infection control and hospital epidemiology , [United Kingdom], p. 1–21, Dec. 6, 2021. DOI: 10.1017/ice.2021.495. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004955/type/journal_article . Acesso em: 10 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/F3381FD87517C7444A28F398308A6AA7/S0899823X21004955a.pdf/respiratory_virus_coinfections_with_sarsc_ov2_continue_to_be_rare_one_year_into_the_pandemic_in_alberta_canada_june_2020_may_2021.pdf



Título	Aiming for Zero: reducing transmission of Coronavirus Disease 2019 in the D.C. Department of Corrections
Autor(es)	Mallory E Epting, Jacob A Pluznik, Samantha R Levano, Xinyi Hua, Isaac C H Fung, Beth Jordan, Eleni O'Donovan, Kissa M Robinson, Reena Chakraborty, Bahram Yousefi, Ciara J Michel, Chava J Bowden, Aman Kapadia, Lindsey R Riback, Anil T Mangla, Matthew J Akiyama, Anne C Spaulding
Resumo	Washington, District of Columbia lowered severe acute respiratory syndrome coronavirus 2 transmission in its large jail while community incidence was still highCoordinated clinical and operational interventions brought new cases to near zero. Aggressive infection control and underlying jail architecture can promote correctional coronavirus disease 2019 management. More intensive monitoring could help confirm that in-house transmission is truly zero.
Referências	EPTING, M. E. <i>et al.</i> Aiming for Zero: reducing transmission of Coronavirus Disease 2019 in the D.C. Department of Corrections. Open forum infectious diseases , [United Kingdom], v. 8, n. 12, p. ofab547, Dec. 12, 2021. DOI: 10.1093/ofid/ofab547. Disponível em: https://doi.org/10.1093/ofid/ofab547 . Acesso em: 10 dez. 2021.
Fonte	https://academic.oup.com/ofid/article/8/12/ofab547/6458128?searchresult=1



Título	Impact of the COVID-19 pandemic on human salmonellosis in the Netherlands
Autor(es)	Lapo Mughini-Gras, Linda Chanamé Pinedo, Roan Pijnacker, Maaike van den Beld, Ben Wit, Kees Veldman, Thijs Bosh, Eelco Franz
Resumo	The public health measures implemented to control COVID-19 may influence also other infectious diseases. Using national laboratory surveillance data, we assessed the impact of the COVID-19 pandemic on human salmonellosis in the Netherlands until March 2021. Salmonellosis incidence decreased significantly after March 2020: in the 2nd, 3rd and 4th quarters of 2020, and in the 1 st quarter of 2021, incidence decreased by 55%, 57%, 47% and 37%, respectively, compared to the same quarters of 2016-2019. The decrease was strongest among travel-related cases (94%, 84%, 79% and 93% in the aforementioned quarters, respectively). Other significant changes were: increased proportion of cases among older adults and increased proportion of invasive infections, decreased proportion of trimethoprim resistance, and increased proportion of serovar Typhimurium monophasic variant vs. Enteritidis. This led to decreased contributions of laying hens and increased contributions of pigs and cattle as sources of human infections. The observed changes probably reflect a combination of reduced exposure to Salmonella due to restrictions on international travels and gatherings, closure of dine-in restaurants, catering and hospitality sectors at large, and changes in healthcare-seeking and diagnostic behaviours
Referências	MUGHINI-GRAS, L. <i>et al.</i> Impact of the COVID-19 pandemic on human salmonellosis in the Netherlands. Epidemiology and infection , [United Kingdom], p. 1–16, Dec. 2, 2021. DOI: 10.1017/S0950268821002557. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002557/type/journal_article . Acesso em: 3 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/1A4B8D409EE39B6B0EF7DE51C4734ED7/S0950268821002557a.pdf/impact of the covid19 pandemic on human salmonellosis in the netherlands.pdf



Título	COVID-19 nosocomial transmission dynamics, a retrospective cohort study of two healthcare associated clusters in a district hospital in England during March and April 2020
Autor(es)	David Leeman, Thomas Ma, Melanie Pathiraja, Jennifer Taylor, Tahira Adnan, Ioannis Baltas, Adam Ioannou, Sri Iyengar, Rachel Mearkle, Thomas Stockdale, Koenraad Van Den Abbeele, Sooria Balasegaram
Resumo	Objective: To understand the transmission dynamics of SARS-CoV-2 in a hospital outbreak to inform infection control actions. Design: Retrospective cohort study. General medical and elderly inpatient wards in a hospital in England. Methods: COVID-19 patients were classified as community or healthcare-associated by time from admission to onset/positivity using European Centre for Disease Prevention and Control definitions. COVID-19 symptoms were classified as asymptomatic, non-respiratory or respiratory. Infectiousness was calculated from 2 days prior to 14 days post symptom onset or positive test. Cases were defined as healthcare-associated COVID-19 patients where infection was acquired from the wards under investigation. COVID-19 exposures were calculated based on symptoms and bed proximity to an infectious patient. Risk ratios and adjusted odds ratios (aOR) were calculated from univariable and multivariable logistic regression. Results: Of 153 patients: 65 were COVID-19 patients (45 healthcare-associated). Exposure to a COVID-19 patient with respiratory symptoms was associated with healthcare-associated infection irrespective of proximity (aOR 3.81; 95%CI 1.6.3-8.87), non-respiratory exposure was only significant within 2.5m (aOR 5.21; 95%CI 1.15-23.48). A small increase in risk ratio was observed for exposure to a respiratory patient for >1 day compared to 1 day from 2.04 (95%CI 0.99-4.22) to 2.36 (95%CI 1.44-3.88). Discussion: Respiratory exposure anywhere within a 4-bedded bay was a risk whereas non-respiratory exposure required bed distance ≤2.5m. Standard Infection control measures required beds to be >2m apart; our study suggests this may be insufficient to stop SARS-CoV-2 spread. We recommend improving cohorting and further studies into bed distance and transmission factors.
Referências	LEEMAN, D. <i>et al.</i> COVID COVID-19 nosocomial transmission dynamics, a retrospective cohort study of two healthcare associated clusters in a district hospital in England during March and April 2020. Infection Control and hospital epidemiology , [United Kingdom], p. 1–18, Nov. 2, 2021. DOI: 10.1017/ice.2021.483. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004839/type/journal article . Acesso em: 3 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/DCB63C4CFDC72C46546FC876AFEEB6C8/S0899823X21004839a.pdf/covid19 nosocomial transmission dynamics a retrospective cohort s tudy of two healthcare associated clusters in a district hospital in england during march and april 2020.pdf



Título	Reinfection with new variants of SARS-CoV-2 after natural infection: a prospective observational cohort in 13 care homes in England
Autor(es)	Anna Jeffery-Smith, Thomas A J Rowland, Monika Patel, Heather Whitaker, Nalini Iyanger, Sarah V Williams, Rebecca Giddings, Leah Thompson, Maria Zavala, Felicity Aiano, Joanna Ellis, Angie Lackenby, Katja Höschler, Kevin Brown, Mary E Ramsay, Robin Gopal, J Yimmy Chow, Shamez N Ladhani, Maria Zambon
Resumo	Understanding the duration of protection and risk of reinfection after natural infection is crucial to planning COVID-19 vaccination for at-risk groups, including care home residents, particularly with the emergence of more transmissible variants. We report on the duration, neutralising activity, and protection against the alpha variant of previous SARS-CoV-2 infection in care home residents and staff infected more than 6 months previously.
Referências	JEFFERY-SMITH, A. <i>et al.</i> Reinfection with new variants of SARS-CoV-2 after natural infection: a prospective observational cohort in 13 care homes in England. The Lancet. Healthy longevity , [United Kingdom], v. 2, n. 12, p. e811–e819, Dec. 2021. DOI: 10.1016/S2666-7568(21)00253-1. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2666756821002531 . Acesso em: 3 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7568%2821%2900253-1



Título	How an outbreak became a pandemic: a chronological analysis of crucial junctures and international obligations in the early months of the COVID-19 pandemic
Autor(es)	Sudhvir Singh, Christine McNab, Rose McKeon Olson, Nellie Bristol, Cody Nolan, Elin Bergstrøm, Michael Bartos, Shunsuke Mabuchi, Raj Panjabi, Abraar Karan, Salma M Abdalla, Mathias Bonk, Margaret Jamieson, George K Werner, Anders Nordström, Helena Legido-Quigley, Alexandra Phelan
Resumo	Understanding the spread of SARS-CoV-2, how and when evidence emerged, and the timing of local, national, regional, and global responses is essential to establish how an outbreak became a pandemic and to prepare for future health threats. With that aim, the Independent Panel for Pandemic Preparedness and Response has developed a chronology of events, actions, and recommendations, from December, 2019, when the first cases of COVID-19 were identified in China, to the end of March, 2020, by which time the outbreak had spread extensively worldwide and had been characterised as a pandemic. Datapoints are based on two literature reviews, WHO documents and correspondence, submissions to the Panel, and an expert verification process. The retrospective analysis of the chronology shows a dedicated initial response by WHO and some national governments, but also aspects of the response that could have been quicker, including outbreak notifications under the International Health Regulations (IHR), presumption and confirmation of human-to-human transmission of SARS-CoV-2, declaration of a Public Health Emergency of International Concern, and, most importantly, the public health response of many national governments. The chronology also shows that some countries, largely those with previous experience with similar outbreaks, reacted quickly, even ahead of WHO alerts, and were more successful in initially containing the virus. Mapping actions against IHR obligations, the chronology shows where efficiency and accountability could be improved at local, national, and international levels to more quickly alert and contain health threats in the future. In particular, these improvements include necessary reforms to international law and governance for pandemic preparedness and response, including the IHR and a potential framework convention on pandemic preparedness and response.
Referências	SINGH, S. <i>et al.</i> How an outbreak became a pandemic: a chronological analysis of crucial junctures and international obligations in the early months of the COVID-19 pandemic. Lancet , [United Kingdom], Nov. 8, 2021. DOI: 10.1016/S0140-6736(21)01897-3. Disponível em: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01897-3/fulltext . Acesso em: 3 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2901897-3



Título	WHO International Standard for evaluation of the antibody response to COVID-19 vaccines: call for urgent action by the scientific community
Autor(es)	vana Knezevic, Giada Mattiuzzo, Mark Page, Philip Minor, Elwyn Griffiths, Micha Nuebling, Vasee Moorthy
Resumo	The first WHO International Standard and International Reference Panel for anti-SARS-CoV-2 immunoglobulin were established by the WHO Expert Committee on Biological Standardization in December, 2020. The WHO International Antibody Standards are intended to serve as global reference reagents, against which national reference preparations or secondary standards can be calibrated. Calibration will facilitate comparison of results of assays (eg, of the neutralising antibody response to candidate COVID-19 vaccines) conducted in different countries. Use of these standards is expected to contribute to better understanding of the immune response, and particularly of the correlates of protection. This Personal View provides some technical details of the WHO Antibody Standards for SARS-CoV-2, focusing specifically on the use of these standards for the evaluation of the immune response to COVID-19 vaccines, rather than other applications (eg, diagnostic or therapeutic). The explanation with regard to why rapid adoption of the standards is crucial is also included, as well as how funders, journals, regulators, and ethics committees could drive adoption in the interest of public health.
Referências	KNEZEVIC, I. <i>et al.</i> WHO International Standard for evaluation of the antibody response to COVID-19 vaccines: call for urgent action by the scientific community. The Lancet microbe , [United Kingdom], p. S2666524721002664, 2021. DOI: 10.1016/S2666-5247(21)00266-4. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2666524721002664 . Acesso em: 3 dez. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2821%2900266-4



Título	Another vision of the situation of the COVID-19 pandemic in Mexico during 2020
Autor(es)	Sergio Isaac De La Cruz Hernández
Resumo	The number of coronavirus disease 2019 (COVID-19) cases and deaths registered in Mexico during 2020 could be underestimated, due to the sentinel surveillance adopted in this country. Some consequences of following this type of epidemiological surveillance were the high case fatality rate and the high positivity rate for COVID-19 shown in Mexico in 2020. During this year, the Mexican Ministry of Health only considered cases from the public health system, which followed this sentinel surveillance, but did not consider those cases from the private health system. To better understand this pandemic, it is important to include all the results obtained by all the institutions capable of testing for COVID-19, thus the Mexican Government could make good decisions to protect the population from this disease.
Referências	DE LA CRUZ HERNÁNDEZ, S. I. Another vision of the situation of the COVID-19 pandemic in Mexico during 2020. Disaster medicine and public health preparedness, [United States], p. 1–9, Nov. 25, 2021. DOI: 10.1017/dmp.2021.340. Disponível em: https://www.cambridge.org/core/product/identifier/S1935789321003402/type/journal_article . Acesso em: 3 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/EBA33FB53A231A001238CAD4958681A8/S1935789321003402a.pdf/another vision of the situation of the covid19 pandemic in mexico during 2020.pdf



Título	Effect of the First Wave of the Belgian COVID-19 Pandemic on Physician-Provided Prehospital Critical Care in the City of Antwerp (Belgium)
Autor(es)	Tina Lavigne, Brecht De Tavernier, Febem; Niels Van Regenmortel, Wouter De Tavernier, Jan Christiaen, Ives Hubloue, Kurt Anseeuw
Resumo	Introduction: There is evidence to suggest that patients delayed seeking urgent medical care during the first wave of the coronavirus disease 2019 (COVID-19) pandemic. A delay in health-seeking behavior could increase the disease severity of patients in the prehospital setting. The combination of COVID-19-related missions and augmented disease severity in the prehospital environment could result in an increase in the number and severity of physician-staffed prehospital interventions, potentially putting a strain on this highly specialized service. Study Objective: The aim was to investigate if the COVID-19 pandemic influences the frequency of physician-staffed prehospital interventions, prehospital mortality, illness severity during prehospital interventions, and the distribution in the prehospital diagnoses.Methods: A retrospective, multicenter cohort study was conducted on prehospital charts from March 14, 2020 through April 30, 2020, compared to the same period in 2019, in an urban area. Recorded data included demographics, prehospital diagnosis, physiological parameters, mortality, and COVID-status. A modified National Health Service (NHS) National Early Warning Score (NEWS) was calculated for each intervention to assess for disease severity. Data were analyzed with univariate and descriptive statistics.Results: There was a 31% decrease in physician-staffed prehospital interventions during the period under investigation in 2020 as compared to 2019 (2019: 644 missions and 2020: 446 missions), with an increase in prehospital mortality (OR = 0.646; 95% CI, 0.435 – 0.959). During the study period, there was a marked decrease in the low and medium NEWS groups, respectively, with an OR of 1.366 (95% CI, 1.036 – 1.802) and 1.376 (0.987 – 1.920). A small increase was seen in the high NEWS group, with an OR of 0.804 (95% CI, 0.566 – 1.140); 2019: 80 (13.67%) and 2020: 69 (16.46%). With an overall decrease in cases in all diagnostic categories, a significant increase was observed for respiratory illness (31%; P = .00



Resumo	cardiac arrest (54%; P < .001), combined with a significant decrease for intoxications (-58%; P = .007). Due to the national test strategy at that time, a COVID-19 polymerase chain reaction (PCR) result was available in only 125 (30%) patients, of which 20 (16%) were positive. Conclusion: The frequency of physician-staffed prehospital interventions decreased significantly. There was a marked reduction in interventions for lower illness severity and an increase in higher illness severity and mortality. Further investigation is needed to fully understand the reasons for these changes.
Referências	LAVIGNE, T. et al. Effect of the First Wave of the Belgian COVID-19 Pandemic on Physician-Provided Prehospital Critical Care in the City of Antwerp (Belgium). Prehospital and disaster medicine , [United States], p. 1–7, Nov. 22, 2021. DOI: 10.1017/S1049023X21001278. Disponível em: https://www.cambridge.org/core/product/identifier/S1049023X21001278/type/journal_article . Acesso em: 3 dez. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/D84F8D4CC973E570567823773CFF5A81/S1049023X21001278a.pdf/effect of the first wave of the belgian covid19 pandemic on physicianprovided prehospital critical care in the city of antwerp belgium.pdf



Título	Severe acute respiratory coronavirus virus 2 (SARS-CoV-2) surface contamination in staff common areas and impact on healthcare worker infection: Prospective surveillance during the coronavirus disease 2019 (COVID-19) pandemic
Autor(es)	Helen L. Zhang, Brendan J. Kelly, Michael Z. David, Ebbing Lautenbach, Elizabeth Huang, Selamawit Bekele BA, Pam Tolomeo, Emily Reesey, Sean Loughrey, David Pegues, d Matthew J. Ziegler
Resumo	We prospectively surveyed SARS-CoV-2 RNA contamination in staff common areas within an acute-care hospital. An increasing prevalence of surface contamination was detected over time. Adjusting for patient census or community incidence of coronavirus disease 2019 (COVID-19), the proportion of contaminated surfaces did not predict healthcare worker COVID-19 infection on study units.
Referências	ZHANG, H. L. <i>et al.</i> Severe acute respiratory coronavirus virus 2 (SARS-CoV-2) surface contamination in staff common areas and impact on healthcare worker infection: Prospective surveillance during the coronavirus disease 2019 (COVID-19) pandemic. Infection control and hospital epidemiology, [United Kingdom], p. 1–4, 2021. DOI: 10.1017/ice.2021.468. Disponível em:



Título	Population impact of SARS-CoV-2 variants with enhanced transmissibility and/or partial immune escape
Autor(es)	Mary Bushman, Rebecca Kahn, Bradford P. Taylor, Marc Lipsitch, William P. Hanage
Resumo	SARS-CoV-2 variants of concern exhibit varying degrees of transmissibility and, in some cases, escape from acquired immunity. Much effort has been devoted to measuring these phenotypes, but understanding their impact on the course of the pandemic – especially that of immune escape – has remained a challenge. Here, we use a mathematical model to simulate the dynamics of wildtype and variant strains of SARS-CoV-2 in the context of vaccine rollout and nonpharmaceutical interventions. We show that variants with enhanced transmissibility frequently increase epidemic severity, whereas those with partial immune escape either fail to spread widely, or primarily cause reinfections and breakthrough infections. However, when these phenotypes are combined, a variant can continue spreading even as immunity builds up in the population, limiting the impact of vaccination and exacerbating the epidemic. These findings help explain the trajectories of past and present SARS-CoV-2 variants and may inform variant assessment and response in the future.
Referências	BUSHMAN, M. et al. Population impact of SARS-CoV-2 variants with enhanced transmissibility and/or partial immune escape. Cell , [United States], p. S009286742101374X, Nov. 18, 2021. DOI: 10.1016/j.cell.2021.11.026. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S009286742101374X . Acesso em: 26 nov. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S0092-8674%2821%2901374-X



Título	SARS-CoV-2 501Y.V2 variants lack higher infectivity but do have immune escape
Autor(es)	Qianqian Li, Jianhui Nie, Jiajing Wu, Li Zhang, Ruxia Ding, Haixin Wang, Yue Zhang, Tao Li, Shuo Liu, Mengyi Zhang, Chenyan Zhao, Huan Liu, Lingling Nie, Haiyang Qin, Meng Wang, Qiong Lu, Xiaoyu Li, Junkai Liu, Haoyu Liang, Yi Shi, Yuelei Shen, Liangzhi Xie, Linqi Zhang, Xiaowang Qu, Wenbo Xu, Weijin Huang, Youchun Wang
Resumo	The 501Y.V2 variants of SARS-CoV-2 containing multiple mutations in spike are now dominant in South Africa and are rapidly spreading to other countries. Here, experiments with 18 pseudotyped viruses showed that the 501Y.V2 variants do not confer increased infectivity in multiple cell types except for murine ACE2-overexpressing cells, where a substantial increase in infectivity was observed. Notably, the susceptibility of the 501Y.V2 variants to 12 of 17 neutralizing monoclonal antibodies was substantially diminished, and the neutralization ability of the sera from convalescent patients and immunized mice was also reduced for these variants. The neutralization resistance was mainly caused by E484K and N501Y mutations in the receptorbinding domain of spike. The enhanced infectivity in murine ACE2-overexpressing cells suggests the possibility of spillover of the 501Y.V2 variants to mice. Moreover, the neutralization resistance we detected for the 501Y.V2 variants suggests the potential for compromised efficacy of monoclonal antibodies and vaccines.
Referências	QIANQIAN, Li <i>et al.</i> SARS-CoV-2 501Y.V2 variants lack higher infectivity but do have immune escape. Cell , [United States], v. 184, n. 9, p. 2362-2371.e9, 2021. DOI: 10.1016/j.cell.2021.02.042. Disponível em: https://www.cell.com/cell/abstract/S0092-8674(21)00231-2 . Acesso em: 26 nov. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S0092-8674%2821%2900231-2



Título	Clinical Evaluation of SARS-CoV-2 Antigen-based Rapid Diagnostic Test Kit for Detection of COVID-19 cases in Bangladesh
Autor(es)	Mahfuzur Rahman, Ananya Ferdous Hoque, Yeasir Karim, Zannat Kawser, Abu Bakar Siddik, Mariya Kibtiya Sumiya, Ayesha Siddika, Md. Shaheen Alam, Ahmed Nawsher Alam, Muntasir Alam, Mohammad Enayet Hossain, Sayera Banu, Firdausi Qadri, Tahmina Shirin, Mustafizur Rahman, Mohammed Ziaur Rahman
Resumo	The rapid and early detection of severe acute respiratory syndrome coronavirus (SARS-CoV-2) infections is key to control the current Coronavirus disease 2019 (COVID-19) pandemic. The present study was conducted to clinically evaluate a rapid diagnostic test (RDT) kit, Standard Q COVID-19 Ag Test (SD 5 Biosensor®, Republic of Korea), with reference to the standard real-time RT-PCR for detection of COVID6 19 cases in Bangladesh. Nasopharyngeal swabs were taken from 900 COVID-19 suspected patients. Among them, 34.11% (n = 307) were diagnosed as COVID-19 cases by RT-PCR assay, of which 85% (n = 261) were also detectable using the RDT. The overall sensitivity and specificity of the RDT compared to RT-PCR were 85.02% and 100%, respectively, regardless of age, sex, and type of SARS-CoV-2 variants. Most of the RT10 PCR positive cases (94%) were found within the first five days of disease onset, and the sensitivity of RDT was 85.91% for the same samples. The positive predictive value (PPV) of the RDT was 100%, and the negative predictive value (NPV) was 92.8%. The Cohen's kappa value of 0.882 indicated excellent agreement between the RDT and RT-PCR assays. The findings of this study showed the potential use of SARS-CoV-2 antigen-based RDT to expedite the diagnostic process and onward COVID-19 management in Bangladesh.
Referências	RAHMAN, Md. M. et al. Clinical Evaluation of SARS-CoV-2 Antigen-based Rapid Diagnostic Test Kit for Detection of COVID-19 cases in Bangladesh. Heliyon, [United Kingdom], p. e08455, Nov. 21, 2021. DOI: 10.1016/j.heliyon.2021.e08455. Disponível em: https://www.cell.com/heliyon/abstract/S2405-8440(21)02558-5 . Acesso em: 26 nov. 2021.
Fonte	https://www.cell.com/mwg-internal/de5fs23hu73ds/progress?id=2o1b1JpIbVkGH98UQAiNb_IdqtujgIcnq7wdBuWpRwU,&dl



Título	COVID-19 Nosocomial Transmission Dynamics, a Retrospective Cohort Study of Two Healthcare Associated Clusters in a District Hospital in England during March and April 2020
Autor(es)	David Leeman, Thomas Ma, Melanie Pathiraja, Jennifer Taylor, Tahira Adnan, Ioannis Baltas, Adam Ioannou, Sri Iyengar, Rachel Mearkle, Thomas Stockdale, Koenraad Van Den Abbeele, Sooria Balasegaram
Resumo	Objective: To understand the transmission dynamics of SARS-CoV-2 in a hospital outbreak to inform infection control actions. Design: Retrospective cohort study. Setting: General medical and elderly inpatient wards in a hospital in England. Methods: COVID-19 patients were classified as community or healthcare-associated by time from admission to onset/positivity using European Centre for Disease Prevention and Control definitions. COVID-19 symptoms were classified as asymptomatic, non-respiratory or respiratory. Infectiousness was calculated from 2 days prior to 14 days post symptom onset or positive test. Cases were defined as healthcare-associated COVID-19 patients where infection was acquired from the wards under investigation. COVID-19 exposures were calculated based on symptoms and bed proximity to an infectious patient. Risk ratios and adjusted odds ratios (aOR) were calculated from univariable and multivariable logistic regression. Results: Of 153 patients: 65 were COVID-19 patients (45 healthcare-associated). Exposure to a COVID-19 patient with respiratory symptoms was associated with healthcare-associated infection irrespective of proximity (aOR 3.81; 95%CI 1.6.3-8.87), non-respiratory exposure was only significant within 2.5m (aOR 5.21; 95%CI 1.15-23.48). A small increase in risk ratio was observed for exposure to a respiratory patient for >1 day compared to 1 day from 2.04 (95%CI 0.99-4.22) to 2.36 (95%CI 1.44-3.88). Discussion: Respiratory exposure anywhere within a 4-bedded bay was a risk whereas non-respiratory exposure required bed distance ≤2.5m. Standard Infection control measures required beds to be >2m apart; our study suggests this may be insufficient to stop SARS-CoV-2 spread. We recommend improving cohorting and further studies into bed distance and transmission factors.
Referências	LEEMAN, D. et al. COVID-19 Nosocomial Transmission Dynamics, a Retrospective Cohort Study of Two Healthcare Associated Clusters in a District Hospital in England during March and April 2020. Infection control and hospital epidemiology, [United Kingdom], p. 1–18, Nov. 22, 2021. DOI: 10.1017/ice.2021.483. Disponível em:



Título	Effectiveness of ChAdOx1 nCoV-19 vaccine against SARS-CoV-2 infection during the delta (B.1.617.2) variant surge in India: a test-negative, case-control study and a mechanistic study of post-vaccination immune responses
Autor(es)	Ramachandran Thiruvengadam, Amit Awasthi, Guruprasad Medigeshi, Sankar Bhattacharya, Shailendra Mani, Sridhar Sivasubbu, Tripti Shrivastava, Sweety Samal, Deepika Rathna Murugesan, Bapu Koundinya Desiraju, Pallavi Kshetrapal, Rajesh Pandey, Vinod Scaria, Praveen Kumar Malik, Juhi Taneja, Akshay Binayke, Tarini Vohra, Aymaan Zaheer, Deepak Rathore, Naseem Ahmad Khan, Heena Shaman, Shubbir Ahmed, Rajesh Kumar, Suprit Deshpande, Chandru Subramani, Nitya Wadhwa, Nimesh Gupta, Anil K Pandey, Jayanta Bhattacharya, Anurag Agrawal, Sudhanshu Vrati, Shinjini Bhatnagar, Pramod Kumar Garg, on behalf of the Department of Biotechnology India Consortium for COVID-19 research
Resumo	SARS-CoV-2 variants of concern (VOCs) have threatened COVID-19 vaccine effectiveness. We aimed to assess the effectiveness of the ChAdOx1 nCoV-19 vaccine, predominantly against the delta (B.1.617.2) variant, in addition to the cellular immune response to vaccination.
Referências	THIRUVENGADAM, R. <i>et al.</i> Effectiveness of ChAdOx1 nCoV-19 vaccine against SARS-CoV-2 infection during the delta (B.1.617.2) variant surge in India: a test-negative, case-control study and a mechanistic study of post-vaccination immune responses. The Lancet. Infectious diseases , [Netherlands], p. S1473309921006800, Nov. 25, 2021. DOI: 10.1016/S1473-3099(21)00680-0. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S1473309921006800 . Acesso em: 26 nov. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900680-0



Título	COVID-19 Infection among women in Iran Exposed vs unexposed to children who received attenuated poliovirus used in oral polio vaccine
Autor(es)	Farrokh Habibzadeh, Mohammad Sajadi, Konstantin Chumakov, Mahboobeh Yadollahie, Shyamasundaran Kottilil, Ashraf Simi, Kristen Stafford, Saeid Saeidimehr, Mohammad Rafiei, Robert C. Gallo
Resumo	Live attenuated vaccines may provide short-term protection against infectious diseases through stimulation of the innate immune system. To evaluate whether passive exposure to live attenuated poliovirus is associated with diminished symptomatic infection with SARS-CoV-2. In a longitudinal cohort study involving 87 923 people conducted between March 20 and December 20, 2020, the incidence of COVID-19 was compared between 2 groups of aged-matched women with and without exposure to live attenuated poliovirus in the oral polio vaccine (OPV). Participants were people receiving health care services from the Petroleum Industry Health Organization and residing in 2 cities in Iran (ie, Ahwaz and Shiraz). Participants were women aged 18 to 48 years whose children were aged 18 months or younger and a group of age-matched women from the same residence who had had no potential exposure to OPV. Indirect exposure to live attenuated poliovirus in OPV. Symptomatic COVID-19, diagnosed by reverse transcription—polymerase chain reaction. After applying the inclusion and exclusion criteria, 419 mothers (mean [SD] age, 35.5 [4.9] years) indirectly exposed to the OPV and 3771 age-matched women (mean [SD] age, 35.7 [5.3] years) who had no exposure to OPV were available for analysis. COVID-19 was diagnosed in 1319 of the 87 923 individuals in the study population (151 per 10 000 population) during the study period. None of the mothers whose children received OPV developed COVID-19 after a median follow-up of 141 days (IQR, 92-188 days; range, 1-270 days); 28 women (0.74%; 95% CI, 0.47%-1.02%) in the unexposed group were diagnosed with COVID-19 during the 9 months of the study. Point-by-point comparison of the survival curves of the exposed and unexposed groups found that indirect exposure to OPV was significantly associated with decreased COVID-19 acquisition; probability of remaining without infection was 1.000 (95% CI, 1.000-1.000) in the exposed group vs 0.993 (95% CI, 0.990-0.995) in the unexposed group after 9 months (P &It .001)



	associated with decreased symptomatic infection with COVID-19. Further study of the potential protective effect of OPV should be conducted, especially in nations where OPV is already in use for polio prevention and specific COVID-19 vaccines are delayed, less affordable, or fail to meet demand.
Referências	HABIBZADEH, F. <i>et al.</i> COVID-19 Infection among women in Iran exposed vs unexposed to children who received attenuated poliovirus used in oral polio vaccine. JAMA network open , [United States], v. 4, n. 11, p. e2135044, Nov. 24, 2021. DOI: 10.1001/jamanetworkopen.2021.35044. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.35044 . Acesso em: 26 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2786548



Título	Variation in COVID-19 Mortality in the US by Race and Ethnicity and Educational Attainment
Autor(es)	Justin M. Feldman, Mary T. Bassett,
Resumo	Racial and ethnic inequities in COVID-19 mortality have been well documented, but little prior research has assessed the combined roles of race and ethnicity and educational attainment.To measure inequality in COVID-19 mortality jointly by race and ethnicity and educational attainment.This cross-sectional study analyzed data on COVID-19 mortality from the 50 US states and the District of Columbia for the full calendar year 2020. It included all persons in the United States aged 25 years or older and analyzed them in subgroups jointly stratified by age, sex, race and ethnicity, and educational attainment.Population-based cumulative mortality rates attributed to COVID-19.FAmong 219.1 million adults aged 25 years or older (113.3 million women [51.7%]; mean [SD] age, 51.3 [16.8] years), 376 125 COVID-19 deaths were reported. Age-adjusted cumulative mortality rates per 100 000 ranged from 54.4 (95% CI, 49.8-59.0 per 100 000 population) among Asian women with some college to 699.0 (95% CI, 612.9-785.0 per 100 000 population) among Native Hawaiian and Other Pacific Islander men with a high school degree or less. Racial and ethnic inequalities in COVID-19 mortality rates remained when comparing within educational attainment categories (median rate ratio reduction, 17% [IQR, 0%-25%] for education-stratified estimates vs unstratified, with non-Hispanic White individuals as the reference). If all groups had experienced the same mortality rates as college-educated non-Hispanic White individuals, there would have been 48% fewer COVID-19 deaths among adults aged 25 years or older overall, including 71% fewer deaths among racial and ethnic minority populations and 89% fewer deaths among racial and ethnic minority populations aged 25 to 64 years.Public health research and practice should attend to the ways in which populations that share socioeconomic characteristics may still experience racial and ethnic inequity in the distribution of risk factors for SARS-CoV-2 exposure and infection fatality rates (eg, housing, occupation,



	the importance of eliminating joint racial-socioeconomic health inequities.
Referências	FELDMAN, J. M.; BASSETT, M. T. Variation in COVID-19 Mortality in the US by Race and Ethnicity and Educational Attainment. JAMA network open , [United States], v. 4, n. 11, p. e2135967, Nov. 23, 2021. DOI: 10.1001/jamanetworkopen.2021.35967. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.35967 . Acesso em: 26 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2786466



Título	Leading Causes of Death Among Adults Aged 25 to 44 Years by Race and Ethnicity in Texas During the COVID-19 Pandemic, March to December 2020
Autor(es)	Jeremy Samuel Faust, Alexander Junxiang Chen; Max Jordan Nguemeni Tiako, Chengan Du, Shu-Xia Li, Harlan M. Krumholz, Michael L. Barnet
Resumo	In the United States, adults aged 25 to 44 years had the largest relative increase in all-cause mortality during the COVID-19 pandemic in 2020, with disproportionate increases among Black, Hispanic, and Latino adults. In the first 6 months of the pandemic, the number of COVID-19—attributed deaths among people aged 25 to 44 years in regions with major outbreaks was similar to or exceeded the number to deaths from drug overdoses, which has been the usual leading cause of death in this age group in prior years. To better understand excess mortality among adults aged 25 to 44 years during the early months of the COVID-19 pandemic, we examined mortality data from Texas, a racially and ethnically diverse state.
Referências	FAUST, J. S. <i>et al.</i> Leading Causes of Death Among Adults Aged 25 to 44 Years by Race and Ethnicity in Texas During the COVID-19 Pandemic, March to December 2020. JAMA internal medicine , [United States], Nov. 22, 2021. Disponível em: https://doi.org/10.1001/jamainternmed.2021.6734. Acesso em: 26 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2786015



Título	Seroprevalence of SARS-CoV-2 Antibodies Among Children in School and Day Care in Montreal, Canada
Autor(es)	Kate Zinszer, Britt McKinnon, Noémie Bourque, Laura Pierce, Adrien Saucier, Alexandra Otis, Islem Cheriet, Jesse Papenburg, Marie-Ève Hamelin, Katia Charland, Julie Carbonneau, Monica Zahreddine, Ashley Savard, Geneviève Fortin, Alexander
	Apostolatos, Nancy Haley, Nathalie Ratté, Isabel Laurin, Cat Tuong Nguyen, Patrica Conrod, Guy Boivin, Gaston De Serres,
	Caroline Quach
	Quebec prioritized in-person learning after the first wave of the COVID-19 pandemic, with school closures being implemented
	temporarily in selected schools or in hot-spot areas. Quebec's decision to keep most schools open was controversial, especially in
	Montreal, which was the epicenter of Canada's first and second waves; therefore, understanding the extent to which children were
	infected with SARS-CoV-2 provides important information for decisions about school closures. To estimate the seroprevalence of
	SARS-CoV-2 antibodies in children and teenagers in 4 neighborhoods of Montreal, Canada. This cohort study (the Enfants et COVID-
	19: Étude de séroprévalence [EnCORE] study) enrolled a convenience sample of children aged 2 to 17 years between October 22,
Resumo	2020, and March 22, 2021, in Montreal, Canada.Potential exposure to SARS-CoV-2.The main outcome was seroprevalence of SARS-
	CoV-2 antibodies, collected using dried blood spots (DBSs) and analyzed with a research-based enzyme-linked immunosorbent
	assay (ELISA). Parents also completed an online questionnaire that included questions on self-reported COVID-19 symptoms and
	tests, along with sociodemographic questions. This study included 1632 participants who provided a DBS sample from 30 day cares,
	22 primary schools, and 11 secondary schools. The mean (SD) age of the children who provided a DBS sample was 9.0 (4.4) years;
	801 (49%) were female individuals, with 354 participants (22%) from day cares, 725 (44%) from primary schools, and 553 (34%)
	from secondary schools. Most parents had at least a bachelor's degree (1228 [75%]), and 210 (13%) self-identified as being a racial
	or ethnic minority. The mean seroprevalence was 5.8% (95% CI, 4.6%-7.0%) but increased over time from 3.2% (95% CI, 0.7%-5.8%)
	in October to November 2020 to 8.4% (95% CI, 4.4%-12.4%) in March to April 2021. Of the 95 children with positive SARS-CoV-2
	antibody results, 78 (82%) were not tested or tested negative with reverse transcription–polymerase chain reaction (RT-PCR)



Resumo	testing, and all experienced mild (49 [52%]) or no clinical symptoms (46 [48%]). The children of parents who self-identified as belonging to a racial and ethnic minority group were more likely to be seropositive compared with children of White parents (adjusted seroprevalence ratio, 1.9; 95% CI, 1.1-2.6). These results provide a benchmark of the seroprevalence status in Canadian children. The findings suggest that there was more transmission occurring in children compared with what was being detected by RT-PCR, although children experienced few or mild symptoms. It will be important to continue monitoring the serological status of children, particularly in the context of new COVID-19 variants of concern and in the absence of mass vaccination campaigns targeting young children.
	ZINSZER, K. <i>et al.</i> Seroprevalence of SARS-CoV-2 Antibodies Among Children in School and Day Care in Montreal, Canada. JAMA network open , [United States], v. 4, n. 11, p. e2135975, Nov. 23, 2021. DOI: 10.1001/jamanetworkopen.2021.35975. Disponível
Referências	em: https://doi.org/10.1001/jamanetworkopen.2021.35975 . Acesso em: 26 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2786465



Título	Myocarditis and pericarditis in adolescents after first and second doses of mRNA COVID-19 vaccines
Autor(es)	Déborah Foltran, Clément Delmas, Clara Flumian, Pierre De Paoli, Francesco Salvo, Sophie Gautier, Milou-Daniel Drici, Clément Karsenty, François Montastruc
Resumo	Introduction While mRNA COVID-19 vaccines like Tozinameran (Pfizer-BioNTech BNT162b2) and Elasomeran (Moderna mRNA-1273) have shown a high level of efficacy and effectiveness in real-life, some concerns about vaccination-related pericarditis and/or myocarditis have raised.1,2 After the initial signals from Israel, European Medicines Agency (EMA) and the U.S. Food and Drug Administration (FDA) alerted on the risk of pericarditis and/or myocarditis with mRNA COVID-19 vaccines. 2,3 In August 2021, the US Centers for Disease Control and Prevention (CDC) published data suggesting a higher rate of vaccinationrelated myocarditis in young men, but no stratification was made on adolescent age group.4 Recently, 2 two observational studies from Israel estimated the incidence of myocarditis around 0.64 and 1.42 per 100,000 persons after the first dose of Tozinameran and 3.83 per 100,000 after the second dose []
Referências	FOLTRAN, D. <i>et al.</i> Myocarditis and pericarditis in adolescents after first and second doses of mRNA COVID-19 vaccines. European heart journal . Quality & Care and clinical outcomes , [United Kingdom], n. qcab090, Nov. 26, 2021. DOI: 10.1093/ehjqcco/qcab090. Disponível em: https://doi.org/10.1093/ehjqcco/qcab090 . Acesso em: 26 nov. 2021.
Fonte	https://watermark.silverchair.com/qcab090.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAucwggLjBgkqhkiG9w0BBwagggLUMIIC0AIBADCCAskGCSq_GSIb3DQEHATAeBglghkgBZQMEAS4wEQQMmxT6H5HuA2VuVQQLAgEQglICmpLBeOLCvjs24zvbXP58ZE4AnHEyP1WvXiAVh1xrpHp2AWhVF4msQRBWLXIqm6XH5bWTAszLU41FaOduv_FIDE8RXI_EtsQo-b0y4PvDkVYUI9OX9IXF5TKKNjHprSUCTLiKMFdwiX_H9Jw3I9CQOtyZuASLhM_esdjGPACuOh_NTaHysUXQjXfQNgvs4UHolyyIXvNQ8HVtdL_IDBZ06UOuMQQfIDJSOKIT-Q77utgS6ixuuUTHT9oQQpgEaMacEAyMvAFDWq0fooSQ5ESyW1L5lexONb9tOKp7lZJqQu2nRlTWNs4zITVO9-xeBylTTZ97DsXjGvxgulxLXEfAt8JQbbYm_V0Pvk4R9AYslRgJQF62glzXmt9w0SZq5QlUcnvWgaeRCu6Ef04yumkb7hd8iFVFkKYTH5pGQPiVLvto2q8FNj93MosE3SLv8daBxvR6rFm1H8cY03_PwzRxdtIPpUfDnJ3CiXDbZiS4Q2ut67egyDjVyeIAH9v5h7MPf0WRpHvJ98_KK4xDTg4wXh1cMINDog-P5GDX4WOUt16yfCmziilJpcCBwD6l8dlnm1EoKLXx-B-xMYF7_pEalnAQcbHEpO7-DdUzvIEQQoFmxGJMfHQNvAcLkP5a6h3ZF2Xn2vUDaaN8Vlae8D1RiZEpxVMPKyM9ljbs4Q7slBqy5X1Wgyc57o1lj_6orrtokJY1Ayg3n3jj1ZLnQa-Yo6ed8r4dn2WfigNH9RF33O0vFDbaQ2U9nc1OCFKWvOQsHhQgv5kijyJGH9tuuq1dUxS2OWH5HdQcoDYI_MucJrA9zkaEiaBDPDW8EPKPmqvLR496vqYpNe9Dj7rGAagslQRH96dbtPDPf_aAxlfTSbZkMs2HJSjRrflb319cQ



Título	A diagnostic conundrum in the context of a pandemic of Coronavirus Disease 2019 (COVID-19)
Autor(es)	Deborah L Abraham, Joyce Omatseye, Jason Gittens
Resumo	A 52-year-old with lung cancer and brain metastases, on a 3-month weaning regime of dexamethasone, had a coincidental finding of bilateral, patchy ground-glass opacifications of both central and peripheral lung fields on computed tomography (CT). This was reported to be a sign of Coronavirus Disease 2019 (COVID-19). On Day 13, due to poor clinical progression and multiple negative reverse transcriptase-polymerase chain reaction tests for COVID-19, an alternative diagnosis was sought. Subsequently, this led to a diagnosis of Pneumocystis jirovecii pneumonia. This case demonstrates complicating factors in the diagnosis of COVID-19 and the presence of cognitive bias during a pandemic, which may lead clinicians to overlook a diagnosis, which may otherwise be addressed earlier.
Referências	ABRAHAM, D. L.; OMATSEYE, J.; GITTENS, J. A diagnostic conundrum in the context of a pandemic of Coronavirus Disease 2019 (COVID-19). Oxford medical case reports , [United Kingdom], v. 2021, n. 11, Nov. 11, 2021. DOI: 10.1093/omcr/omab108. Disponível em: https://doi.org/10.1093/omcr/omab108 . Acesso em: 26 nov. 2021.
Fonte	https://doi.org/10.1093/omcr/omab108



Título	Waning Immunity after the BNT162b2 Vaccine in Israel
Autor(es)	Yair Goldberg, , Micha Mandel,, Yinon M. Bar-On, Omri Bodenheimer, Laurence Freedman, Eric J. Haas, Ron Milo, Sharon Alroy-Preis, , Nachman Ash, Amit Huppert
Resumo	In December 2020, Israel began a mass vaccination campaign against coronavirus disease 2019 (Covid-19) by administering the BNT162b2 vaccine, which led to a sharp curtailing of the outbreak. After a period with almost no cases of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection, a resurgent Covid-19 outbreak began in mid-June 2021. Possible reasons for the resurgence were reduced vaccine effectiveness against the delta (B.1.617.2) variant and waning immunity. The extent of waning immunity of the vaccine against the delta variant in Israel is unclear.
Referências	GOLDBERG, Y. <i>et al.</i> Waning Immunity after the BNT162b2 Vaccine in Israel. New England journal of medicine , [United States], 2021. DOI: 10.1056/NEJMoa2114228. Disponível em: https://doi.org/10.1056/NEJMoa2114228 . Acesso em: 26 nov. 2021.
Fonte	https://www.nejm.org/doi/full/10.1056/NEJMoa2114228?query=featured_coronavirus



Título	Societal activities associated with SARS-CoV-2 infection – a case-control study in Denmark, November 2020
Autor(es)	Pernille Kold Munch , Laura Espenhain , Christian Holm Hansen , Luise Müller , Tyra Grove Krauseb, Steen Ethelberg
Resumo	Identification of societal activities associated with SARS-CoV-2 infection, may provide an evidence base for implementing preventive measures. Here, we investigated potential determinants for infection in Denmark in a situation where society was only partially open. We conducted a national matched case-control study. Cases were recent RT-PCR test-positives, while controls, individually matched on age, sex and residence, had not previously tested positive for SARS-CoV-2. Questions concerned person contact and community exposures. Telephone interviews were performed over a seven-day period in December 2020. We included 300 cases and 317 controls and determined odds ratios (ORs) and 95% confidence intervals (95%CI) by conditional logistical regression with adjustment for household size and country of origin. Contact (OR=4.9, 95%CI:2.4-10), and close contact (OR=13, 95%CI:6.7-25), with a person with a known SARS-CoV-2 infection were main determinants. Contact most often took place in the household or work place. Community determinants included: events with singing (OR=2.1, 95%CI:1.1-4.1), attending fitness centre (OR=1.8, 95%CI:1.1-2.8) and consumption of alcohol in a bar (OR=10, 95%CI:1.5-65). Other community exposures appeared not to be associated with infection, these included shopping at supermarkets, travel by public transport, dining at restaurants and private social events with few participants. Overall, the restrictions in place at the time of the study appeared to be sufficient to reduce transmission of disease in the public space, which instead largely took place following direct exposures to people with known SARS-CoV-2 infections. Keywords: COVID-19 · SARS-CoV-2 community exposures · risk factors · case control study
Referências	MUNCH, P. K. et al. Societal activities associated with SARS-CoV-2 infection – a case-control study in Denmark, November 2020. Epidemiology and infection , [United Kingdom], p. 1–19, Nov. 17, 2021. DOI: 10.1017/S0950268821002478. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002478/type/journal_article . Acesso em: 19 nov. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/27C3C38869327E22A65A4252942B9ED8/S0950268821002478a.pdf/societal activities associated with sarscov2 infection a casecontrol study in denmark november 2020.pdf



Título	SARS-CoV-2 surface contamination in staff common areas and impact on healthcare worker infection: prospective surveillance during the COVID-19 pandemic
Autor(es)	Helen L. Zhang, Brendan J. Kelly, Michael Z. David, Ebbing Lautenbach, Elizabeth Huang, , Selamawit Bekele, Pam Tolomeo, , Emily Reesey, Sean Loughrey, David Pegues, Matthew J. Ziegler
Resumo	We prospectively surveyed SARS-CoV-2 RNA contamination in staff common areas within an acute-care hospital. An increasing prevalence of surface contamination was detected over time. Adjusting for patient census or community incidence of coronavirus disease 2019 (COVID-19), the proportion of contaminated surfaces did not predict staff COVID-19 infection on study units.
Referências	ZHANG, H. L. <i>et al.</i> SARS-CoV-2 surface contamination in staff common areas and impact on healthcare worker infection: prospective surveillance during the COVID-19 pandemic. Infection control and hospital epidemiology , [United Kingdom], p. 1–10, Nov. 15, 2021. DOI: 10.1017/ice.2021.468. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004682/type/journal_article . Acesso em: 19 nov. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/3694C9FBD7D19ACB10F45683E1D2AB6F/S0899823X21004682a.pdf/sarscov2_surface_contamination_in_staff_common_areas_and_impact_on_healthcare_worker_infection_prospective_surveillance_during_the_covid19_pandemic.pdf



Título	Effectiveness of a third dose of the BNT162b2 mRNA COVID-19 vaccine for preventing severe outcomes in Israel: an observational study
Autor(es)	Noam Barda, Noa Dagan, Cyrille Cohen, Miguel A Hernán, Marc Lipsitch, Isaac S Kohane, Ben Y Reis, Ran D Balicer
Resumo	Many countries are experiencing a resurgence of COVID-19, driven predominantly by the delta (B.1.617.2) variant of SARS-CoV-2. In response, these countries are considering the administration of a third dose of mRNA COVID-19 vaccine as a booster dose to address potential waning immunity over time and reduced effectiveness against the delta variant. We aimed to use the data repositories of Israel's largest health-care organisation to evaluate the effectiveness of a third dose of the BNT162b2 mRNA vaccine for preventing severe COVID-19 outcomes.
Referências	BARDA, N. <i>et al.</i> Effectiveness of a third dose of the BNT162b2 mRNA COVID-19 vaccine for preventing severe outcomes in Israel: an observational study. Lancet , [Netherlands], p. S0140673621022492, 2021. DOI: 10.1016/S0140-6736(21)02249-2. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S0140673621022492 . Acesso em: 19 nov. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2902249-2



Título	COVID-19 risk factors and mortality outcomes among medicare patients receiving long-term dialysis
Autor(es)	Stephen Salerno, Joseph M. Messana, GarrettW. Gremel, Claudia Dahlerus, Richard A. Hirth, Peisong Han, Jonathan H. Segal, Tao Xu, Dan Shaffer, Amy Jiao, Jeremiah Simon, Lan Tong, MA, Karen Wisniewski, Tammie Nahra, Robin Padilla, Kathryn Sleeman, Tempie Shearon, Sandra Callard, Alexander Yaldo, Lisa Borowicz, Wilfred Agbenyikey, Golden M. Horton, Jesse Roach, Yi Li,
Resumo	OBJECTIVE To identify risk factors associated with COVID-19 and mortality in Medicare patients undergoing long-term dialysis. DESIGN, SETTING, AND PARTICIPANTS This retrospective, claims-based cohort study compared mortality trends of patients receiving long-term dialysis in 2020 with previous years (2013-2019) and fit Cox regression models to identify risk factors for contracting COVID-19 and postdiagnosis mortality. The cohort included the national population of Medicare patients receiving long-term dialysis in 2020, derived from clinical and administrative databases. COVID-19 was identified through Medicare claims sources. Data were analyzed on May 17, 2021. MAIN OUTCOMES AND MEASURES The 2 main outcomes were COVID-19 and all-cause mortality. Associations of claims-based risk factors with COVID-19 and mortality were investigated prediagnosis and postdiagnosis. RESULTS Among a total of 498 169 Medicare patients undergoing dialysis (median [IQR] age, 66 [56-74] years; 215 935 [43.1%] women and 283 227 [56.9%] men), 60 090 (12.1%) had COVID-19, among whom 15 612 patients (26.0%) died. COVID-19 rates were significantly higher among Black (21 787 of 165 830 patients [13.1%]) and Hispanic (13 530 of 86 871 patients [15.6%]) patients compared with non-Black patients (38 303 of 332 339 [11.5%]), as well as patients with short (ie, 1-89 days; 7738 of 55 184 patients [14.0%]) and extended (ie, U90 days; 10 737 of 30 196 patients [35.6%]) nursing home stays in the prior year. Adjusting for all other risk factors, residing in a nursing home 1 to 89 days in the prior year was associated with a higher hazard for COVID-19 (hazard ratio [HR] vs 0 days, 1.60; 95% CI 1.56-1.65) and for postdiagnosis mortality (HR, 1.31; 95% CI, 1.25-1.37), as was residing in a nursing home for an extended stay (COVID-19: HR, 4.48; 95% CI, 4.37-4.59; mortality: HR, 1.12; 95% CI, 1.07-1.16). Black race (HR vs non-Black: HR, 1.25; 95% CI, 1.23-1.28) and Hispanic ethnicity (HR vs non-Hispanic: HR, 1.68; 95% CI, 1.64-1.72) were associated with sig



	(HR, 0.77; 95% CI, 0.75-0.80), it was associated with higher mortality (HR, 1.18; 95% CI, 1.111.25). CONCLUSIONS AND RELEVANCE These results shed light on COVID-19 risk factors and outcomes among Medicare patients receiving long-term chronic dialysis and could inform policy decisions to mitigate the significant extra burden of COVID-19 and death in this population.
Referências	SALERNO, S. <i>et al.</i> COVID-19 Risk Factors and Mortality Outcomes Among Medicare Patients Receiving Long-term Dialysis. JAMA network open , [United States], v. 4, n. 11, p. e2135379, Nov. 17, 2021. DOI: 10.1001/jamanetworkopen.2021.35379. Disponível em: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2786199 . Acesso em: 19 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2786199



Título	Seroprevalence of unidentified SARS-CoV-2 infection in Hong Kong during 3 pandemic waves
Autor(es)	Siaw S. Boon, Martin C. S. Wong, Rita W. Y. Ng, Danny T. M. Leung, Zigui Chen, Christopher K. C. Lai, Wendy C. S. Ho, Junjie Huang, Barry K. C. Wong, Kitty S. C. Fung,; Paul K. S. Chan
Resumo	Seroprevalence studies inform the extent of infection and assist evaluation of mitigation strategies for the COVID-19 pandemic. To estimate the prevalence of unidentified SARS-CoV-2 infection in the general population of Hong Kong. A prospective cross-sectional study was conducted in Hong Kong after each major wave of the COVID-19 pandemic (April 21 to July 7, 2020; September 29 to November 23, 2020; and January 15 to April 18, 2021). Adults (age ≥18 years) who had not been diagnosed with COVID-19 were recruited during each period, and their sociodemographic information, symptoms, travel, contact, quarantine, and COVID-19 testing history were collected. The main outcome was prevalence of SARS-CoV-2 infection. SARS-CoV-2 IgG antibodies were detected by an enzyme-linked immunosorbent assay based on spike (S1/S2) protein, followed by confirmation with a commercial electrochemiluminescence immunoassay based on the receptor binding domain of spike protein. The study enrolled 4198 participants (2539 [60%] female; median age, 50 years [IQR, 25 years]), including 903 (22%), 1046 (25%), and 2249 (53%) during April 21 to July 7, 2020; during September 29 to November 23, 2020; and during January 15 to April 18, 2021, respectively. The numbers of participants aged 18 to 39 years, 40 to 59 years, and 60 years or older were 1328 (32%), 1645 (39%), and 1225 (29%), respectively. Among the participants, 2444 (58%) stayed in Hong Kong since November 2019 and 2094 (50%) had negative SARS-CoV-2 RNA test results. Only 170 (4%) reported ever having contact with individuals with confirmed cases, and 5% had been isolated or quarantined. Most (2803 [67%]) did not recall any illnesses, whereas 737 (18%), 212 (5%), and 385 (9%) had experienced respiratory symptoms, gastrointestinal symptoms, or both, respectively, before testing. Six participants were confirmed to be positive for anti-SARS-CoV-2 IgG; the adjusted prevalence of unidentified infection was 0.15% (95% CI, 0.06%-0.32%). Extrapolating these findings to the whole population, t



	sectional study of participants from the general public in Hong Kong, the prevalence of unidentified SARS-CoV-2 infection was low after 3 major waves of the pandemic, suggesting the success of the pandemic mitigation by stringent isolation and quarantine policies even without complete city lockdown. More than 99.5% of the general population of Hong Kong remain naive to SARS-CoV-2, highlighting the urgent need to achieve high vaccine coverage.
Referências	BOON, S. S. <i>et al.</i> Seroprevalence of unidentified SARS-CoV-2 infection in Hong Kong During 3 pandemic waves. JAMA network open , [United States], v. 4, n. 11, p. e2132923, Nov. 15, 2021. DOI: 10.1001/jamanetworkopen.2021.32923. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.32923 . Acesso em: 19 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2786137



Título	Disparities in COVID-19 outcomes by race, ethnicity, and socioeconomic Status: a systematic-review and meta-analysis
Autor(es)	Shruti Magesh; Yuxiang Li; Aidan Mattingly-app
Resumo	COVID-19 has disproportionately affected racial and ethnic minority groups, and race and ethnicity have been associated with disease severity. However, the association of socioeconomic determinants with racial disparities in COVID-19 outcomes remains unclear. To evaluate the association of race and ethnicity with COVID-19 outcomes and to examine the association between race, ethnicity, COVID-19 outcomes, and socioeconomic determinants. A systematic search of PubMed, medRxiv, bioRxiv, Embase, and the World Health Organization COVID-19 databases was performed for studies published from January 1, 2020, to January 6, 2021. Studies that reported data on associations between race and ethnicity and COVID-19 positivity, disease severity, and socioeconomic status were included and screened by 2 independent reviewers. Studies that did not have a satisfactory quality score were excluded. Overall, less than 1% (0.47%) of initially identified studies met selection criteria. Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines were followed. Associations were assessed using adjusted and unadjusted risk ratios (RRs) and odds ratios (ORs), combined prevalence, and metaregression. Data were pooled using a random-effects model. The main measures were RRs, ORs, and combined prevalence values. A total of 4 318 929 patients from 68 studies were included in this meta-analysis. Overall, 370 933 patients (8.6%) were African American, 9082 (0.2%) were American Indian or Alaska Native, 101 793 (2.4%) were Asian American, 851 392 identified as Hispanic/Latino (19.7%), 7417 (0.2%) were Pacific Islander, 1 037 996 (24.0%) were White, and 269 040 (6.2%) identified as multiracial and another race or ethnicity. In age- and sexadjusted analyses, African American individuals (RR, 3.54; 95% CI, 1.38-9.07; P = .008) and Hispanic individuals (RR, 4.68; 95% CI, 1.28-17.20; P = .02) were the most likely to test positive for COVID-19. Asian American individuals had the highest risk of intensive care unit admission (



	COVID-19 positivity in Hispanic individuals (P &It .001) and African American individuals (P &It .001). In this study, members of racial and ethnic minority groups had higher risks of COVID-19 positivity and disease severity. Furthermore, socioeconomic determinants were strongly associated with COVID-19 outcomes in racial and ethnic minority populations.
Referências	MAGESH, S. <i>et al.</i> Disparities in COVID-19 outcomes by race, ethnicity, and socioeconomic Status: a systematic-review and meta-analysis. JAMA network open , [United States], v. 4, n. 11, p. e2134147, Nov. 11, 2021. DOI: 10.1001/jamanetworkopen.2021.34147. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.34147 . Acesso em: 19 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785980



Título	Multisystem inflammatory syndrome in adults (MIS-A) associated with SARS-CoV-2 infection with delayed onset myocarditis: Case report
Autor(es)	Miles Shen, Aidan Milner, Carlo Foppiano Palacios, Tariq Ahmad
Resumo	During the Coronavirus disease 2019 (COVID-19) pandemic, reports have emerged of a multisystem inflammatory syndrome in adults (MIS-A). MIS-A can affect various organ systems, including cardiovascular, gastrointestinal, and neurologic systems without significant respiratory involvement. A previously healthy 43-year-old man presented with fevers and abdominal pain then rapidly deteriorated into cardiogenic shock. His constellation of symptoms along with elevated inflammatory markers in the setting of a recent SARS-CoV-2 infection was consistent with the diagnosis of MIS-A. He also had a comprehensive infectious workup that was unremarkable, ruling out other potential infectious etiologies for his presentation. He subsequently improved through supportive measures and after administration of intravenous immunoglobulin (IVIG). He later demonstrated recovery of cardiac function and cardiac magnetic resonance imaging (MRI) showed signs consistent with myocarditis. As the COVID-19 pandemic continues to be an ongoing issue, it is important to recognize MIS-A, a rare and potentially deadly clinical syndrome that can lead to profound cardiovascular complications. Non-invasive imaging modalities such as cardiac MRI can play a role in the identification of myocarditis. In addition to supportive management, adjunctive therapies such as IVIG may be efficacious in MIS-A and should be further investigated.
Referências	SHEN, M. et al. Multisystem inflammatory syndrome in adults (MIS-A) associated with SARS-CoV-2 infection with delayed onset myocarditis: Case report. European heart journal. Case reports, [United Kingdom], n. ytab470, Nov. 19, 2021. DOI: 10.1093/ehjcr/ytab470. Disponível em: https://doi.org/10.1093/ehjcr/ytab470 . Acesso em: 19 nov. 2021.
Fonte	https://academic.oup.com/ehjcr/advance-article/doi/10.1093/ehjcr/ytab470/6432039?searchresult=1



Título	Lower SARS-CoV-2 viral shedding following COVID-19 vaccination among healthcare workers in Los Angeles, California
Autor(es)	Paul C Adamson, Michael A Pfeffer, Valerie A Arboleda, Omai B Garner, Annabelle de St. Maurice, Benjamin von Bredow, Jonathan Flint, Leonid Kruglyak, Judith S Currier
Resumo	Among 880 healthcare workers with a positive SARS-CoV-2 test, 264 (30.0%) infections were identified following receipt of at least one vaccine dose. Median SARS-CoV-2 cycle threshold values were highest among individuals receiving two vaccine doses, corresponding to lower viral shedding. Vaccination might lead to lower transmissibility of SARS-CoV-2.
Referências	ADAMSON, P. C. <i>et al.</i> Lower SARS-CoV-2 viral shedding following COVID-19 vaccination among healthcare workers in Los Angeles, California. Open forum infectious diseases , [United Kingdom], n. ofab526, Nov. 18, 2021. DOI: 10.1093/ofid/ofab526. Disponível em: https://doi.org/10.1093/ofid/ofab526 . Acesso em: 19 nov. 2021.
Fonte	https://academic.oup.com/ofid/advance-article/doi/10.1093/ofid/ofab526/6425697?searchresult=1



Título	Effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality: systematic review and meta-analysis
Autor(es)	Stella Talic, Shivangi Shah, Holly Wild, Danijela Gasevic, Ashika Maharaj, Zanfina Ademi, Xue Li, Wei Xu, Ines Mesa-Eguiagaray, Jasmin Rostron, Evropi Theodoratou, Xiaomeng Zhang, Ashmika Motee, Danny Liew, Dragan Ilic
Resumo	Objective To review the evidence on the effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality. Design Systematic review and meta-analysis. Data sources Medline, Embase, CINAHL, Biosis, Joanna Briggs, Global Health, and World Health Organization COVID-19 database (preprints). Eligibility criteria for study selection Observational and interventional studies that assessed the effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality. Main outcome measures The main outcome measure was incidence of covid-19. Secondary outcomes included SARS-CoV-2 transmission and covid-19 mortality. Data synthesis DerSimonian Laird random effects meta-analysis was performed to investigate the effect of mask wearing, handwashing, and physical distancing measures on incidence of covid-19. Pooled effect estimates with corresponding 95% confidence intervals were computed, and heterogeneity among studies was assessed using Cochran's Q test and the I2 metrics, with two tailed P values. Results 72 studies met the inclusion criteria, of which 35 evaluated individual public health measures and 37 assessed multiple public health measures as a "package of interventions." Eight of 35 studies were included in the meta-analysis, which indicated a reduction in incidence of covid-19 associated with handwashing (relative risk 0.47, 95% confidence interval 0.19 to 1.12, I2=12%), mask wearing (0.47, 0.29 to 0.75, I2=84%), and physical distancing (0.75, 0.59 to 0.95, I2=87%). Owing to heterogeneity of the studies, meta-analysis was not possible for the outcomes of quarantine and isolation, universal lockdowns, and closures of borders, schools, and workplaces. The effects of these interventions were synthesised descriptively. Conclusions This systematic review and meta-analysis suggests that several personal protective and social measures, including handwashing, mask wearing, and physical distancing are associated



	reductions in the incidence covid-19. Public health efforts to implement public health measures should consider community health and sociocultural needs, and future research is needed to better understand the effectiveness of public health measures in the context of covid-19 vaccination.
Referências	TALIC, S. <i>et al.</i> Effectiveness of public health measures in reducing the incidence of covid-19, SARS-CoV-2 transmission, and covid-19 mortality: systematic review and meta-analysis. BMJ , [United Kingdom], v. 375, p. e068302, Nov. 18, 2021. DOI: 10.1136/bmj-2021-068302. Disponível em: https://www.bmj.com/content/375/bmj-2021-068302 . Acesso em: 19 nov. 2021.
Fonte	https://www.bmj.com/content/bmj/375/bmj-2021-068302.full.pdf



Título	Developing a sentinel syndromic surveillance system using school-absenteeism data, example monitoring absences over the 2020 COVID-19 pandemic
Autor(es)	Jennifer Lai, , Helen E. Hughes, Roger A. Morbey, Paul Loveridge , Jamie Lopez Bernal, Vanessa Saliba, Esther Kissling, Alex Lovelock-Wren , Jeremy Mabbitt , Alex J. Elliot
Resumo	This study describes the development of a pilot sentinel school absence syndromic surveillance system. Using data from a sample of schools in England the capability of this system to monitor the impact of disease on school absences in school-aged children is shown, using COVID-19 pandemic period as an example. Data were obtained from an online app service used by schools and parents to report their children absent, including reasons/symptoms relating to absence. For 2019 and 2020, data were aggregated into daily counts of 'total' and 'cough' absence reports. There was a large increase in the number of absence reports in March 2020 compared to March 2019, corresponding to the first wave of the COVID-19 pandemic in England. Absence numbers then fell rapidly and remained low from late March 2020 until August 2020, while lockdown was in place in England. Compared to 2019, there was a large increase in the number of absence reports in September 2020 when schools re-opened in England, although the peak number of absences was smaller than in March 2020. This information can help provide context around the absence levels in schools associated with COVID-19. Also, the system has the potental for further development to monitor the impact of other conditions on school absence, e.g. gastrointestinal infections.
Referências	LAI, J. <i>et al.</i> Developing a sentinel syndromic surveillance system using school-absenteeism data, example monitoring absences over the 2020 COVID-19 pandemic. Epidemiology and infection , [United Kingdom], p. 1–17, Nov. 9, 2021. DOI: 10.1017/S0950268821002399. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002399/type/journal_article . Acesso em: 12 nov. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/A974BC4154C61582CAF38C8811925683/S0950268821002399a.pdf/developing a sentinel syndromic surveillance system using schoolab senteeism data example monitoring absences over the 2020_covid19_pandemic.pdf



Título	Transmission of SARS-CoV-2 Virus, Delta Variant, Between Two Fully Vaccinated Healthcare Personnel
Autor(es)	L. Leigh Smith, Aaron M Milstone, Morgan Jibowu, Chun Huai Luo, C. Paul Morris, Heba H Mostafa, Lisa L Maragakis
Resumo	Introduction Breakthrough SARS-CoV-2 virus infection causing COVID-19 in fully vaccinated individuals occurs, and the frequency is increasing since the SARS-CoV-2 delta variant virus began circulating widely. 1 COVID-19 vaccines are highly effective at reducing SARS-CoV-2 shedding and transmission. 2 The question of whether fully vaccinated people with breakthrough COVID19 can transmit the SARS-CoV-2 virus to others is central to the debate around the need for mitigation efforts including masking and physical distancing for fully vaccinated individuals. We report apparent SARS-CoV-2 viral transmission between two fully vaccinated healthcare workers (HCW) in the setting of occupational unmasked close contact.
Referências	SMITH, L. L. <i>et al.</i> Transmission of SARS-CoV-2 virus, Delta variant, between two fully vaccinated healthcare personnel. Infection control and hospital epidemiology , [United Kingdom], p. 1–5, Nov. 8, 2021. DOI: 10.1017/ice.2021.469. Disponível em:



Título	Have the Diagnoses of Patients Transported by Ambulances Changed in the Early Stage of the COVID-19 Pandemic?
Autor(es)	Muge Gulen, Associate Professor; Salim Satar, Associate Professor; Selen Acehan,; Mehmet Bozkurt, Ebru Funda Aslanturkiyeli, ; Sarper Sevdimbas, Cemre Ipek Esen, Muhammet Balcik, Mehmet Durdu Uzucek, Gonca Koksaldi Sahin, Basak Toptas Firat
Resumo	Introduction: Since December 2019, emergency services and Emergency Medical Service (EMS) systems have been at the forefront of the fight against the coronavirus disease 2019 (COVID-19) pandemic world-wide. Objective: The objective of this study was to examine the reasons and the necessity of transportation to the emergency department (ED) by ambulance and the outcomes of these cases with the admissions during the COVID-19 pandemic period and during the same period in 2019. Methods: A retrospective descriptive study was conducted in which patients transported to the ED by ambulance in April 2019 and April 2020 were compared. The primary outcomes were the changes in the number and diagnoses of patients who were transferred to the ED by ambulance during the COVID-19 period. The secondary outcome was the need for patients to be transferred to the hospital by ambulance. Results: A total of 4,466 patients were included in the study. During the COVID-19 period, there was a 41.6% decrease in ED visits and a 31.5% decrease in ambulance calls. The number of critically ill patients transported by ambulance (with diagnoses such as decompensated heart failure [P <.001], chronic obstructive pulmonary disease [COPD] attack (P = .001), renal failure [acute-chronic; P = .008], angina pectoris [P <.001], and syncope [P <.001]) decreased statistically significantly in 2020. Despite this decrease in critical patient calls, non-emergency patient calls continued and 52.2% of the patients transported by ambulance in 2020 were discharged from the ED. Conclusions: Understanding how the COVID-19 pandemic is affecting EMS use is important for evaluating the current state of emergency health care and planning to manage possible future outbreaks.
Referências	GULEN, M. et al. Have the diagnoses of patients transported by ambulances changed in the early stage of the COVID-19 pandemic? Prehospital and disaster medicine , [United States], p. 1–18, Nov. 10, 2021. DOI: 10.1017/S1049023X21001229. Disponível em: https://www.cambridge.org/core/product/identifier/S1049023X21001229/type/journal_article . Acesso em: 12 nov. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/BE9F8429F785BEAC684915B43A2F6BD1/S1049023X21001229a.pdf/have the diagnoses of patients transported by ambulances change d in the early stage of the covid19 pandemic.pdf



Título	COVID-19 screening system utilizing daily symptom attestation helps identify hospital employees who should be tested to protect patients and co-workers
Autor(es)	Ellen Kim, Charles Morris, Michael Klompas, Haipeng Zhang, DO, Adam Landman, Sunil Eappen, Karen Hopcia, Dean Hashimoto, Hojjat Salmasian
Resumo	Objective: To investigate the effectiveness of a daily attestation system used by employees of a multi-institutional academic medical center, which comprised of symptom-screening, self-referrals to the Occupational Health team, and/or a COVID-19 test. Design: Retrospective cohort study of all employee attestations and COVID-19 tests performed between March and June 2020. Setting: A large multi-institutional academic medical center, including both inpatient and ambulatory settings. Participants: All employees who worked at the study site. Methods: Data was combined from the attestation system (COVIDPass), the employee database, and the electronic health records, and was analyzed using descriptive statistics including chi-squared, Wilcoxon, and Kruskal-Wallis tests. We investigated whether an association existed between symptomatic attestations by the employees and them testing positive for COVID-19. Results:After data linkage and cleaning, there were 2,117,298 attestations submitted by 65,422 employees between March and June 2020. Most attestations were asymptomatic (99.9%). The most commonly reported symptoms were sore throat (910), runny nose (637), and cough (570). Of the 2,026 employees who ever attested symptomatic, 905 employees were tested within 14 days of a symptomatic attestation, and 114 (13%) of these tests were positive. The most common symptoms associated with a positive COVID-19 test were anosmia (23% vs 4%) and fever (46% vs 19%). Conclusions: Daily symptom attestations amongst healthcare workers identified a handful of employees with Covid-19. While the number of positives was low, attestations may help keep unwell employees off campus to try to prevent transmissions.



	KIM, E. et al. COVID-19 screening system utilizing daily symptom attestation helps identify hospital employees who should be
	tested to protect patients and co-workers. Infection control and hospital epidemiology , [United Kingdom], p. 1–17, Nov. 10, 2021.
Referências	DOI: 10.1017/ice.2021.461. Disponível em: https://www.cambridge.org/core/journals/infection-control-and-hospital-
	epidemiology/article/covid19-screening-system-utilizing-daily-symptom-attestation-helps-identify-hospital-employees-who-
	should-be-tested-to-protect-patients-and-coworkers/D3A2F9A53DA261ED1A7FD8AD9B316061. Acesso em: 12 nov. 2021.
	https://www.cambridge.org/core/services/aop-cambridge-
Fonte	core/content/view/D3A2F9A53DA261ED1A7FD8AD9B316061/S0899823X2100461Xa.pdf/covid19_screening_system_utilizing_dail
	y_symptom_attestation_helps_identify_hospital_employees_who_should_be_tested_to_protect_patients_and_coworkers.pdf



Título	Inferring the COVID-19 infection fatality rate in the community-dwelling population: A simple Bayesian evidence synthesis of Inferring the COVID-19 infection fatality rate in the community-dwelling population: A simple Bayesian evidence synthesis of seroprevalence study data and imprecise mortality data
Autor(es)	Harlan Campbell, Paul Gustafson
Resumo	Estimating the COVID-19 infection fatality rate (IFR) has proven to be particularly challenging –and rather controversial– due to the fact that both the data on deaths and the data on the number of individuals infected are subject to many different biases. We consider a Bayesian evidence synthesis approach which, while simple enough for researchers to understand and use, accounts for many important sources of uncertainty inherent in both the seroprevalence and mortality data. With the understanding that the results of one's evidence synthesis analysis may be largely driven by which studies are included and which are excluded, we conduct two separate parallel analyses based on two lists of eligible studies obtained from two different research teams. The results from both analyses are rather similar. With the first analysis, we estimate the COVID-19 IFR to be 0.31% (95% credible interval of (0.16%, 0.53%)) for a typical community-dwelling population where 9% of the population is aged over 65 years and where the gross-domestic product at purchasing-power parity (GDP at PPP) per capita is \$17.8k (the approximate worldwide average). With the second analysis, we obtain 0.32% (95% credible interval of (0.19%, 0.47%)). Our results suggest that, as one might expect, lower IFRs are associated with younger populations (and may also be associated with wealthier populations). For a typical community-dwelling population with the age and wealth of the United States we obtain IFR estimates of 0.43% and 0.41%; and with the age and wealth of the European Union, we obtain IFR estimates of 0.67% and 0.51%.
Referências	CAMPBELL, H.; GUSTAFSON, P. Inferring the COVID-19 infection fatality rate in the community-dwelling population: A simple Bayesian evidence synthesis of seroprevalence study data and imprecise mortality data. Epidemiology and infection , [United Kingdom], p. 1–29, Nov. 8, 2021. DOI: 10.1017/S0950268821002405. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002405/type/journal_article . Acesso em: 12 nov. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/2BED7DA2109703060E07ABB6E79D96DD/S0950268821002405a.pdf/inferring_the_covid19_infection_fatality_rate_in_the_communitydwelling_population_a_simple_bayesian_evidence_synthesis_of_seroprevalence_study_data_and_imprecise_mortality_data.pdf



Título	Infection control in the intensive care unit: expert consensus statements for SARS-CoV-2 using a Delphi method
Autor(es)	Prashant Nasa, Elie Azoulay, Arunaloke Chakrabarti, Jigeeshu V Divatia, Ravi Jain, Camilla Rodrigues, Victor D Rosenthal, Waleed Alhazzani, Yaseen M Arabi, Jan Bakker, Matteo Bassetti, Jan De Waele, George Dimopoulos, Bin Du, Sharon Einav, Laura Evans, Simon Finfer, Claude Guérin, Naomi E Hammond, Samir Jaber, Ruth M Kleinpell, Younsuck Koh, Marin Kollef, Mitchell M Levy, Flavia R Machado, Jordi Mancebo, Ignacio Martin-Loeches, Mervyn Mer, Michael S Niederman, Paolo Pelosi, Anders Perner, John V Peter, Jason Phua, Lise Piquilloud, Mathias W Pletz, Andrew Rhodes, Marcus J Schultz, Mervyn Singer, Jéan-François Timsit, Balasubramanian Venkatesh, Jean-Louis Vincent, Tobias Welte, Sheila N Myatra
Resumo	During the current COVID-19 pandemic, health-care workers and uninfected patients in intensive care units (ICUs) are at risk of being infected with SARS-CoV-2 as a result of transmission from infected patients and health-care workers. In the absence of high-quality evidence on the transmission of SARS-CoV-2, clinical practice of infection control and prevention in ICUs varies widely. Using a Delphi process, international experts in intensive care, infectious diseases, and infection control developed consensus statements on infection control for SARS-CoV-2 in an ICU. Consensus was achieved for 31 (94%) of 33 statements, from which 25 clinical practice statements were issued. These statements include guidance on ICU design and engineering, health-care worker safety, visiting policy, personal protective equipment, patients and procedures, disinfection, and sterilisation. Consensus was not reached on optimal return to work criteria for health-care workers who were infected with SARS-CoV-2 or the acceptable disinfection strategy for heat-sensitive instruments used for airway management of patients with SARS-CoV-2 infection. Well designed studies are needed to assess the effects of these practice statements and address the remaining uncertainties.
Referências	NASA, P. et al. Infection control in the intensive care unit: expert consensus statements for SARS-CoV-2 using a Delphi method. The Lancet. Infectious diseases , [United Kingdom], p. S1473309921006265, Nov. 10, 2021. DOI: 10.1016/S1473-3099(21)00626-5. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S1473309921006265 . Acesso em: 12 nov. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900626-5



Título	Vaccination status and the detection of SARS-CoV-2 infection in health care personnel under surveillance in long-term residential facilities
Autor(es)	Katherine Linsenmeyer, Michael E. Charness, William J. O'Brien, Judith Strymish, Sucheta J. Doshi, Sven K. Ljaamo, Kalpana Gupta
Resumo	Introduction Routine testing for asymptomatic SARS-COV-2 infection among health care personnel (HCP) who have not been vaccinated against COVID-19 can reduce transmission to the residents of long-term care (LTC) facilities.1,2 However, the utility of surveillance testing for LTC HCP who have been vaccinated against COVID-19 is unclear. Although rates of positive results among HCP who are vaccinated are extremely low,3-5 breakthrough infections and transmission still occur.6 The Veterans Health Administration (VHA) implemented routine surveillance of HCP and residents of LTC units in April 2020. Surveillance was intensified in January 2021, coincident with a national surge of cases and first vaccine availability. Therefore, the object of this study was to assess whether vaccination was associated with decreased detection of asymptomatic SARS-CoV-2 infection in HCP working in LTC facilities.
Referências	LINSENMEYER, K. <i>et al.</i> Vaccination status and the detection of SARS-CoV-2 infection in health care personnel under surveillance in long-term residential facilities. JAMA network open , [United States], v. 4, n. 11, p. e2134229, Nov. 10, 2021. DOI: 10.1001/jamanetworkopen.2021.34229. Disponível em: https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785925 . Acesso em: 12 nov. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785925



	Association of Self-reported COVID-19 Infection and SARS-CoV-2 Serology Test Results With Persistent Physical Symptoms Among
Título	French Adults During the COVID-19 Pandemic
Autor(es)	Joane Matta, Emmanuel Wiernik, Olivier Robineau, Fabrice Carrat, Mathilde Touvier, Gianluca Severi, Xavier de Lamballerie, Hélène Blanché, Jean-François Deleuze, Clément Gouraud, Nicolas Hoertel, Brigitte Ranque, Marcel Goldberg, Marie Zins, Cédric
	Lemogne, for the Santé, Pratiques, Relations et Inégalités Sociales en Population Générale Pendant la Crise COVID-19–Sérologie (SAPRIS-SERO) Study Group
	After an infection by SARS-CoV-2, many patients present with persistent physical symptoms that may impair their quality of life.
	Beliefs regarding the causes of these symptoms may influence their perception and promote maladaptive health behaviors. To
	examine the associations of self-reported COVID-19 infection and SARS-CoV-2 serology test results with persistent physical
	symptoms (eg, fatigue, breathlessness, or impaired attention) in the general population during the COVID-19 pandemic.Participants
Resumo	in this cross-sectional analysis were 26 823 individuals from the French population-based CONSTANCES cohort, included between
	2012 and 2019, who took part in the nested SAPRIS and SAPRIS-SERO surveys. Between May and November 2020, an enzyme-
	linked immunosorbent assay was used to detect anti–SARS-CoV-2 antibodies. Between December 2020 and January 2021, the
	participants reported whether they believed they had experienced COVID-19 infection and had physical symptoms during the
	previous 4 weeks that had persisted for at least 8 weeks. Participants who reported having an initial COVID-19 infection only after
	completing the serology test were excluded.Logistic regressions for each persistent symptom as the outcome were computed in
	models including both self-reported COVID-19 infection and serology test results and adjusting for age, sex, income, and
	educational level.Of 35 852 volunteers invited to participate in the study, 26 823 (74.8%) with complete data were included in the
	present study (mean [SD] age, 49.4 [12.9] years; 13 731 women [51.2%]). Self-reported infection was positively associated with
	persistent physical symptoms, with odds ratios ranging from 1.39 (95% CI, 1.03-1.86) to 16.37 (95% CI, 10.21-26.24) except for
	hearing impairment (odds ratio, 1.45; 95% CI, 0.82-2.55) and sleep problems (odds ratio, 1.14; 95% CI, 0.89-1.46). A serology test
	result positive for SARS-COV-2 was positively associated only with persistent anosmia (odds ratio, 2.72; 95% CI, 1.66-4.46), even



Fonte	https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2785832
Referências	MATTA, J. <i>et al.</i> Association of Self-reported COVID-19 Infection and SARS-CoV-2 Serology Test Results With Persistent Physical Symptoms Among French Adults During the COVID-19 Pandemic. JAMA internal medicine , [United States], Nov. 8, 2021. DOI: 10.1001/jamainternmed.2021.6454. Disponível em: https://doi.org/10.1001/jamainternmed.2021.6454. Acesso em: 12 nov. 2021.
Resumo	when restricting the analyses to participants who attributed their symptoms to COVID-19 infection. Further adjusting for self-rated health or depressive symptoms yielded similar results. There was no significant interaction between belief and serology test results. The findings of this cross-sectional analysis of a large, population-based French cohort suggest that persistent physical symptoms after COVID-19 infection may be associated more with the belief in having been infected with SARS-CoV-2 than with having laboratory-confirmed COVID-19 infection. Further research in this area should consider underlying mechanisms that may not be specific to the SARS-CoV-2 virus. A medical evaluation of these patients may be needed to prevent symptoms due to another disease being erroneously attributed to "long COVID."



Título	Association of sleep-related hypoxia with risk of COVID-19 hospitalizations and mortality in a large integrated health system
Autor(es)	Cinthya Pena Orbea, Lu Wang, Vaishal Shah, Lara Jehi, Alex Milinovich, Nancy Foldvary-Schaefer, Mina K. Chung, Saif Mashaqi, Loutfi Aboussouan, Kelsey Seidel, Pharm; Reena Mehra
Resumo	The influence of sleep-disordered breathing (SDB) and sleep-related hypoxemia in SARS-CoV-2 viral infection and COVID-19 outcomes remains unknown. Controversy exists regarding whether to continue treatment for SDB with positive airway pressure given concern for aerosolization with limited data to inform professional society recommendations. To investigate the association of SDB (identified via polysomnogram) and sleep-related hypoxia with (1) SARS-CoV-2 positivity and (2) World Health Organization (WHO)-designated COVID-19 clinical outcomes while accounting for confounding including obesity, underlying cardiopulmonary disease, cancer, and smoking history. This case-control study was conducted within the Cleveland Clinic Health System (Ohio and Florida) and included all patients who were tested for COVID-19 between March 8 and November 30, 2020, and who had an available sleep study record. Sleep indices and SARS-CoV-2 positivity were assessed with overlap propensity score weighting, and COVID-19 clinical outcomes were assessed using the institutional registry. Sleep study—identified SDB (defined by frequency of apneas and hypopneas using the Apnea-Hypopnea Index [AHI]) and sleep-related hypoxemia (percentage of total sleep time at <90% oxygen saturation [TST <90]). Outcomes were SARS-CoV-2 infection and WHO-designated COVID-19 clinical outcomes (hospitalization, use of supplemental oxygen, noninvasive ventilation, mechanical ventilation or extracorporeal membrane oxygenation, and death). Of 350 710 individuals tested for SARS-CoV-2, 5402 (mean [SD] age, 56.4 [14.5] years; 3005 women [55.6%]) had a prior sleep study, of whom 1935 (35.8%) tested positive for SARS-CoV-2. Of the 5402 participants, 1696 were Black (31.4%), 3259 were White (60.3%), and 822 were of other race or ethnicity (15.2%). Patients who were positive vs negative for SARS-CoV-2 had a higher AHI score (median, 16.2 events/h [IQR, 6.1-39.5 events/h] vs 13.6 events/h [IQR, 5.5-33.6 events/h];



Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785921
Referências	PENA ORBEA, C. <i>et al.</i> Association of sleep-related hypoxia with risk of COVID-19 hospitalizations and mortality in a large integrated health system. JAMA network open , [United States], v. 4, n. 11, p. e2134241, Nov. 10, 2021. DOI: 10.1001/jamanetworkopen.2021.34241. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.34241 . Acesso em: 12 nov. 2021.
Resumo	P < .001) and increased TST <90 (median, 1.8% sleep time [IQR, 0.10%-12.8% sleep time] vs 1.4% sleep time [IQR, 0.10%-10.8% sleep time]; P = .02). After overlap propensity score—weighted logistic regression, no SDB measures were associated with SARS-CoV-2 positivity. Median TST <90 was associated with the WHO-designated COVID-19 ordinal clinical outcome scale (adjusted odds ratio, 1.39; 95% CI, 1.10-1.74; P = .005). Time-to-event analyses showed sleep-related hypoxia associated with a 31% higher rate of hospitalization and mortality (adjusted hazard ratio, 1.31; 95% CI, 1.08-1.57; P = .005). In this case-control study, SDB and sleep-related hypoxia were not associated with increased SARS-CoV-2 positivity; however, once patients were infected with SARS-CoV-2, sleep-related hypoxia was an associated risk factor for detrimental COVID-19 outcomes.



Título	Antibody titers before and after a third dose of the SARS-CoV-2 BNT162b2 vaccine in adults aged ≥60 years
Autor(es)	Noa Eliakim-Raz, Yaara Leibovici-Weisman, Amos Stemmer, Asaf Ness, Muhammad Awwad, Nassem Ghantous, Salomon M. Stemmer
Resumo	The durability of response to the SARS-CoV-2 BNT162b2 vaccine (Pfizer-BioNTech) in adults aged 60 years and older has yet to be determined. The immune response to 2 doses of BNT162b2 is lower in individuals aged 65 to 85 years vs 18 to 55 years. Among 4868 health care workers receiving 2 BNT162b2 doses, a significant waning of the humoral response (IgG, neutralizing antibodies) within 6 months of the second dose was observed, especially among adults aged 65 years and older. After a fourth SARS-CoV-2 wave in Israel, the Israeli Ministry of Health authorized, at the end of July 2021, a third BNT162b2 vaccine dose for individuals aged 60 years and older, which was subsequently expanded to younger age groups.
Referências	ELIAKIM-RAZ, N. <i>et al.</i> Antibody titers before and after a third dose of the SARS-CoV-2 BNT162b2 vaccine in adults aged ≥60 years. JAMA, [United States.], Nov. 5, 2021. DOI: 10.1001/jama.2021.19885. Disponível em: https://doi.org/10.1001/jama.2021.19885 . Acesso em: 12 nov. 2021.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2786096



Título	Low COVID-19 vaccination coverage and high COVID-19 mortality rates in Brazilian elderly
Autor(es)	Emil Kupek
Resumo	Objective: To investigate the relation between COVID-19 vaccine coverage and COVID-19-related mortality by age groups in Brazil in 2021. Methods: Secondary data on COVID-19 deaths and vaccination coverage were retrieved to investigate COVID-19 mortality rate (MR) evolution as the vaccination against COVID-19 advanced in Brazil in 2021. Poisson regression with adjustment for age and Brazilian states was used to calculate the MR. Results: By mid-April 2021, MR increased 2 – 3 times compared with the already high level in January for people aged 60 years or older, reaching the highest epidemic level of 5 – 15 per 100,000 inhabitants in this age group. Despite the following decline trend, by the end of May, the MR level was still about 50% and 80% higher for the age groups of 40 – 79 years and 80 years or older. The coverage concerning the first dose of COVID-19 vaccine reached 80% for people aged 60 – 69 years and exceeded 95% for those aged 70 years or older, but the second dose was only given to 26, 76 and 64% of the age groups of 60 – 69, 70 – 79, and 80 years or older, respectively. The age-standardized average MR over the study period was the highest in northern Brazilian states of Rondônia, Amazonas, Acre, and Roraima (range 6-8.4 per 100,000 inhabitants). Conclusions: COVID-19 vaccination coverage was below the level necessary to protect Brazilians from rising MR between January and May 2021. Urgent measures are necessary to increase the vaccine supply and the adherence to non-pharmacological protective measures.
Referências	KUPEK, E. Low COVID-19 vaccination coverage and high COVID-19 mortality rates in Brazilian elderly. Revista brasileira de epidemiologia , [São Paulo], v. 24, p. e210041, 2021. DOI: 10.1590/1980-549720210041. Disponível em: http://www.scielo.br/scielo.php?script=sci arttext&pid=S1415-790X2021000100208&tlng=en. Acesso em: 12 nov. 2021.
Fonte	https://www.scielo.br/j/rbepid/a/cNrTxfnVbgYjPdrsj3bjtHG/?format=pdf⟨=en



Título	SARS-CoV-2 variants and effectiveness of vaccines: a review of current evidence
Autor(es)	Elizabeth-Barbara Tatsi, Filippos Filippatos, Athanasios Michos
Resumo	The SARS-CoV-2 virus is rapidly evolving via mutagenesis, lengthening the pandemic, and threatening the public health. Until August 2021, 12 variants of SARS-CoV-2 named as Variants of Concern (VOC; Alpha to Delta) or Variants of Interest (VOI; Epsilon-Mu), with significant impact on transmissibility, morbidity, possible reinfection, and mortality, have been identified. The VOC Delta (B.1.617.2) of Indian origin is now the dominant and the most contagious variant worldwide as it provokes a strong binding to the human ACE2 receptor, increases transmissibility and manifests considerable immune escape strategies after natural infection or vaccination. Although the development and administration of SARS-CoV-2 vaccines, based on different technologies (mRNA, adenovirus carrier, recombinant protein etc), are very promising for the control of the pandemic, their effectiveness and neutralizing activity against VOCs varies significantly. In this review, we describe the most significant circulating variants of SARS-CoV-2, and the known effectiveness of currently available vaccines against them.
Referências	TATSI, EB.; FILIPPATOS, F.; MICHOS, A. SARS-CoV-2 variants and effectiveness of vaccines: a review of current evidence. Epidemiology and infection , [United Kingdom], p. 1–24, Nov. 4, 2021. DOI: 10.1017/S0950268821002430. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002430/type/journal_article . Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/sarscov2-variants-and-effectiveness-of-vaccines-a-review-of-current-evidence/39243FCC3CED73D5F1D94E497F8823D3



Título	The COVID-19 pandemic in the WHO African region: the first year (February 2020 to February 2021)
Autor(es)	Benido Impouma, Franck Mboussou, Bridget Farham, Caitlin M. Wolfe, Krys Johnson, Catherine Clary, Richard Mihigo, Ngoy Nsenga, Ambrose Talisuna, Zabulon Yoti, Antoine Flahault, Olivia Keiser, Abdou Salam Gueye, Joseph Cabore, Matshidiso Moeti
Resumo	The World Health Organization African region recorded its first laboratory confirmed COVID-19 cases on 25 February 2021. Two months later, all the 47 countries of the region were affected. The first anniversary of the pandemic occurred in a changed context with the emergence of new variants of concern (VOC) and growing COVID-19 fatigue. This study describes the epidemiological trajectory of COVID-19 in the region, summarizes public health and social measures (PHSM) implemented and discusses their impact on the pandemic trajectory. As of 24 February 2021, the African region accounted for 2.5% cases and 2.9% of deaths reported globally. Of the 13 countries that submitted detailed line listing of cases, the proportion of cases with at least one co-morbid condition was estimated at 3.3% of all cases. Hypertension, diabetes and Human mmunodeficiency Virus (HIV) infection were the most common comorbid conditions, accounting for 11.1%, 7.1% and 5.0% of cases with comorbidities, respectively. Overall, the CFR in patients with comorbid conditions was higher than in patients without comorbid conditions: 5.5% versus 1.0% (p<0.0001). Countries started to implement lockdown measures in early March 2020. This contributed to slow the spread of pandemic at the early stage while the gradual ease of lockdowns from 20 April 2020 resulted in an upsurge. The second wave of the pandemic, which started in November 2020, coincided with the emergence of new VOC. Only 0.08% of the population from six countries received at least one dose of COVID-19 vaccine. It is critical to not only learn from the past 12 months to improve the effectiveness of the current response but also to start preparing the health systems for future pandemics.
Referências	IMPOUMA, B. et al. The COVID-19 pandemic in the WHO African region: the first year (February 2020 to February 2021). Epidemiology and infection , [United Kingdom], p. 1–27, Nov. 4, 2021. DOI: 10.1017/S0950268821002429. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002429/type/journal_article . Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/covid19-pandemic-in-the-who-african-region-the-first-year-february-2020-to-february-2021/FE922DF0A0E4B57710A7CA6D20687365



Título	First whole genome analysis of the novel coronavirus (SARS-CoV-2) obtained from COVID-19 patients from five districts in Western Serbia
Autor(es)	Dejan Vidanović, Bojana Tešović, Jeremy D Volkening, Claudio L Afonso, Joshua Quick, Milanko Šekler, Aleksandra Knežević, Marko Janković, Tanja Jovanović, Tamaš Petrović, Bojana Banović Đeri
Resumo	This study was endeavored to contribute in furthering our understanding of the molecular epidemiology of SARS-CoV-2 by sequencing and analyzing the first full-length genome sequences obtained from 48 COVID-19 patients in five districts in Western Serbia in the period April 2020-July 2020. SARS-CoV-2 sequences in Western Serbia distinguished from the Wuhan sequence in 128 SNPs in total. Phylogenetic structure of local SARS-CoV-2 isolates suggested existence of at least four distinct groups of SARS-CoV-2 strains in Western Serbia. The first group is the most similar to the strain from Italy. These isolates included two 20A sequences and fifteen to thirty 20B sequences that displayed a newly occurring set of four conjoined mutations. The second group is the most similar to the strain from France, carrying two mutations and belonged to 20A clade. The third group is the most similar to the strain from Switzerland carrying four co-occurring mutations and belonging to 20B clade. The fourth group is the most similar to another strain from France, displaying one mutation that gave rise to a single local isolate that belonged to 20A clade.
Referências	VIDANOVIĆ, D. <i>et al.</i> First whole genome analysis of the novel coronavirus (SARS-CoV-2) obtained from COVID-19 patients from five districts in Western Serbia. Epidemiology and infection , [United Kingdom], p. 1–31, Nov. 2, 2021. DOI: 10.1017/S095026882100220X. Disponível em: https://www.cambridge.org/core/product/identifier/S095026882100220X/type/journal_article . Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/first-whole-genome-analysis-of-the-novel-coronavirus-sarscov2-obtained-from-covid19-patients-from-five-districts-in-western-serbia/D7CE8691D4D2E9E45C6422D40903FCDC



Título	Transmission risk of SARS-CoV-2 to healthcare personnel following unanticipated exposure to aerosol generating procedures: Experience from epidemiologic investigations at an academic medical center
Autor(es)	Sharon Fawcett, Meghan Madhusudhan, Emily Gaddam, Matthew Almario, Shawna Misah, Dee Dee Klute-Evans, Julie Johnson, Clarise Stroud, Judy Dolan-Caren, Michael Ben-Aderet, Jeffery Luria, Margie Morgan, Eric Vail, Jonathan Grein
Resumo	Healthcare personnel (HCP) with unprotected exposures to aerosol generating procedures (AGP) on patients with COVID-19 are at risk of infection with SARS-CoV-2. A retrospective review at an academic medical center demonstrated a less than 1% infection rate among HCP involved in AGP without a respirator and/or eye protection.
	FAWCETT, S. <i>et al.</i> Transmission risk of SARS-CoV-2 to healthcare personnel following unanticipated exposure to aerosol generating procedures: Experience from epidemiologic investigations at an academic medical center. Infection control and hospital
Referências	epidemiology, [United Kingdom], p. 1–10, Nov. 2, 2021. DOI: 10.1017/ice.2021.472. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004724/type/journal_article . Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/transmission-risk-of-sarscov2-to-healthcare-personnel-following-unanticipated-exposure-to-aerosol-generating-procedures-experience-from-epidemiologic-investigations-at-an-academic-medical-center/92D47486DDC498C57B9BE9B38588FF0A



Título	The Impact of SARS-COV-2 Response on Hospital Infection Prevention Programs and Practices in Southeastern United States
Autor(es)	Sonali D. Advani; Andrea Cromer, Brittain Wood, Esther Baker, Kathryn L. Crawford, Linda Crane, Linda Roach, Polly Padgette, 2, Elizabeth Dodds-Ashley; Ibukunoluwa C. Kalu, David J. Weber, Emily Sickbert-Bennett; Deverick J Anderson, for the CDC Prevention Epicenters Program
Resumo	Initial assessments of SARS-COV-2 preparedness revealed resource shortages and variations in infection prevention policies across US hospitals. Our follow-up survey revealed improvement in resource availability, increase in testing capacity, and uniformity in infection prevention policies. Most importantly, the survey highlighted an increase in staffing shortages and use of travel nursing.
Referências	ADVANI, S. D. <i>et al.</i> The Impact of SARS-COV-2 Response on Hospital Infection Prevention Programs and Practices in Southeastern United States. Infection control and hospital epidemiology, [United Kingdom], p. 1–12, Nov. 2, 2021. DOI: 10.1017/ice.2021.460. Disponível em: <a .="" 2021<="" 5="" acesso="" em:="" href="https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/impact-of-sarscov2-response-on-hospital-infection-prevention-programs-and-practices-in-southeastern-united-states/B1BA73BAE653A01E49D03D4B46EC4625" nov.="" th="">
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/B1BA73BAE653A01E49D03D4B46EC4625/S0899823X21004608a.pdf/impact_of_sarscov2_response_on_hospit_al_infection_prevention_programs_and_practices_in_southeastern_united_states.pdf



Título	Comparison of ARIMA, ES, GRNN and ARIMA-GRNN hybrid models to forecast the second wave of COVID-19 in India and the United States
Autor(es)	Gang Wang, Tiantian Wu, Wudi Wei, Junjun Jiang , Sanqi An, Bingyu Liang, Li Ye, Hao Liang
Resumo	As acute infectious pneumonia, the COVID-19 has created unique challenges for each nation and region. Both India and the United States (US) have experienced a second outbreak, resulting in severe disease burden. The study aimed to develop optimal models to predict the daily new cases, in order to help to develop public health strategies. The autoregressive integrated moving average (ARIMA) models, generalized regression neural network (GRNN) models, ARIMA-GRNN hybrid model and exponential smoothing (ES) model were used to fit the daily new cases. The performances were evaluated by MAPE. The predictive value with ARIMA (3, 1, 3) (1, 1, 1) 14 model was closest to the actual value in India, while the ARIMA-GRNN presented a better performance in the US. According to the models, the number of daily new COVID-19 cases in India continued to decrease after 27 May 2021. In conclusion, ARIMA model presented to be the best-fit model in forecasting daily COVID-19 new cases in India, and ARIMA-GRNN hybrid model had the best prediction performance in the US. The appropriate model should be selected for different regions in predicting daily new case. The results can shed light on understanding the trends of the outbreak and giving ideas of the epidemiological stage of these regions.
Referências	GANG, Wang <i>et al.</i> Comparison of ARIMA, ES, GRNN and ARIMA-GRNN hybrid models to forecast the second wave of COVID-19 in India and the United States. Epidemiology and infection , [United Kingdom], p. 1–21, Nov. 2, 2021. DOI: 10.1017/S0950268821002375. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002375/type/journal article . Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/87C42DA49A58FD23AFED7A7131725D89/S0950268821002375a.pdf/comparison of arima es grnn and arimagrnn hybrid models to forecast the second wave of covid19 in india and the united states.pdf



Título	Estimating the SARS-CoV2 infections detection rate and cumulative incidence in the World Health Organization African Region ten months into the pandemic
Autor(es)	Benido Impouma, Franck Mboussou, Cyrus Shahpar, Caitlin M. Wolfe, , Bridget Farham, George Sie Williams, Humphrey Karamagi, Roland Ngom, PhD1, Ngoy Nsenga, , Antoine Flahault, Cláudia Torres Codeço, Zabulon Yoti, Francis Kasolo, Olivia Keiser
Resumo	As of 03 January 2021, the WHO African region is the least affected by the COVID-19 pandemic, accounting for only 2.4% of cases and deaths reported globally. However, concerns abound about whether the number of cases and deaths reported from the region reflect the true burden of the disease and how the monitoring of the pandemic trajectory can inform response measures. We retrospectively estimated four key epidemiological parameters (the total number of cases, the number of missed cases, the detection rate and the cumulative incidence) using the COVID-19 prevalence calculator tool developed by Resolve to Save Lives. We used cumulative cases and deaths reported during the period 25 February to 31 December 2020 for each WHO Member State in the region as well as population data to estimate the four parameters of interest. The estimated number of confirmed cases in 42 countries out of 47 of the WHO African region included in this study was 13947631 [95% CI: 13334,620; 14635502] against 1889512 cases reported, representing 13.5% of overall detection rate (range: 4.2% in Chad, 43.9% in Guinea). The cumulative incidence of SARS-CoV-2 was estimated at 1.38% [95% CI: 1.31%; 1.44%], with South Africa the highest (14.5% [95% CI: 13.9%; 15.2%]) and Mauritius (0.1% [95% CI: 0.099%; 0.11%]) the lowest. The low detection rate found in most countries of the WHO African region suggests the need to strengthen SARS-CoV-2 testing capacities and adjusting testing strategies.
Referências	IMPOUMA, B. <i>et al.</i> Estimating the SARS-CoV2 infections detection rate and cumulative incidence in the World Health Organization African Region ten monthsinto the pandemic. Epidemiology and infection , [United Kingdom], p. 1–21, Nov. 4, 2021. DOI: 10.1017/S0950268821002417. Disponível em: https://www.cambridge.org/core/journals/epidemiology-and-infection/article/estimating-the-sarscov2-infections-detection-rate-and-cumulative-incidence-in-the-world-health-organization-african-region-ten-months-into-the-pandemic/8F40479872BC73B9B9F541A65F4E7BA8 . Accesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/estimating-the-sarscov2-infections-detection-rate-and-cumulative-incidence-in-the-world-health-organization-african-region-ten-months-into-the-pandemic/8F40479872BC73B9B9F541A65F4E7BA8



Título	What effect might border screening have on preventing importation of COVID-19 compared with other infections? A modelling study
Autor(es)	Declan Bays, Emma Bennett, Thomas Finnie
Resumo	The effectiveness of screening travellers during times of international disease outbreak is contentious, especially as the reduction in the risk of disease importation can be very small. Border screening typically consists of travellers being thermally scanned for signs of fever and/or completing a survey declaring any possible symptoms prior to admission to their destination country; while more thorough testing typically exists, these would generally prove more disruptive to deploy. In this paper, we describe a simple Monte Carlo based model that incorporates the epidemiology of COVID-19 to investigate the potential decrease in risk of disease importation that might be achieved by requiring travellers to undergo screening upon arrival during the current pandemic. This is a purely theoretical study to investigate the maximum impact that might be attained by deploying a test or testing programme simply at point of entry, through which we may assess such action in the real world as a method of decreasing risk of importation. We therefore assume ideal conditions such as 100% compliance among travellers and the use of a "perfect" test. In addition to COVID-19, we also apply the presented model to simulated outbreaks of influenza, SARS and Ebola for comparison. Our model only considers screening implemented at airports, being the predominant method of international travel. Primary results showed that in the best-case scenario, screening at point of entry may detect a maximum of 8.8% of travellers infected with COVID-19, compared to 34.8.%, 9.7% and 3.0% for travellers infected with influenza, SARS and Ebola respectively. While results appear to indicate that screening is more effective at preventing disease ingress when the disease in question has a shorter average incubation period, our results suggest that screening at point of entry alone does not represent a sufficient method to adequately protect a nation from the importation of COVID-19 cases.



Referências	BAYS, D.; BENNETT, E.; FINNIE, T. What effect might border screening have on preventing importation of COVID-19 compared with other infections? A modelling study. Epidemiology and infection , [United Kingdom], p. 1–9, Nov. 4, 2021. DOI: 10.1017/S0950268821002387. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002387/type/journal_article.Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/what-effect-might-border-screening-have-on-preventing-importation-of-covid19-compared-with-other-infections-a-modelling-study/5607EFC7819E7A7D900B6576C6C0C3A5



Título	False-negative nasopharyngeal COVID-19 RT-PCR in immunocompromised patients resulting in Healthcare Worker Exposures
Autor(es)	Elena Beam, Michelle L. Meyer2, John C. O' Horo, Laura Breeher
Resumo	Exposure to COVID-19 infection will remain a concern in healthcare settings, even with increasing vaccination rates among healthcare staff and patient populations. This is particularly true for healthcare workers (HCWs) who are immunocompromised, as they have been noted to have a lower response to available COVID-19 vaccines [1-6]. Specific immunocompromised hosts, including hypogammaglobulinemic patients, and those on anti-CD-20 inhibitors are not only at risk for poor vaccine response, but can also present with prolonged duration of symptoms and infection.[]
Referências	BEAM, E. <i>et al.</i> False-negative nasopharyngeal COVID-19 RT-PCR in immunocompromised patients resulting in Healthcare Worker Exposures. Infection control and hospital epidemiology, [United Kingdom], p. 1–4, Niov. 2, 2021. DOI: 10.1017/ice.2021.447Disponível em: <a .="" 2021<="" 5="" acesso="" em:="" href="https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/falsenegative-nasopharyngeal-covid19-rtpcr-in-immunocompromised-patients-resulting-in-healthcare-worker-exposures/42075C1FF01B762F842EEB8E3D47A316" nov.="" th="">
Fonte	https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/falsenegative-nasopharyngeal-covid19-rtpcr-in-immunocompromised-patients-resulting-in-healthcare-worker-exposures/42075C1FF01B762F842EEB8E3D47A316



Título	Experience with voluntary SARS-CoV-2 testing of asymptomatic staff at the National Institutes of Health for one year
Autor(es)	Arthur H. Totten, , Ann Marie Matlock, , Heike Bailin, Josanne Revoir, Christopher M. Siwy, , Maria Joyce, Patricia Coffey, David K. Henderson, , Tara N. Palmore, Karen M. Frank, McKeeby, DSc
Resumo	Voluntary asymptomatic SARS-CoV-2 testing was provided by NIH Clinical Center over a year. Of 105,927 tests, 0.2% were positive. Of eligible staff, 79% participated with variable frequency and 61% of positive individuals had symptoms at the time of testing. Saliva was chosen as an option less frequently than mid-turbinate collection.
Referências	TOTTEN, A. H. <i>et al.</i> Experience with Voluntary SARS-CoV-2 Testing of Asymptomatic Staff at the National Institutes of Health for One Year. Infection control and hospital epidemiology, [United Kingdom], p. 1–9, Nov. 2, 2021. DOI: 10.1017/ice.2021.458. Disponível em: <a .="" 2021<="" 5="" accesso="" em:="" href="https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/experience-with-voluntary-sarscov2-testing-of-asymptomatic-staff-at-the-national-institutes-of-health-for-one-year/0EE4169EC0FB87132A83B27FC65DFB10" nov.="" th="">
Fonte	https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/experience-with-voluntary-sarscov2-testing-of-asymptomatic-staff-at-the-national-institutes-of-health-for-one-year/0EE4169EC0FB87132A83B27FC65DFB10



Título	COVID-19 vaccine hesitancy among university students in Lebanon
Autor(es)	Bou Hamdan m, Singh S, Polavarapu M, Jordan TR, Melhem NM.
Resumo	Little is known about the decision-making process of college students in Lebanon regarding COVID-19 vaccination. The aim of this study was to identify factors predicting behavioral intentions of students enrolled at the American University of Beirut to obtain a COVID-19 vaccine. A total of 3,805 students were randomly selected. Participants were divided into 3 groups: vaccine accepting (willing to take or already took the vaccine), vaccine hesitant (hesitant to take the vaccine) and vaccine resistant (decided not to take the vaccine). Overall, participants were vaccine accepting (87%), with 10% and 3% being hesitant and resistant, respectively. Vaccine hesitancy was significantly associated with nationality, residency status and university rank. Participants who believed the vaccine was safe and in agreement with their personal views were less likely to be hesitant. Participants who did not receive the flu vaccine were more hesitant than those who did. Moreover, a significant association between hesitancy and agreement with conspiracies was observed. High level of knowledge about COVID-19 disease and vaccine resulted in lower odds of vaccine resistance among AUB students. The factors identified explaining each of the three vaccine intention groups can be used as core content for health communication and social marketing campaigns to increase the rate of COVID-19 vaccination.
Referências	HAMDAN, M. B. <i>et al.</i> COVID-19 vaccine hesitancy among university students in Lebanon. Epidemiology and infection , [United Kingdom], p. 1–32, Nov. 2, 2021. DOI: 10.1017/S0950268821002314. Disponível em:



Título	Hospital Outbreak of the SARS-CoV-2 Delta Variant in Partially and Fully Vaccinated Patients and Healthcare Workers in Toronto, Canada
Autor(es)	Erica K. Susky, Susy Hota, Irene E. Armstrong , Tony Mazzulli, Shaindel Kestenberg, Leanne K. Casaubon, John Granton, Carly Rebelo, Erika Bartels , Jeff Wrana , Alon Vaisman
Resumo	The SARS-CoV-2 Delta variant is highly transmissible and current vaccines may have reduced effectiveness in preventing symptomatic infection. Using epidemiological and genomic analysis, we investigated an outbreak of the variant in an acute care setting amongst partially and fully vaccinated individuals. Effective outbreak control was achieved using standard measures.
Referências	SUSKY, E. K. <i>et al.</i> Hospital Outbreak of the SARS-CoV-2 Delta Variant in Partially and Fully Vaccinated Patients and Healthcare Workers in Toronto, Canada. Infection control and hospital epidemiology , [United Kingdom], p. 1–10, Oct,. 28, 2021. DOI: 10.1017/ice.2021.471. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004712/type/journal_article . Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/9E02D8008E995B8D52A8BF166BE85189/S0899823X21004712a.pdf/hospital outbreak of the sarscov2 delta variant in partially and fully vaccinated patients and healthcare workers in toronto canada.pdf



Título	Neurological presentations in patients with COVID-19 in cytokine storm
Autor(es)	Gorkem Tutal Gursoy, Hatice Yuksel, Inci Mulkem Simsek, Saniye Oral, Fadime Erdogan Kucukdagli, Ayberk araman, Esragul Akinci, Aliye Bastug, Hatice Rahmet Güner, Hesna Bektaş
Resumo	Coronavirus disease 2019 (COVID-19) infection causes a wide variety of neurological disorders by affecting both central and peripheral nervous systems. The cytokine storm (CS) has been blamed for the development of severe neurological disorders in COVID-5 19. However, the relationship between COVID-19 CS and neurological manifestations has not been adequately studied. Thus, we aimed to investigate the neurological presentations in patients with COVID-19 CS.
Referências	TUTAL GURSOY, G. <i>et al.</i> Neurological presentations in patients with COVID-19 in cytokine storm. Canadian Journal of neurological sciences, [United Kingdom], p. 1–18, Oct. 29, 2021. DOI: 10.1017/cjn.2021.247. Disponível em: https://www.cambridge.org/core/product/identifier/S031716712100247X/type/journal_article . Acesso em: 5 nov. 2021
Fonte	https://www.cambridge.org/core/journals/canadian-journal-of-neurological-sciences/article/neurological-presentations-in-patients-with-covid19-in-cytokine-storm/A47E431FE6FD39851D8FC20682A126FA



Título	SARS-CoV-2 susceptibility and COVID-19 disease severity are associated with genetic variants affecting gene expression in a wide variety of tissues
Autor(es)	Matteo D'Antonio, Jennifer P. Nguyen, Timothy D. Arthur, Hiroko Matsui, The COVID-19 Host Genetics Initiative, Agnieszka D'Antonio-Chronowska, Kelly A. Frazer
Resumo	Variability in SARS-CoV-2 susceptibility and COVID-19 disease severity between individuals is partly due to genetic factors. Here, we identify four genomic loci with suggestive associations for SARS-CoV-2 susceptibility and nineteen for COVID-19 disease severity. Four of these 23 loci likely have an ethnicity-specific component. GWAS signals in eleven loci colocalize with eQTLs associated with the expression of 20 genes in 62 tissues/cell types (range: 1:43 tissues/gene) including lung, brain, heart, muscle, skin as well as the digestive system and immune system. We perform genetic fine mapping to compute 99% credible SNP sets, which identify ten GWAS loci that have eight or fewer SNPs in the credible set, including three loci with one single likely causal SNP. Our study suggests that the diverse symptoms and disease severity of COVID-19 observed between individuals is associated with variants across the genome affecting gene 31 expression levels in a wide variety of tissue types.
Referências	D'ANTONIO, M. <i>et al.</i> SARS-CoV-2 susceptibility and COVID-19 disease severity are associated with genetic variants affecting gene expression in a wide variety of tissues. Cell reports , [Netherlands], p. 110020, Nov. 2, 2021. DOI: 10.1016/j.celrep.2021.110020. Disponível em: https://www.cell.com/cell-reports/abstract/S2211-1247(21)01502-3 . Acesso em: 5 nov. 2021
Fonte	https://www.cell.com/mwg-internal/de5fs23hu73ds/progress?id=jajn3rN3zLdnXbTAo l2c07DuZRqyH0epBG492s3NmU,&dl



Título	The impact of viral mutations on recognition by SARS-CoV-2 specific T-cells
Autor(es)	Thushan I. de Silva, Guihai Liu, Benjamin B. Lindsey, Danning Dong, Shona C. Moore, Nienyun Sharon Hsu, Dhruv Shah, Dannielle Wellington, Alexander J. Mentzer, Adrienn Angyal, Rebecca Brown, Matthew D. Parker, Zixi Ying, Xuan Yao, Lance Turtle, Susanna Dunachie, COVID-19 Genomics UK (COG-UK) Consortium, Mala K. Maini, Graham Ogg, Julian C. Knight, ISARIC4C Investigators, Yanchun Peng, Sarah L. Rowland-Jones, Tao Dong
Resumo	We identify amino acid variants within dominant SARS-CoV-2 T-cell epitopes by interrogating global sequence data. Several variants within nucleocapsid and ORF3a epitopes have arisen independently in multiple lineages and result in loss of recognition by epitope-specific T-cells assessed by IFN-γ and cytotoxic killing assays. Complete loss of T-cell responsiveness was seen due to Q213K in the A*01:01-restricted CD8+ ORF3a epitope FTSDYYQLY ₂₀₇₋₂₁₅ , due to P13L, P13S and P13T in the B*27:05-restricted CD8+ nucleocapsid epitope QRNAPRITF ₉₋₁₇ , and due to T362I and P365S in the A*03:01/A*11:01-restricted CD8+ nucleocapsid epitope KTFPPTEPK ₃₆₁₋₃₆₉ . CD8+ T-cell lines unable to recognise variant epitopes have diverse T-cell receptor repertoires. These data demonstrate the potential for T-cell evasion and highlight the need for ongoing surveillance for variants capable of escaping T-cell as well as humoral immunity.
Referências	DE SILVA, T. I. <i>et al.</i> The impact of viral mutations on recognition by SARS-CoV-2 specific T-cells. iScience , [Netherlands], p. 103353, Oct. 27, 2021. DOI: 10.1016/j.isci.2021.103353. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2589004221013225 . Acesso em: 5 nov. 2021
Fonte	https://www.cell.com/mwg-internal/de5fs23hu73ds/progress?id=cFUqqU4Rc_IGiCuQ0l9pQ-ae58zOmbPC3iT4obW5drk,&dl



Título	Increasing impact of COVID-19 on young adults: evidence from hospitalisations in Brazil
Autor(es)	R.Guimarães, D.A.M.Villela, D.R. Xavier, R., Saldanha, C Barcellos, C.M.de Freitas, M.C. Portela
Resumo	Objectives: Concerns about the increasing impact of severe COVID-19 in younger individuals in Brazil came after a recent synchronised country-wide wave of cases in Brazil. This communication analyses how hospitalisations due to COVID-19 changed in the age groups 18–49 years and ≥70 years. Study design:Longitudinal study based on secondary data. Methods:Data from SIVEP-Gripe, a public and open-access database of Severe Acute Respiratory Illness records (including COVID-19 notifications), were used in this study. Statistical control charts examined changes in the magnitude and variation of younger (18–49 years) and older (≥70 years) adults who were hospitalised between 15th March 2020 and 19th June 2021. Results:During the few first weeks of the pandemic in Brazil, the number of COVID-19 hospitalisations increased in older adults but decreased in younger adults. Subsequently, hospitalisations reached statistical control zones in epidemiological weeks (EW) 19–48 of 2020 (EW 19-48/2020) and EW 03-05/2021 (18–49 y, mean = 26.1%; ≥70 y, mean = 32.8%). Between EW 49/2020 and EW 02/2021, the number of hospitalisations of younger adults dropped to levels below the lower control limit. In contrast, the number of hospitalisations of older adults surpassed the upper limit of the corresponding statistical control zones. However, from EW 06/2021, numbers of hospitalisations changed from statistical control zones, with hospitalisations of younger adults increasing and reaching 44.9% in EW 24/2021 and hospitalisations of older adults decreasing until EW 19/2021 (14.1%) and reaching 17.3% in EW 24/2021. Conclusions:



Fonte	https://www.sciencedirect.com/science/article/pii/S0033350621003218?via%3Dihub
Referências	GUIMARÃES, R. <i>et al.</i> Increasing impact of COVID-19 on young adults: evidence from hospitalisations in Brazil. Public health , [United Kingdom], v. 198, p. 297–300, Sept. 2021. DOI: 10.1016/j.puhe.2021.08.002. Disponível em: https://www.sciencedirect.com/science/article/pii/S0033350621003218 . Acesso em: 29 out. 2021.
	An increasing number of COVID-19 hospitalisations were observed in younger adults from EW 06/2021. This could be a result of the successful vaccination programme in older adults, who were initially prioritised, and possibly an increased exposure to highly transmissible variants of COVID-19 in younger adults who had to go to work in the absence of social protection (i.e. government financial support). Potential consequences of COVID-19 hospitalisations in younger adults could include a reduced life expectancy of the population and an increased number of people unable to perform daily activities due to post-COVID-19 conditions.



Título	The systemic inflammatory landscape of COVID19 in pregnancy: Extensive serum proteomic profiling of mother-infant dyads with in-utero SARS-CoV-2
Autor(es)	Suan-Sin Foo, Mary Catherine Cambou, Thalia Mok, Viviana M. Fajardo, Kyle L. Jung, Trevon Fuller, Weiqiang Chen, Tara Kerin, Jenny Mei, Debika Bhattacharya, Younho Choi, Xin Wu, Tian Xia, Woo-Jin Shin, Jessica Cranston, Grace Aldrovandi, Nicole Tobin, Deisy Contreras, Francisco J. Ibarrondo, Otto Yang, Shangxin Yang, Omai Garner, Ruth Cortado, Yvonne Bryson, Carla Janzen, Shubhamoy Ghosh, Sherin Devaskar, Brenda Asilnejad, Maria Elisabeth Moreira, Zilton Vasconcelos, Priya R. Soni, L. Caroline Gibson, Patricia Brasil, Suzy AA. Comhair, Vaithilingaraja Arumugaswami, Serpil C. Erzurum, Rashmi Rao, Jae U. Jung, Karin Nielsen-Saines
Resumo	While pregnancy increases the risk for severe COVID19, the clinical and immunological implications of COVID19 on maternal-fetal health remain unknown. Here, we present the clinical and immunological landscapes of 93 COVID19 mothers and 45 of their SARS-CoV-2-exposed infants through comprehensive serum proteomics profiling for >1400 cytokines of their peripheral and cord blood specimens. Prenatal SARS-CoV-2 infection triggers NF-κB-dependent proinflammatory immune activation. Pregnant women with severe COVID19 show increased inflammation and unique IFNλ antiviral signaling, with elevated levels of IFNL1 and IFNLR1. Furthermore, SARS-CoV-2 infection re-shapes maternal immunity at delivery altering the expression of pregnancy complication-associated cytokines, inducing MMP7, MDK, ESM1, and reducing BGN and CD209. Finally, COVID19-exposed infants exhibit induction of T cell-associated cytokines (IL33, NFATC3 and CCL21), while some undergo IL-1β/IL-18/CASP1 axis-driven neonatal respiratory distress despite birth at term. Our findings demonstrate COVID19-induced immune rewiring in both mothers and neonates, warranting long-term clinical follow-up to mitigate potential health risks.
Referências	SUAN-SIN, Foo <i>et al.</i> The systemic inflammatory landscape of COVID19 in pregnancy: Extensive serum proteomic profiling of mother-infant dyads with in-utero SARS-CoV-2. Cell reports medicine , [United States], p. 100453, Oct. 26, 2021. DOI: 10.1016/j.xcrm.2021.100453. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2666379121003219 . Acesso em: 29 out. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S2666-3791%2821%2900321-9



Título	Community SARS-CoV-2 seroprevalence before and after the second wave of SARS-CoV-2 infection in Harare, Zimbabwe
Autor(es)	Arun Fryatt , Victoria Simmsa, Tsitsi Bandason , Nicol Redzo , Ioana D. Olaru, Chiratidzo E Ndhlovu , Hilda Mujuru , Simbarashe Rusakaniko , Michael Hoelscher, Raquel Rubio-Acero , Ivana Paunovic , Andreas Wieser, Prosper Chonzi , Kudzai Masunda, Rashida A Ferrand, Katharina Kranzer
Resumo	By the end of July 2021 Zimbabwe, has reported over 100,000 SARS-CoV-2 infections. The true number of SARS-CoV-2 infections is likely to be much higher. We conducted a seroprevalence survey to estimate the prevalence of past SARS-CoV-2 in three high-density communities in Harare, Zimbabwe before and after the second wave of SARS-CoV-2.
Referências	FRYATT, A. <i>et al.</i> Community SARS-CoV-2 seroprevalence before and after the second wave of SARS-CoV-2 infection in Harare, Zimbabwe. EClinicalMedicine , [Netherlands], v. 41, p. 101172, Oct. 23, 2021. DOI: 10.1016/j.eclinm.2021.101172. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2589537021004521 . Acesso em: 29 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900452-1



Título	Community transmission and viral load kinetics of the SARS-CoV-2 delta (B.1.617.2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study
Autor(es)	Anika Singanayagam, Seran Hakki, Jake Dunning, Kieran J Madon, Michael A Crone, Aleksandra Koycheva, Nieves Derqui-Fernandez, Jack L Barnett, Michael G Whitfield, Robert Varro, Andre Charlett, Rhia Kundu, Joe Fenn, Jessica Cutajar, Valerie Quinn, Emily Conibear, Wendy Barclay, Paul S Freemont, Graham P Taylor, Shazaad Ahmad, Maria Zambon, Neil M Ferguson, Ajit Lalvani, on behalf of the ATACCC Study Investigators
Resumo	The SARS-CoV-2 delta (B.1.617.2) variant is highly transmissible and spreading globally, including in populations with high vaccination rates. We aimed to investigate transmission and viral load kinetics in vaccinated and unvaccinated individuals with mild delta variant infection in the community.
Referências	SINGANAYAGAM, A. <i>et al.</i> Community transmission and viral load kinetics of the SARS-CoV-2 delta (B.1.617.2) variant in vaccinated and unvaccinated individuals in the UK: a prospective, longitudinal, cohort study. The Lancet Infectious Diseases , [United Kingdom], Oct. 29, 2021. Disponível em: https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00648-4/fulltext. Acesso em: 29 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900648-4



Título	Twenty years after the anthrax terrorist attacks of 2001: lessons learned and unlearned for the COVID-19 response
Autor(es)	Lawrence O. Gostin, Jennifer B. Nuzzo
Resumo	The 20th anniversary of the terrorist attacks on September 11, 2001, resulted in deep national reflection. Less remembered are the events that began to unfold 7 days later as anonymous letters laced with deadly anthrax (Bacillus anthracis) spores began arriving at postal facilities, media companies, and congressional offices. The first death from inhaled anthrax exposure occurred on October 5, with an additional 4 deaths and 17 infections over the ensuing months. The anthrax attacks exposed a health system ill-equipped to respond to acute emergencies.
Referências	GOSTIN, L. O.; NUZZO, J. B. Twenty Years After the Anthrax Terrorist Attacks of 2001: Lessons Learned and Unlearned for the COVID-19 Response. JAMA, [United States], OCt. 27, 2021. DOI: 10.1001/jama.2021.19292. Disponível em: https://doi.org/10.1001/jama.2021.19292 . Acesso em: 29 out. 2021.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2785780



Título	Association of Self-reported High-Risk Allergy History With Allergy Symptoms After COVID-19 Vaccination
Autor(es)	Lily Li, MD; Lacey B. Robinson, Rajesh Patel, Adam B. Landman, Xiaoqing Fu, Erica S. Shenoy, Dean M. Hashimoto, Aleena Banerji, Paige G. Wickner, Upeka Samarakoon, Christian M. Mancini, Yuqing Zhang, Kimberly G. Blumenthal
Resumo	Allergic history in individuals with confirmed anaphylaxis to a messenger RNA (mRNA) COVID-19 vaccine is common. However, the risk factors for allergy symptoms after receiving the vaccine are unknown.To assess the association between self-reported history of high-risk allergy and self-reported allergic reactions after mRNA COVID-19 vaccination of health care employees.This cohort study obtained demographic, medical, and vaccine administration data of employees of Mass General Brigham from the institutional electronic health record. Employees who received at least 1 dose of an mRNA COVID-19 vaccine between December 14, 2020, and February 1, 2021, and who completed at least 1 postvaccination symptom survey in the 3 days after vaccination were included.Self-reported history of high-risk allergy, defined as a previous severe allergic reaction to a vaccine, an injectable medication, or other allergen.The primary outcome was 1 or more self-reported allergic reactions in the first 3 days after dose 1 or dose 2 of an mRNA COVID-19 vaccine. Multivariable log binomial regression was used to assess the association between allergic reactions and high-risk allergy status.A total of 52 998 health care employees (mean [SD] age, 42 [14] years; 38 167 women [72.0%]) were included in the cohort, of whom 51 706 (97.6%) received 2 doses of an mRNA COVID-19 vaccine and 474 (0.9%) reported a history of high-risk allergy. Individuals with vs without a history of high-risk allergy reported more allergic reactions after receiving dose 1 or 2 of the vaccine (11.6% [n = 55] vs 4.7% [n = 2461]). In the adjusted model, a history of high-risk allergy was associated with an increased risk of allergic reactions (adjusted relative risk [aRR], 2.46; 95% CI, 1.92-3.16), with risk being highest for hives (aRR, 3.81; 95% CI, 2.33-6.22) and angioedema (aRR, 4.36; 95% CI, 2.52-7.54).This cohort study found that self-reported history of high-risk allergy was associated with an increased risk of self-reported allergic reactions within 3 days of mRNA C



	vaccination. However, reported allergy symptoms did not impede the completion of the 2-dose vaccine protocol among a cohort of eligible health care employees, supporting the overall safety of mRNA COVID-19 vaccine.
Referências	LI, L. <i>et al.</i> Association of Self-reported High-Risk Allergy History With Allergy Symptoms After COVID-19 Vaccination. JAMA Network Open , [United States], v. 4, n. 10, p. e2131034, 2021. DOI: 10.1001/jamanetworkopen.2021.31034. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.31034 . Acesso em: 29 out. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785466



Título	Association of University Student Gatherings With Community COVID-19 Infections Before and After the NCAA March Madness Tournament
Autor(es)	Ashley L. O'Donoghue
Resumo	IntroductionUniversities across the US are weighing various vaccination policies for the current fall semester. It is difficult to assess the risk of social gatherings on university campuses among unvaccinated students. However, the NCAA Men's Division I Basketball Tournament (March Madness) provides an opportunity to study this risk. In mid-March 2021, when variants were spreading rapidly and vaccination rates were low among the college-aged population, 464 universities across the country competed in March Madness. By the event's nature as a single-elimination tournament, it is difficult to predict which universities will proceed to the later rounds of the tournament. This cross-sectional study uses a difference-in-differences analysis to estimate the association of large celebrations at universities across the US with COVID-19 infections in a university's county during a time of low vaccination rates among university students.
Referências	O'DONOGHUE, A. L. Association of University Student Gatherings With Community COVID-19 Infections Before and After the NCAA March Madness Tournament. JAMA network open , [United States], v. 4, n. 10, p. e2130783, Oct. 25, 2021. DOI: 10.1001/jamanetworkopen.2021.30783. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.30783 . Acesso em: 29 out. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2785395



Título	COVID-19 patients with increasing age experience differential time to initial medical care and severity of symptoms
Autor(es)	J. Mancilla-Galindo, A. Kammar-García, A. Martínez-Esteban, H. D. Meza-Comparán, J. Mancilla-Ramírez, N. Galindo-Sevilla
Resumo	We conducted a retrospective observational study in patients with laboratoryconfirmed COVID-19 who received medical care in 688 COVID-19 ambulatory units and hospitals in Mexico City between 24 February 2020 and 24 December 2020, to study if the elderly seek medical care later than younger patients and their severity of symptoms at initial medical evaluation. Patients were categorized into 8 groups (<20, 20-29, 30-39, 40-49, 50-59, 60-69, 70-79, and ≥ 80 years). Symptoms at initial evaluation were classified according to a previously validated classification into respiratory and non-respiratory symptoms. Comparisons between time from symptom onset to medical care for every age category were done through variance analyses. Two logistic regression models were applied to determine the risk of presenting symptoms of severity according to age. 286020 patients were included (mean age: 42.8, SD: 16.8 years; 50.4% were women). Mean time from symptom onset to medical care was 4.04 (SD: 3.6) days and increased with older age categories (p<0.0001). The risk of presenting with symptoms of severity was greater with increasing age categories. In conclusion, COVID-19 patients with increasing ages tend to seek medical care later, with higher rates of symptoms of severity at initial presentation in both ambulatory units and hospitals.
Referências	MANCILLA-GALINDO, J. <i>et al.</i> COVID-19 patients with increasing age experience differential time to initial medical care and severity of symptoms. Epidemiology and iInfection , [United Kingdom], p. 1–25, Oct. 22, 2021. DOI: 10.1017/S095026882100234X. Disponível em: https://www.cambridge.org/core/journals/epidemiology-and-infection/article/covid19-patients-with-increasing-age-experience-differential-time-to-initial-medical-care-and-severity-of-symptoms/F4A0CB9757B1F0DF242D450F7D31C409 . Acesso em: 22 out. 2021.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/covid19-patients-with-increasing-age-experience-differential-time-to-initial-medical-care-and-severity-of-symptoms/F4A0CB9757B1F0DF242D450F7D31C409



Título	Seroepidemiology of SARS-CoV-2 infections in an urban population-based cohort in León, Nicaragua
Autor(es)	Fredman González, Nadja A. Vielot, Michael Sciaudone, Christian Toval-Ruíz, Lakshmanane Premkumar, Lester Gutierrez, Edwing Centeno Cuadra, Nancy Munguia, Patricia Blandón, Aravinda M. de Silva, Rebecca Rubinstein, Natalie Bowman, Sylvia Becker-Dreps, Filemon Bucardo
Resumo	In a Nicaraguan population-based cohort, SARS-CoV-2 seroprevalence reached 28% in the first six months of the country's epidemic and reached 35% six months later. Immune waning was uncommon. Individuals with a seropositive household member were over three times as likely to be seropositive themselves, suggesting the importance of household transmission.
Referências	GONZÁLEZ, F. <i>et al.</i> Seroepidemiology of SARS-CoV-2 infections in an urban population-based cohort in León, Nicaragua. Epidemiology and Infection , [United Kingdom], p. 1–17, Oct. 20, 2021. DOI: 10.1017/S0950268821002144. Disponível em:



Título	High anti-SARS-CoV-2 antibody seroconversion rates before the second wave in Manaus, Brazil, and the protective effect of social behaviour measures: results from the prospective DETECTCoV-19 cohort
Autor(es)	Pritesh Lalwani, Roger V Araujo-Castillo, Christian A Ganoza, Bárbara Batista Salgado, Ivanildo Vieira Pereira Filho, Danielle Severino Sena da Silva, Thiago Barros do Nascimento de Morais, Maele Ferreira Jordão, Jessica Vanina Ortiz, Aguyda Rayany Cavalcante Barbosa, Wlademir Braga Salgado Sobrinho, Isabelle Bezerra Cordeiro, Júlio Nino de Souza Neto, Enedina Nogueira de Assunção, Cristiano Fernandes da Costa, Pedro Elias de Souza, Bernardino Claudio de Albuquerque, Spartaco Astofi-Filho, the DETECTCOV-19 Study Team, Jaila Dias Borges Lalwani
Resumo	The city of Manaus, Brazil, has seen two collapses of the health system due to the COVID-19 pandemic. We report anti-SARS-CoV-2 nucleocapsid IgG antibody seroconversion rates and associated risk factors in Manaus residents before the second wave of the epidemic in Brazil.
Referências	LALWANI, P. <i>et al.</i> High anti-SARS-CoV-2 antibody seroconversion rates before the second wave in Manaus, Brazil, and the protective effect of social behaviour measures: results from the prospective DETECTCoV-19 cohort. The Lancet. Global health , [Netherlands], v. 9, n. 11, p. e1508—e1516, 2021. DOI: 10.1016/S2214-109X(21)00355-7. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2214109X21003557 . Acesso em: 22 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2214-109X%2821%2900355-7



s and communities
Kebede Gudina, Solomon Ali, Eyob Girma, Addisu Gize, Birhanemeskel Tegene, Gadissa Bedada Hundie, Wondewosen e Sime, Rozina Ambachew, Alganesh Gebreyohanns, Mahteme Bekele, Abhishek Bakuli, Kira Elsbernd, Simon Merkt, Lorenzo to, Michael Hoelscher, Jan Hasenauer, Andreas Wieser, Arne Kroidl
year since the first reported case, the true COVID-19 burden in Ethiopia remains unknown due to insufficient surveillance. led to investigate the seroepidemiology of SARS-CoV-2 among front-line hospital workers and communities in Ethiopia.
A, E. K. <i>et al.</i> Seroepidemiology and model-based prediction of SARS-CoV-2 in Ethiopia: longitudinal cohort study among ne hospital workers and communities. The Lancet. Global health , [Netherlands], v. 9, n. 11, p. e1517–e1527, 2021. DOI: vel em: https://linkinghub.elsevier.com/retrieve/pii/S2214109X21003867 . Acesso em: 22 out. 2021.
vww.thelancet.com/action/showPdf?pii=S2214-109X%2821%2900386-7



Título	Application of machine learning in the prediction of COVID-19 daily new cases: a scoping review
Autor(es)	Soudeh Ghafouri-Fard, Hossein Mohammad-Rahimi, Parisa Motie, Mohammad A.S. Minabi, Mohammad Taheri, Saeedeh Nateghinia
Resumo	COVID-19 has produced a global pandemic affecting all over of the world. Prediction of the rate of COVID-19 spread and modeling of its course have critical impact on both health system and policy makers. Indeed, policy making depends on judgments formed by the prediction models to propose new strategies and to measure the efficiency of the imposed policies. Based on the nonlinear and complex nature of this disorder and difficulties in estimation of virus transmission features using traditional epidemic models, artificial intelligence methods have been applied for prediction of its spread. Based on the importance of machine and deep learning approaches in the estimation of COVID-19 spreading trend, in the present study, we review studies which used these strategies to predict the number of new cases of COVID-19. Adaptive neuro-fuzzy inference system, long short-term memory, recurrent neural network and multilayer perceptron are among the mostly used strategies in this regard. We compared the performance of several machine learning methods in prediction of COVID-19 spread. Root means squared error (RMSE), mean absolute error (MAE), R2 coefficient of determination (R2), and mean absolute percentage error (MAPE) parameters were selected as performance measures for comparison of the accuracy of models. R2 values have ranged from 0.64 to 1 for artificial neural network (ANN) and Bidirectional long shortterm memory (LSTM), respectively. Adaptive neuro-fuzzy inference system (ANFIS), Autoregressive Integrated Moving Average (ARIMA) and Multilayer perceptron (MLP) have also have R2 values near 1. ARIMA and LSTM had the highest MAPE values. Collectively, these models are capable of identification of learning parameters that affect dissimilarities in COVID-19 spread across various regions or populations, combining numerous intervention methods and implementing what-if scenarios by integrating data from diseases having analogous trends with COVID-19. Therefore, application of these methods would help in precise policy maki



Referências	GHAFOURI-FARD, S. <i>et al.</i> Application of machine learning in the prediction of COVID-19 daily new cases: A scoping review. Heliyon , [United Kingdom], v. 7, n. 10, p. e08143, Oct. 11, 2021. DOI: 10.1016/j.heliyon.2021.e08143. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2405844021022465 . Acesso em: 22 out. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S2405-8440%2821%2902246-5



Título	Prior infection with SARS-CoV-2 boosts and broadens Ad26.COV2.S immunogenicity in a variant dependent manner
Autor(es)	Roanne Keeton, Simone I. Richardson, Thandeka Moyo-Gwete, Tandile Hermanus, Marius B. Tincho, Ntombi Benede, Nelia P. Manamela, Richard Baguma, Zanele Makhado, Amkele Ngomti, Thopisang Motlou, Mathilda Mennen, Lionel Chinhoyi, Sango Skelem, Hazel Maboreke, Deelan Doolabh, Arash Iranzadeh, Ashley D. Otter, Tim Brooks, Mahdad Noursadeghi, James Moon, Alba Grifoni, Daniela Weiskopf, Alessandro Sette, Jonathan Blackburn, Nei-Yuan Hsiao, Carolyn Williamson, Catherine Riou, Ameena
Resumo	Goga, Nigel Garrett, Linda-Gail Bekker, Glenda Gray, Ntobeko A.B. Ntusi, Penny L. Moore, Wendy A. Burgers The Johnson and Johnson Ad26.COV2.S single dose vaccine represents an attractive option for COVID-19 vaccination in resource limited countries. We examined the effect of prior infection with different SARS-CoV-2 variants on Ad26.COV2.S immunogenicity. We compared participants who were SARS-CoV-2 naïve with those either infected with the ancestral D614G virus or infected in the second wave when Beta predominated. Prior infection significantly boosts spike binding antibodies, antibody-dependent cellular cytotoxicity and neutralizing antibodies against D614G, Beta and Delta, however neutralization cross-reactivity varied by wave. Robust CD4 and CD8 T cell responses are induced after vaccination, regardless of prior infection. T cell recognition of variants is largely preserved, apart from some reduction in CD8 recognition of Delta. Thus, Ad26.COV2.S vaccination following infection may result in enhanced protection against COVID-19. The impact of the infecting variant on neutralization breadth after vaccination has implications for the design of second-generation vaccines based on variants of concern.
Referências	KEETON, R. <i>et al.</i> Prior infection with SARS-CoV-2 boosts and broadens Ad26.COV2.S immunogenicity in a variant dependent manner. Cell host & microbe , [United States], p. S1931312821004650, Oct. 12, 2021. DOI: 10.1016/j.chom.2021.10.003. Disponível em: https://www.cell.com/cell-host-microbe/abstract/S1931-3128(21)00465-0 . Acesso em: 22 out. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S1931-3128%2821%2900465-0



Título	Evaluation of global evolutionary variations in the early stage of SARS-CoV-2 pandemic
Autor(es)	Sanghyun Lee, , Chi-Hwan Choi, Mi-Ran Yun, Dae-Won Kim, Sung Soon Kim, Young Ki Choi, Young Sill Choi
Resumo	To understand the origin of variants and their evolutionary history in the early stage of the COVID-19 pandemic, time-scaled phylogenetic and gene variation analyses were performed. The mutation patterns and evolution characteristics were examined using the Bayesian Evolutionary Analysis Sampling Trees (BEAST) with 349 wholegenome sequences available by March 2020. The results revealed five phylogenetic clusters (Groups A–E), with 408 nucleotide variants. The mutations including the deletion of three nucleotides underwent various and complicated changes in the whole genome over time, while some frequency or transient mutations were also observed. Phylogenetic analysis demonstrated that SARS-CoV-2 originated from China and was transmitted to other Asian countries, followed by North America and Europe. This study could help to comprehensively understand the evolutionary characteristics of SARS-CoV-2 with a special emphasis on its global variation patterns.
Referências	SANGHYUN, Lee . <i>et al</i> . Evaluation of global evolutionary variations in the early stage of SARS-CoV-2 pandemic. Heliyon , [United Kingdom], v. 7, n. 10, p. e08170, 2021. DOI: 10.1016/j.heliyon.2021.e08170. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2405844021022738 . Acesso em: 22 out. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S2405-8440%2821%2902273-8



	The immune landscape of SARS-CoV-2-associated Multisystem Inflammatory Syndrome in Children (MIS-C) from acute disease to
Título	recovery
	Eleni Syrimi, Eanna Fennell, Alex Richter, Pavle Vrljicak, Richard Stark, Sascha Ott, Paul G. Murray, Eslam Al-Abadi, Ashish
Autor(es)	Chikermane Pamela Dawson, Scott Hackett, Deepthi Jyothish, Hari Krishnan Kanthimathinathan, Sean Monaghan, Prasad
	Nagakumar, Barnaby R. Scholefield, Steven Welch, Naeem Khan, Sian Faustini, Kate Davies, Wioleta M. Zelek, Pamela Kearns,
	Graham S. Taylor
	Multisystem inflammatory syndrome in children (MIS-C) is a life-threatening disease occurring several weeks after severe acute
	respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. Deep immune profiling showed acute MIS-C patients had highly
	activated neutrophils, classical monocytes and memory CD8+ T-cells, with increased frequencies of B-cell plasmablasts and double-
Resumo	negative B-cells. Post treatment samples from the same patients, taken during symptom resolution, identified recovery-associated
	immune features including increased monocyte CD163 levels, emergence of a new population of immature neutrophils and, in
	some patients, transiently increased plasma arginase. Plasma profiling identified multiple features shared by MIS-C, Kawasaki
	Disease and COVID-19 and that therapeutic inhibition of IL-6 may be preferable to IL-1 or TNF-a. We identified several potential
	mechanisms of action for IVIG, the most commonly used drug to treat MIS-C. Finally, we showed systemic complement activation
	with high plasma C5b-9 levels is common in MIS-C suggesting complement inhibitors could be used to treat the disease.
	SYRIMI, E. et al. The immune landscape of SARS-CoV-2-associated Multisystem Inflammatory Syndrome in Children (MIS-C) from
Referências	acute disease to recovery. iScience , [Netherlands], v. 24, n. 11, p. 103215, Oct. 2021. DOI: 10.1016/j.isci.2021.103215. Disponível
Referencias	em: https://linkinghub.elsevier.com/retrieve/pii/S2589004221011834. Acesso em: 22 out. 2021.
	https://www.cell.com/action/showPdf?pii=S2589-0042%2821%2901183-4
Fonte	



Título	The mutational landscape of SARS-CoV-2 variants diversifies T cell targets in an HLA-supertype-dependent manner
Autor(es)	David J. Hamelin, Dominique Fournelle, Jean-Christophe Grenier, Jana Schockaert, Kevin A. Kovalchik, Peter Kubiniok, Fatima Mostefai, Je´roˆ me D. Duquette, Frederic Saab, Isabelle Sirois, Martin A. Smith, Sofie Pattijn, Hugo Soudeyns, He´ le` ne Decaluwe, Julie Hussin, Etienne Caron
Resumo	The rapid, global dispersion of SARS-CoV-2 has led to the emergence of a diverse range of variants. Here, we describe how the mutational landscape of SARS-CoV-2 has shaped HLA-restricted T cell immunity at the population level during the first year of the pandemic. We analyzed a total of 330,246 high-quality SARS-CoV-2 genome assemblies, sampled across 143 countries and all major continents from December 2019 to December 2020 before mass vaccination or the rise of the Delta variant. We observed that proline residues are preferentially removed from the proteome of prevalent mutants, leading to a predicted global loss of SARS-CoV-2 T cell epitopes in individuals expressing HLA-B alleles of the B7 supertype family; this is largely driven by a dominant C-to-U mutation type at the RNA level. These results indicate that B7-supertype-associated epitopes, including the most immunodominant ones, were more likely to escape CD8 ⁺ T cell immunosurveillance during the first year of the pandemic.
Referências	HAMELIN, D. J. <i>et al.</i> The mutational landscape of SARS-CoV-2 variants diversifies T cell targets in an HLA-supertype-dependent manner. Cell systems , [Netherlands.], Oct. 2021. Disponível em: https://www.cell.com/cell-systems/abstract/S2405-4712(21)00381-1. Acesso em: 22 out. 2021. DOI: 10.1016/j.cels.2021.09.013. Disponível em: https://www.cell.com/cell-systems/abstract/S2405-4712(21)00381-1. Acesso em: 22 out. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S2405-4712%2821%2900381-1



Título	Geographical variation in demand, utilization, and outcomes of hospital services for COVID-19 in Brazil: A descriptive serial cross-sectional study
Autor(es)	Claudia Cristina de Aguiar Pereira, Mônica Martins, Sheyla Maria Lemos Lima, Carla Lourenço Tavares de Andrade, Fernando Ramalho Gameleira Soares, Margareth Crisóstomo Portela,
Resumo	Objective To analyze the geographical variation in the provision of health services, namely in demand, patterns of utilization, and effectiveness in the Brazilian Health Regions in four different periods of the COVID-19 pandemic, from February 2020 to March 2021. Methods Descriptive serial cross-sectional study based on secondary data on COVID-19 hospitalizations from SIVEP-Gripe, a public and open-access database of Severe Acute Respiratory Illness records collected by the Brazilian Ministry of Health, and COVID-19 case notification data from Brasil.io, a repository of public data. Fifty-six epidemiological weeks were split into four periods. The following variables were considered for each Brazilian Health Region, per period: number of hospitalizations, hospitalizations per 100,000 inhabitants, hospitalizations per 100 new cases notified in the Health Region, percentage of hospitalizations with ICU use, percentages of hospitalizations with invasive and non-invasive ventilatory support, percentage of hospitalizations resulting in death and percentage of hospitalizations with ICU use resulting in death. Descriptive statistics of the variables were obtained across all 450 Health Regions in Brazil over the four defined pandemic periods. Maps were generated to capture the spatiotemporal variation and trends during the first year of the COVID-19 pandemic in Brazil. Results There was great variation in how COVID-19 hospitalizations grew and spread among Health Regions, with higher numbers between June and August 2020, and, especially, from mid-December 2020 to March 2021. The variation pattern in the proportion of ICU use in the hospitalizations across the Health Regions was broad, with no intensive care provision in large areas in the North, Northeast, and Midwest. The proportions of hospitalizations and hospitalizations with ICU use resulting in deaths were remarkably high, reaching medians of 34.0% and 62.0% across Health Regions, respectively. Conclusion The Heath Regions in Brazil are highly diverse, showing br



Referências	PEREIRA, C. C. de A. <i>et al.</i> Geographical variation in demand, utilization, and outcomes of hospital services for COVID-19 in Brazil: A descriptive serial cross-sectional study. PLOS ONE , [United States], v. 16, n. 9, p. e0257643, Sept. 2021. DOI: 10.1371/journal.pone.0257643. Disponível em: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0257643 . Acesso em: 22 out. 2021.
Fonte	https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0257643



Título	Effectiveness of COVID-19 Vaccine in Preventing Infection and Disease Severity: A Case Control Study from an Eastern State of India
Autor(es)	Chandramani Singh, Bijaya Nanda Naik, Sanjay Pandey, Bijit Biswas, Binod Kumar Pati, Manisha Verma, Prabhat Kumar Singh
Resumo	Effectiveness of corona virus disease-19 (COVID-19) vaccines used in India is unexplored and need to be substantiated. The present case-control study was planned to elicit the effectiveness of COVID-19 vaccines in preventing infection and disease severity in the general population of Bihar, India. This case-control study was conducted among people aged ≥45 years during April to June, 2021. The cases were the COVID-19 patients admitted or visited All India Institute of Medical Sciences (AIIMS), Patna, Bihar, India, and were contacted directly. The controls were the individuals tested negative for severe acute respiratory syndrome coronavirus-2 (SARS CoV-2) at the Virology laboratory, AIIMS-Patna and contacted telephonically for collection of relevant information. The vaccine effectiveness (VE) was calculated by using the formula [VE = 1 − Odds Ratio]. The adjusted VE for partial and full vaccination were estimated to be 52.0% [95% confidence interval (CI): 39.0%, 63.0%)] and 83.0% (95% CI: 73.0%, 89.0%) respectively for preventing SARS CoV-2 infection. The sub-group analyses of the cases have shown that the length of hospital stays (LOS) (partially vaccinated: 9 days vs. unvaccinated: 12 days; p=0.028) and the severity of the disease (fully vaccinated: 30.3% vs. partially vaccinated: 51.3% and unvaccinated: 54.1%; p=0.035) were significantly low among vaccinated compared to unvaccinated individuals. To conclude, four out of every five fully vaccinated individuals are estimated to be protected from contracting SARS CoV-2 infection. Vaccination lowered LOS and chances of development of severe disease.
Referências	SINGH, C. <i>et al.</i> Effectiveness of COVID-19 Vaccine in Preventing Infection and Disease Severity: A Case Control Study from an Eastern State of India. Epidemiology and infection , [United Kingdom], p. 1–20, Oct. 11, 2021. DOI: 10.1017/S0950268821002247. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002247/type/journal_article . Acesso em: 15 out. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/6CAAA68CE4E8340FD66EA316DD04A233/S0950268821002247a.pdf/effectiveness of covid19 vaccine in preventing infection and disease severity a case control study from an eastern state of india.pdf



Título	Longitudinal respiratory subphenotypes in patients with COVID-19-related acute respiratory distress syndrome: results from three observational cohorts
Autor(es)	Lieuwe D J Bos, Michael Sjoding, Pratik Sinha, Sivasubramanium V Bhavani, Patrick G Lyons, Alice F Bewley, Michela Botta, Anissa M Tsonas, Ary Serpa Neto, Marcus J Schultz, Robert P Dickson, Frederique Paulus, for the PRoVENT-COVID collaborative group
Resumo	Introduction: Patients with COVID-19-related acute respiratory distress syndrome (ARDS) have been postulated to present with distinct respiratory subphenotypes. However, most phenotyping schema have been limited by sample size, disregard for temporal dynamics, and insufficient validation. We aimed to identify respiratory subphenotypes of COVID-19-related ARDS using unbiased data-driven approaches. Methods: PROVENT—COVID was an investigator-initiated, national, multicentre, prospective, observational cohort study at 22 intensive care units (ICUs) in the Netherlands. Consecutive patients who had received invasive mechanical ventilation for COVID-19 (aged 18 years or older) served as the derivation cohort, and similar patients from two ICUs in the USA served as the replication cohorts. COVID-19 was confirmed by positive RT-PCR. We used latent class analysis to identify subphenotypes using clinically available respiratory data cross-sectionally at baseline, and longitudinally using 8-hourly data from the first 4 days of invasive ventilation. We used group-based trajectory modelling to evaluate trajectories of individual variables and to facilitate potential clinical translation. The PROVENTCOVID study is registered with ClinicalTrials.gov, NCT04346342. Findings: Between March 1, 2020, and May 15, 2020, 1007 patients were admitted to participating ICUs in the Netherlands, and included in the derivation cohort. Data for 288 patients were included in replication cohort 1 and 326 in replication cohort 2. Cross-sectional latent class analysis did not identify any underlying subphenotypes. Longitudinal latent class analysis identified two distinct subphenotypes. Subphenotype 2 was characterised by higher mechanical power, minute ventilation, and ventilatory ratio over the first 4 days of invasive mechanical ventilation than subphenotype 1, but PaO2/FiO2, pH, and compliance of the respiratory system did not differ between the two subphenotypes. 185 (28%) of 671 patients with subphenotype 1 and 109 (32%) of 336 patients wi



Resumo	ventilatory ratio and mechanical power with similar dynamics to those observed in latent class analysis-derived trajectory subphenotypes. The two trajectories were: a stable value for ventilatory ratio or mechanical power over the first 4 days of invasive mechanical ventilation (trajectory A) or an upward trajectory (trajectory B). However, upward trajectories were better independent prognosticators for 28-day mortality (OR 1·64, 95% CI 1·17–2·29 for ventilatory ratio; 1·82, 1·24–2·66 for mechanical power). The association between upward ventilatory ratio trajectories (trajectory B) and 28-day mortality was confirmed in the replication cohorts (OR 4·65, 95% CI 1·87–11·6 for ventilatory ratio in replication cohort 1; 1·89, 1·05–3·37 for ventilatory ratio in replication cohort 2). Interpretation: At baseline, COVID-19-related ARDS has no consistent respiratory subphenotype. Patients diverged from a fairly homogenous to a more heterogeneous population, with trajectories of ventilatory ratio and mechanical power being the most discriminatory. Modelling these parameters alone provided prognostic value for duration of mechanical ventilation and mortality.
Referências	BOS, L. D. J. <i>et al.</i> Longitudinal respiratory subphenotypes in patients with COVID-19-related acute respiratory distress syndrome: results from three observational cohorts. The Lancet. Respiratory medicine , [Netherlands], p. S2213260021003659, Oct. 12, 2021. DOI: 10.1016/S2213-2600(21)00365-9. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2213260021003659 . Acesso em: 15 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900365-9



Título	Sociodemographic, clinical, and immunological factors associated with SARS-CoV-2 diagnosis and severe COVID-19 outcomes in people living with HIV: a retrospective cohort study
Autor(es)	Daniel K Nomah, Juliana Reyes-Urueña, Yesika Díaz, Sergio Moreno, Jordi Aceiton, Andreu Bruguera, Rosa M Vivanco-Hidalgo, Josep M Llibre, Pere Domingo, Vicenç Falcó, Arkaitz Imaz, Cristina Cortés, Lluís Force, Emili Letang, Ingrid Vilaró, Jordi Casabona, Jose M Miro, and the PISCIS study group
Resumo	Factors affecting outcomes of SARS-CoV-2 infection in people living with HIV are unclear. We assessed the factors associated with SARS-CoV-2 diagnosis and severe outcomes among people living with HIV.
Referências	NOMAH, D. K. <i>et al.</i> Sociodemographic, clinical, and immunological factors associated with SARS-CoV-2 diagnosis and severe COVID-19 outcomes in people living with HIV: a retrospective cohort study. The Lancet. HIV , [Netherlands], p. S235230182100240X, Oct. 13, 2021. DOI: 10.1016/S2352-3018(21)00240-X. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S235230182100240X . Acesso em: 15 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-3018%2821%2900240-X



Título	The role of viral genomics in understanding COVID-19 outbreaks in long-term care facilities
Autor(es)	Dinesh Aggarwal, Richard Myers, William L Hamilton, Tehmina Bharucha, Niamh M Tumelty, Colin S Brown, Emma J Meader, Tom Connor, Darren L Smith, Declan T Bradley, Samuel Robson, Matthew Bashton, Laura Shallcross, Maria Zambon, Ian Goodfellow, Meera Chand, Justin O'Grady, M Estée Török, Sharon J Peacock, Andrew J Page, The COVID-19 Genomics UK (COG-UK) Consortium
Resumo	We reviewed all genomic epidemiology studies on COVID-19 in long-term care facilities (LTCFs) that had been published to date. We found that staff and residents were usually infected with identical, or near identical, SARS-CoV-2 genomes. Outbreaks usually involved one predominant cluster, and the same lineages persisted in LTCFs despite infection control measures. Outbreaks were most commonly due to single or few introductions followed by a spread rather than a series of seeding events from the community into LTCFs. The sequencing of samples taken consecutively from the same individuals at the same facilities showed the persistence of the same genome sequence, indicating that the sequencing technique was robust over time. When combined with local epidemiology, genomics allowed probable transmission sources to be better characterised. The transmission between LTCFs was detected in multiple studies. The mortality rate among residents was high in all facilities, regardless of the lineage. Bioinformatics methods were inadequate in a third of the studies reviewed, and reproducing the analyses was difficult because sequencing data were not available in many facilities.
Referências	AGGARWAL, D. <i>et al.</i> The role of viral genomics in understanding COVID-19 outbreaks in long-term care facilities. The Lancet microbe , [United Kingdom], p. S2666524721002081, Sept. 29, 2021. DOI: 10.1016/S2666-5247(21)00208-1. Disponível em: https://www.thelancet.com/journals/lanmic/article/PIIS2666-5247(21)00208-1/fulltext . Acesso em: 15 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2821%2900208-1



Título	The impact of the COVID-19 pandemic on paediatric glioma patients in low, middle, and high-income countries: a multicentre, international, observational cohort study
Autor(es)	Soham Bandyopadhyay, Dr. Global Children's NCDs Collaborative
Resumo	Paediatric cancer is a leading cause of non-communicable disease deaths for children worldwide, with more than 90% of deaths occurring in low-and-middle-income countries (LMICs). The COVID-19 pandemic may have exacerbated disparities in paediatric cancer outcomes between LMICs and HICs. The World Health Organization (WHO) Global Initiative for Childhood Cancer has identified gliomas as a common cancer that can act as a benchmark for assessing global paediatric cancer care. This study aims to ascertain the short and medium-term outcome across 17 countries during the COVID-19 pandemic by determining 30- and 90-day all-cause mortality rates for paediatric glioma patients who underwent treatment. A multicentre, international, mixed- (retrospective and prospective), collaborative cohort study in 17 countries. Patients were recruited between March 12th 2020 and July 12th 2020.129 patients were recruited with the majority being histologically diagnosed as low-grade gliomas (n = 86/118, 72.9%). Seven children had a change to their planned chemotherapy treatment because of the COVID-19 pandemic. Similarly, seven children and eleven children had a change to their planned radiotherapy treatment and surgical treatment respectively because of the COVID-19 pandemic. Five patients died within the 30-day follow-up period, with all five patients being in LMICs. A sixth child, also in a LMIC, died within the 90-day follow-up period. This significant difference in mortality between LMICs and HICs was present when controlling for confounding for factors such as grade, ASA status, sex, weight, and age. There has been relatively minimal change to the treatment of paediatric gliomas worldwide compared to their initial planned care. There was a significant difference in mortality for childhood gliomas between LMICS and high-income countries during the COVID-19 pandemic. There needs to be a concerted effort to improve equity in health outcomes globally.
Referências	BANDYOPADHYAY, S. The impact of the COVID-19 pandemic on paediatric glioma patients in low, middle, and high-income countries: a multicentre, international, observational cohort study. Neuro-oncology , [United States], v. 23, n. Supplement_4, p. iv23, Oct. 4, 2021. DOI: 10.1093/neuonc/noab195.058. Disponível em: https://doi.org/10.1093/neuonc/noab195.058 . Acesso em: 15 out. 2021.
Fonte	https://academic.oup.com/neuro-oncology/article/23/Supplement 4/iv23/6397564?searchresult=1



Título	SARS-CoV-2 Dose, Infection, and Disease Outcomes for COVID-19 – A Review
Autor(es)	Lisa M Brosseau, Kevin Escandón, Angela K Ulrich, Angela L Rasmussen, Chad J Roy, Gregory J Bix, Saskia V Popescu, Kristine Moore, Michael T Osterholm
Resumo	The relationship between SARS-CoV-2 dose, infection, and COVID-19 outcomes remains poorly understood. This review summarizes the existing literature regarding this issue, identifies gaps in current knowledge, and suggests opportunities for future research. In humans, host characteristics including age, sex, comorbidities, smoking, and pregnancy are associated with severe COVID-19. Similarly in animals, host factors are strong determinants of disease severity although most animal infection models manifest clinically with mild to moderate respiratory disease. The influence of variants of concern as it relates to minimal infectious dose, consequence of overall pathogenicity, and disease outcome in dose-response remain unknown. Epidemiologic data suggest a doseresponse relationship for infection contrasting with limited and inconsistent surrogate-based evidence between dose and disease severity. Recommendations include the design of future infection studies in animal models to investigate inoculating dose on outcomes and the use of better proxies for dose in human epidemiology studies.
Referências	BROSSEAU, L. M. <i>et al.</i> SARS-CoV-2 Dose, Infection, and Disease Outcomes for COVID-19 – A Review. Clinical infectious diseases , [United States], n. ciab903, Oct. 15, 2021. DOI: 10.1093/cid/ciab903. Disponível em: https://doi.org/10.1093/cid/ciab903 . Acesso em: 15 out. 2021.
Fonte	https://academic.oup.com/cid/advance-article/doi/10.1093/cid/ciab903/6397523?searchresult=1



Título	Effectiveness of Covid-19 Vaccines in Ambulatory and Inpatient Care Settings
Autor(es)	Thompson, E. Stenehjem, S. Grannis, S.W. Ball, A.L. Naleway, T.C. Ong, M.B. DeSilva, K. Natarajan, C.H. Bozio, N. Lewis, K. Dascomb, B.E. Dixon, R.J. Birch, S.A. Irving, S. Rao, E. Kharbanda, J. Han, S. Reynolds, K. Goddard, N. Grisel, W.F. Fadel, M.E. Levy, J. Ferdinands, B. Fireman, J. Arndorfer, N.R. Valvi, E.A. Rowley, P. Patel, O. Zerbo, E.P. Griggs, R.M. Porter, M. Demarco, L. Blanton, A. Steffens, Y. Zhuang, N. Olson, M. Barron, P. Shifflett, S.J. Schrag, J.R. Verani, A. Fry, M. Gaglani, E. AzzizBaumgartner, and N.P. Klein
Resumo	There are limited data on the effectiveness of the vaccines against symptomatic coronavirus disease 2019 (Covid-19) currently authorized in the United States with respect to hospitalization, admission to an intensive care unit (ICU), or ambulatory care in an emergency department or urgent care clinic.
Referências	THOMPSON, M. G. <i>et al.</i> Effectiveness of Covid-19 Vaccines in Ambulatory and Inpatient Care Settings. New England journal of medicine , [United States], v. 385, n. 15, p. 1355–1371, Oct. 7, 2021. DOI: 10.1056/NEJMoa2110362. Disponível em: https://doi.org/10.1056/NEJMoa2110362 . Acesso em: 15 out. 2021.
Fonte	https://www.nejm.org/doi/pdf/10.1056/NEJMoa2110362?articleTools=true



Título	Clinical characteristics of 1544 Brazilians aged 60 years and over with laboratory evidence for SARS-CoV-2
Autor(es)	Marcelo de Maio Nascimento
Resumo	Introduction: Infection with the new coronavirus responsible for Severe Acute Respiratory Syndrome (SARS-CoV-2) continues to spread worldwide. In Brazil, there are already more than 230 thousand dead, many of these older adults. Objective: To present the clinical characteristics of older Brazilian adults infected by COVID-19, in the epidemiological weeks (EW) 34-52, and to verify factors responsible for the increased risk of death. Methods: Retrospective and observational study conducted with secondary publicly available data, provided by the Brazilian Ministry of Health. 1,544 confirmed cases of registered COVID-19 infection were included between August 16 and December 26, 2020, aged 60 or older. Outcomes: Demographic data, comorbidity, symptoms for disease, clinical information: days of hospitalization, chest X-ray, type of RT-PCR. Results: 48% of patients admitted to the ICU with evidence for SARS-CoV-2 died. Symptoms and comorbidities related to increased chance of death (OR) were immunodeficiency (188%), kidney disease (166%), neurological disease (103%), dyspnea (86%), pneumopathy (55%), O2 saturation <95% (53%), respiratory discomfort (49%), age (36%), sore throat (31%), and sex (0.5%). There was a 5% increase in the chance of death for each year of life. Conclusion: Heart disease and Diabetes mellitus were the most frequent comorbidities, but did not indicate an increased risk of death from SARS-CoV-2 infection. Age, sex, sore throat, dyspnea, respiratory discomfort, O2 saturation <95%, neurological disease, pneumopathy, immunodeficiency, and kidney disease were significantly associated with risk of death from COVID-19.
Referências	NASCIMENTO, M. de M. Clinical characteristics of 1544 Brazilians aged 60 years and over with laboratory evidence for SARS-CoV-2. Archives of gerontology and geriatrics , [Netherlands], v. 96, p. 104462, Sept. – Oct. 2021. DOI: 10.1016/j.archger.2021.104462. Disponível em: https://www.sciencedirect.com/science/article/pii/S0167494321001254 . Acesso em: 15 out. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S0167494321001254?via%3Dihub



Título	PREPRINT: Survey of SARS-CoV-2 genetic diversity in two major Brazilian cities using a fast and affordable Sanger sequencing strategy
Autor(es)	Erick Gustavo Dorlass, Karine Lima Lourenço, Rubens Daniel Miserani Magalhães, Hugo Sato, Alex Fiorini, Renata Peixoto, Helena Perez Coelho, Bruna Larotonda Telezynski, Guilherme Pereira Scagion, Tatiana Ometto, Luciano Matsumiya Thomazelli, Danielle Bruna Leal Oliveira, Ana Paula Fernandes, Edison Luiz Durigon, Flavio Guimarães Fonseca, Santuza Maria Ribeiro Teixeira
Resumo	Genetic variants of SARS-CoV-2 have been emerging and circulating in many places across the world. Rapid detection of these variants is essential since their dissemination can impact transmission rates, diagnostic procedures, disease severity, response to vaccines or patient management. Sanger sequencing has been used as the preferred approach for variant detection among circulating human immunodeficiency and measles virus genotypes. Using primers to amplify a fragment of the SARS-CoV-2 genome encoding part of the Spike protein, we showed that Sanger sequencing allowed us to rapidly detect the introduction and spread of three distinct SARS-CoV-2 variants in two major Brazilian cities. In both cities, after the predominance of variants closely related to the virus first identified in China, the emergence of the P.2 variant was quickly followed by the identification of the P1 variant, which became dominant in less than one month after it was first detected.
Referências	DORLASS, E. G. <i>et al.</i> Survey of SARS-CoV-2 genetic diversity in two major Brazilian cities using a fast and affordable Sanger sequencing strategy . [<i>S. l.: s. n.</i>], 2021. DOI: https://doi.org/10.1101/2021.07.02.21259802. Disponível em: https://www.medrxiv.org/content/10.1101/2021.07.02.21259802v1. Acesso em: 15 out. 2021.
Fonte	https://www.medrxiv.org/content/10.1101/2021.07.02.21259802v1?rss=1



Título	Deaths involving COVID-19 by self-reported disability status during the first two waves of the COVID-19 pandemic in England: a retrospective, population-based cohort study
Autor(es)	Matthew L Bosworth, Daniel Ayoubkhani, Vahé Nafilyan, Josephine Foubert, Myer Glickman, Calum Davey, Hannah Kuper
Resumo	People with learning disabilities are at substantially increased risk of COVID-19 mortality, but evidence on risks of COVID-19 mortality for disabled people more generally is limited. We aimed to use population-level data to estimate the association between self-reported disability and death involving COVID-19 during the first two waves of the COVID-19 pandemic in England.
Referências	BOSWORTH, M. L. <i>et al.</i> Deaths involving COVID-19 by self-reported disability status during the first two waves of the COVID-19 pandemic in England: a retrospective, population-based cohort study. The Lancet. Public health , [United Kingdom], p. S2468266721002061, Oct. 6, 2021. DOI: 10.1016/S2468-2667(21)00206-1. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2468266721002061 . Acesso em: 8 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2468-2667%2821%2900206-1



Título	The durability of immunity against reinfection by SARS-CoV-2: a comparative evolutionary study
Autor(es)	Jeffrey P Townsend, Hayley B Hassler, Zheng Wang, Sayaka Miura, Jaiveer Singh, Sudhir Kumar, Nancy H Ruddle, Alison P Galvani, Alex Dornburg
Resumo	Among the most consequential unknowns of the devastating COVID-19 pandemic are the durability of immunity and time to likely reinfection. There are limited direct data on SARS-CoV-2 long-term immune responses and reinfection. The aim of this study is to use data on the durability of immunity among evolutionarily close coronavirus relatives of SARS-CoV-2 to estimate times to reinfection by a comparative evolutionary analysis of related viruses SARS-CoV, MERS-CoV, human coronavirus (HCoV)-229E, HCoV-OC43, and HCoV-NL63.
Referências	TOWNSEND, J. P. <i>et al.</i> The durability of immunity against reinfection by SARS-CoV-2: a comparative evolutionary study. The Lancet microbe , [United Kingdom], p. S2666524721002196, 2021. DOI: 10.1016/S2666-5247(21)00219-6. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2666524721002196 . Acesso em: 8 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2821%2900219-6



Título	Interplay between the genetics of personality traits, severe psychiatric disorders and COVID-19 host genetics in the susceptibility to SARS-CoV-2 infection
Autor(es)	Urs Heilbronner, Fabian Streit, Thomas Vogl, Fanny Senner, Sabrina K. Schaupp, Daniela Reich-Erkelenz, Sergi Papiol, Mojtaba Oraki Kohshour, Farahnaz Klöhn-Saghatolislam, Janos L. Kalman, Maria Heilbronner, Katrin Gade, Ashley L. Comes, Monika Budde, Till F. M. Andlauer, Heike Anderson-Schmidt, Kristina Adorjan, Til Stürmer, Adrian Loerbroks, Manfred Amelang, Eric Poisel, Jerome Foo, Stefanie Heilmann-Heimbach, Andreas J. Forstner, Franziska Degenhardt, Jörg Zimmermann, Jens Wiltfang, Martin von Hagen, Carsten Spitzer, Max Schmauss, Eva Reininghaus, Jens Reimer, Carsten Konrad, Georg Juckel, Fabian U. Lang, Markus Jäger, Christian Figge, Andreas J. Fallgatter, Detlef E. Dietrich, Udo Dannlowski, Bernhardt T. Baune, Volker Arolt, Ion-George Anghelescu, Markus M. Nöthen, Stephanie H. Witt, Ole A. Andreassen, Chi-Hua Chen, Peter Falkai, Marcella Rietschel, Thomas G. Schulze, Eva C. Schulte
Resumo	The severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) pandemic, with its impact on our way of life, is affecting our experiences and mental health. Notably, individuals with mental disorders have been reported to have a higher risk of contracting SARS-CoV-2. Personality traits could represent an important determinant of preventative health behaviour and, therefore, the risk of contracting the virus.
Referências	HEILBRONNER, U. <i>et al.</i> Interplay between the genetics of personality traits, severe psychiatric disorders and COVID-19 host genetics in the susceptibility to SARS-CoV-2 infection. BJPsych open , [United Kingdom], v. 7, n. 6, p. e188, Oct. 7, 2021. DOI: 10.1192/bjo.2021.1030. Disponível em: https://www.cambridge.org/core/product/identifier/S2056472421010309/type/journal_article . Acesso em: 8 out. 2021.
Fonte	https://www.cambridge.org/core/journals/bjpsych-open/article/interplay-between-the-genetics-of-personality-traits-severe-psychiatric-disorders-and-covid19-host-genetics-in-the-susceptibility-to-sarscov2-infection/95D09C1BBA29302FB931C19A84C86D27



Título	A network meta-analysis of secondary attack rates of COVID-19 in different contact environments
Autor(es)	Xun-Ying Zhao, Zi-Qiong Shen, Li-Tao Sun, Long Cheng, Meng-Yuan Wang, Xiao-Fan Zhang, Bin Xu, Lu-Lu Tian, Yun-Qi Miao, Xue-Yao Wu, Kun Zou, Jia-Yuan Li
Resumo	As the COVID-19 pandemic continues around the world, understanding the transmission characteristics of COVID-19 is vital for prevention and control. We conducted the first study aiming to estimate and compare the relative risk of secondary attack rates (SARs) of COVID-19 in different contact environments. Up to 26 July 2021, epidemiological studies and cluster epidemic reports of COVID-19 were retrieved from SCI, Embase, PubMed, CNKI, Wanfang and CBM in English and Chinese, respectively. Relative risks (RRs) were estimated in pairwise comparisons of SARs between different contact environments using frequentist NMA framework, and the ranking of risks in these environments was calculated using surface under the cumulative ranking curve (SUCRA). Subgroup analysis was performed by regions. 32 studies with 68,260 participants were identified. Compared with meal or gathering, transportation (RR: 10.55, 95%CI: 1.43~77.85), medical care (RR: 11.68, 95%CI: 1.58~86.61) and work or study places (RR: 10.15, 95%CI: 1.40~73.38) had lower risk ratios for SARs. Overall, the SUCRA ranking from the highest to the lowest were household (95.3%), meal or gathering (81.4%), public places (58.9%), daily conversation (50.1%), transportation (30.8%), medical care (18.2%) and work or study places (15.3%). Household SARs were significantly higher than other environments in the subgroup of mainland China and sensitive analysis without small sample studies (<100). In light of the risks, stratified personal protection and public health measures need to be in place accordingly, so as close contacts categorizing and management
Referências	XUN-YING, Zhao <i>et al.</i> A network meta-analysis of secondary attack rates of COVID-19 in different contact environments. Epidemiology and infection , [United Kingdom], p. 1–17, Oct. 5, 2021. DOI: 10.1017/S0950268821002223. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002223/type/journal_article . Acesso em: 8 out. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/CA4020A33E86A139F8ED3B71BCE96FA9/S0950268821002223a.pdf/network metaanalysis of secondary attack rates of covid19 in diff erent contact environments.pdf



Título	COVID-19 Incidence and Mortality in Federal and State Prisons Compared With the US Population, April 5, 2020, to April 3, 2021
Autor(es)	Neal Marquez, Julie A. Ward, Kalind Parish, Brendan Saloner, Sharon Dolovich
Resumo	Early in the COVID-19 pandemic, case and death rates in US prisons substantially exceeded national rates. Prison systems subsequently reported adopting several policies to contain COVID-19 spread, including limiting social interactions, distributing personal protective equipment, and expediting prisoner releases, although failures of infection prevention and control have been documented. We examined COVID-19 cases and deaths among US federal and state prisoners during the first 52 weeks of the pandemic and compared these rates with the overall US population, updating a previously published report analyzing COVID-19 incidence and mortality in prisons through June 6, 2020.
Referências	MARQUEZ, N. <i>et al.</i> COVID-19 Incidence and Mortality in Federal and State Prisons Compared With the US Population, April 5, 2020, to April 3, 2021. JAMA , [United States], Oct. 6, 2021. DOI: 10.1001/jama.2021.17575. Disponível em: https://doi.org/10.1001/jama.2021.17575 . Acesso em: 8 out. 2021.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2784944



Título	Assessment of Simulated Surveillance Testing and Quarantine in a SARS-CoV-2–Vaccinated Population of Students on a University Campus
Autor(es)	Francis C. Motta, Kevin A. McGoff, Anastasia Deckard, Cameron R.Wolfe, Mattia Bonsignori, M. Anthony Moody, Kyle Cavanaugh, Thomas N. Denny, John Harer, Steven B. Haase
Resumo	The importance of surveillance testing and quarantine on university campuses to limit SARS-CoV-2 transmission needs to be reevaluated in the context of a complex and rapidly changing environment that includes vaccines, variants, and waning immunity. Also, recent US Centers for Disease Control and Prevention guidelines suggest that vaccinated students do not need to participate in surveillance testing. To evaluate the use of surveillance testing and quarantine in a fully vaccinated student population for whom vaccine effectiveness may be affected by the type of vaccination, presence of variants, and loss of vaccine-induced or natural immunity over time. In this simulation study, an agent-based Susceptible, Exposed, Infected, Recovered model was developed with some parameters estimated using data from the 2020 to 2021 academic year at Duke University (Durham, North Carolina) that described a simulated population of 5000 undergraduate students residing on campus in residential dormitories. This study assumed that 100% of residential undergraduates are vaccinated. Under varying levels of vaccine effectiveness (90%, 75%, and 50%), the reductions in the numbers of positive cases under various mitigation strategies that involved surveillance testing and quarantine were estimated. The percentage of students infected with SARS-CoV-2 each day for the course of the semester (100 days) and the total number of isolated or quarantined students were estimated. A total of 5000 undergraduates were simulated in the study. In simulations with 90% vaccine effectiveness, weekly surveillance testing was associated with only marginally reduced viral transmission. At 50% to 75% effectiveness, surveillance testing was estimated to reduce the number of infections by as much as 93.6%. A 10-day quarantine protocol for exposures was associated with only modest reduction in infections until vaccine effectiveness dropped to 50%. Increased testing of reported contacts was estimated to be at least as effective as a quarantine at limiting infec
Referências	MOTTA, F. C. et al. Assessment of Simulated Surveillance Testing and Quarantine in a SARS-CoV-2–Vaccinated Population of Students on a University Campus. JAMA health Forum, [United States], v. 2, n. 10, p. e213035, 2021. DOI: 10.1001/jamahealthforum.2021.3035. Disponível em: https://doi.org/10.1001/jamahealthforum.2021.3035. Acesso em: 8 out. 2021.
Fonte	https://jamanetwork.com/journals/jama-health-forum/fullarticle/2784740



Título	Extracorporeal membrane oxygenation for COVID-19: evolving outcomes from the international Extracorporeal Life Support Organization Registry
Autor(es)	Ryan P Barbaro, Graeme MacLaren, Philip S Boonstra, Alain Combes, Cara Agerstrand, Gail Annich, Rodrigo Diaz, Eddy Fan, Katarzyna Hryniewicz, Roberto Lorusso, Matthew L Paden, Christine M Stead, Justyna Swol, Theodore J Iwashyna, Arthur S Slutsky, Daniel Brodie, for the Extracorporeal Life Support Organization
Resumo	Over the course of the COVID-19 pandemic, the care of patients with COVID-19 has changed and the use of extracorporeal membrane oxygenation (ECMO) has increased. We aimed to examine patient selection, treatments, outcomes, and ECMO centre characteristics over the course of the pandemic to date.
Referências	BARBARO, R. P. <i>et al.</i> Extracorporeal membrane oxygenation for COVID-19: evolving outcomes from the international Extracorporeal Life Support Organization Registry. Lancet , [Netherlands], v. 398, n. 10307, p. 1230–1238, Sept. 29, 2021. DOI: 10.1016/S0140-6736(21)01960-7. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S0140673621019607 . Acesso em: 1 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2901960-7



Título	COVID-19 hospital admissions and deaths after BNT162b2 and ChAdOx1 nCoV-19 vaccinations in 2·57 million people in Scotland (EAVE II): a prospective cohort study
Autor(es)	Utkarsh Agrawal, Srinivasa Vittal Katikireddi, Colin McCowan, Rachel H Mulholland, Amaya Azcoaga-Lorenzo, Sarah Amele, Adeniyi Francis Fagbamigbe, Eleftheria Vasileiou, Zoe Grange, Ting Shi, Steven Kerr, Emily Moore, Josephine L K Murray, Syed Ahmar Shah, Lewis Ritchie, Dermot O'Reilly, Sarah J Stock, Jillian Beggs, Antony Chuter, Fatemah Torabi, Ashley Akbari, Stuart Bedston, Jim McMenamin, Rachael Wood, Ruby S M Tang, Simon de Lusignan, F D Richard Hobbs, Mark Woolhouse, Colin R Simpson, Chris Robertson, Aziz Sheikh
Resumo	The UK COVID-19 vaccination programme has prioritised vaccination of those at the highest risk of COVID-19 mortality and hospitalisation. The programme was rolled out in Scotland during winter 2020–21, when SARS-CoV-2 infection rates were at their highest since the pandemic started, despite social distancing measures being in place. We aimed to estimate the frequency of COVID-19 hospitalisation or death in people who received at least one vaccine dose and characterise these individuals.
Referências	AGRAWAL, U. <i>et al.</i> COVID-19 hospital admissions and deaths after BNT162b2 and ChAdOx1 nCoV-19 vaccinations in 2·57 million people in Scotland (EAVE II): a prospective cohort study. The Lancet. Respiratory medicine , [Netherlands], p. S2213260021003805, Sept. 29, 2021. DOI: 10.1016/S2213-2600(21)00380-5. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2213260021003805 . Acesso em: 1 out. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900380-5



Título	COVID-19 Vaccination uptake among Health Care Workers
Autor(es)	Gilboa M, Tal I, Levin EG, Segal S, Belkin A, Zilberman- Daniels T, Biber A, Rubin C, Rahav G, Regev-Yochay G.
Resumo	Objective: To assess reasons for noncompliance to COVID-19 vaccination among health care workers. Design: Cohort observational and surveillance study. Setting: Sheba Medical center, a 1600 bed tertiary medical center in Israel. Participants: 10,888 Health care workers including all employees, students and volunteers. Intervention: The BNT162b2 mRNA Covid-19 vaccine was offered to all health care workers of the hospital, non-compliance was assessed and prerollout and post-rollout surveys were carried out. Data regarding uptake of the vaccine as well as demographic data and compliance to prior influenza vaccination was collected. Additionally, two surveys were distributed; pre-rollout, regarding intention to receive the vaccine and post-rollout, to all unvaccinated health care workers regarding causes of hesitancy. Results: In the pre-rollout survey 1673/3563 (47%) declared their intent to receive the vaccine. Eventually 8108 (79%) of health care workers received the COVID-19 vaccine within 40 days of rollout. In a multivariate logistic regression model, the factors that were significant predictors of vaccine uptake were male gender, 40-59 age group, Paramedical and Doctors, a high socioeconomic level and compliance with flu vaccine. Among 425 unvaccinated health care workers who answered the second survey, the most common cause for hesitancy was the risk during pregnancy (31%). Conclusion: Though vaccine uptake among health care workers was higher than expected, still relatively low uptake was observed among young women and those from lower socioeconomic level and educational background. Concerns regarding vaccine safety during pregnancy were common and more data about vaccine safety especially during pregnancy might improve compliance.
Referências	GILBOA, M. <i>et al.</i> COVID-19 Vaccination uptake among Health Care Workers. Infection control and hospital epidemiology , [United Kingdom], p. 1–22, Sept. 23, 2021. DOI: 10.1017/ice.2021.421. Disponível em: https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/covid19-vaccination-uptake-among-health-care-workers/2861D55BC36DC2289E5F823A6CC905C2. Acesso em: 1 out. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/2861D55BC36DC2289E5F823A6CC905C2/S0899823X21004219a.pdf/covid19 vaccination uptake among health care workers.pdf



Título	A rapid test recognizing mucosal SARS-CoV-2-specific antibodies distinguishes prodromal from convalescent COVID-19
Autor(es)	Friederike Krempe , Lara Schöler , Benjamin Katschinski , Anke Herrmann , Olympia E. Anastasiou , Carina Elsner , R. Stefan Ross , Friedrich Scholz , Ulf Dittmer , Peter Miethe , Vu Thuy Khanh Le-Trilling, Mirko Trilling
Resumo	The COVID-19 pandemic poses enormous challenges to global healthcare sectors. To prevent the overburden of medical systems, it is crucial to distinguish individuals approaching the most infectious early phase from those in the declining non-infectious phase. However, a large fraction of transmission events occur during pre- or asymptomatic phases. Especially in absence of symptoms, it is difficult to distinguish prodromal from late phases of infection just by RT-PCR since both phases are characterized by low viral loads and corresponding high Ct values (>30).
Referências	KREMPE, F. <i>et al.</i> A rapid test recognizing mucosal SARS-CoV-2-specific antibodies distinguishes prodromal from convalescent COVID-19. iScience , [Netherlands.], p. 103194, Sept. 29, 2021. DOI: 10.1016/j.isci.2021.103194. Disponível em: https://www.cell.com/iscience/abstract/S2589-0042(21)01162-7 . Acesso em: 1 out. 2021.
Fonte	https://www.cell.com/mwg-internal/de5fs23hu73ds/progress?id=WtYtMGMtOwtgW4lVFWZIYyGTBVG4j6S5HDfoTAoEt2Q,&dl



Título	Health outcomes and psychosocial risk exposures among healthcare workers during the first wave of the COVID-19 outbreak
Autor(es)	Marina Moreno Martínez, María IsabelFernández-Cano, MariaFeijoo-Cid, ClaraLlorens Serrano, Albert Navarro
Resumo	Introduction. The aim is to describe the health and psychosocial risk factors of Spanish healthcare workers during the COVID-19 pandemic. Methods: A cross-sectional study by means of an online questionnaire (April–May 2020). The data comes from the database resulting from the COTS project "Working conditions, insecurity, and health in the context of the COVID-19 pandemic". The sample consisted of 1989 health care workers. Results: Women, young people (doctors and nurses) and the middle-aged (assistants) had poorer health and greater exposure to psychosocial risks. Geriatric assistants were the most-affected occupational group. Conclusions: gender, occupation, and age are focuses of inequality in the exposure of health care workers to psychosocial risks.
Referências	MORENO MARTÍNEZ, M. <i>et al.</i> Health outcomes and psychosocial risk exposures among healthcare workers during the first wave of the COVID-19 outbreak. Safety science , [United Kingdom], v. 145, p. 105499, 2021. DOI: 10.1016/j.ssci.2021.105499. Disponível em: https://www.sciencedirect.com/science/article/pii/S0925753521003428 . Acesso em: 1 out. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S0925753521003428?via%3Dihub



Título	A highly potent antibody effective against SARS-CoV-2 variants of concern
Autor(es)	Craig Fenwick, Priscilla Turelli, Laurent Perez, Céline Pellaton, Line Esteves-Leuenberger, Alex Farina, Jérémy Campos, Erica Lana, Flurin Fiscalini, Charlène Raclot, Florence Pojer, Kelvin Lau, Demurtas Davide, Marc Descatoire, Victor S. Joo, Mathilde Foglierini, Alessandra Noto, Rana Abdelnabi, Caroline S. Foo, Laura Vangeel, Johan Neyts, Wenjuan Du, Berend-Jan Bosch, Geertruida Veldman, Pieter Leyssen, Volker Thiel, Roger LeGrand, Yves Lévy, Didier Trono, Giuseppe Pantaleo
Resumo	Control of the ongoing SARS-CoV-2 pandemic is endangered by the emergence of viral variants with increased transmission efficiency, resistance to marketed therapeutic antibodies and reduced sensitivity to vaccine-induced immunity. Here, we screen B cells from COVID- 19 donors and identify P5C3, a highly potent and broadly neutralizing monoclonal antibody with picomolar neutralizing activity against all SARS-CoV-2 variants of concern (VOC) identified to date. Structural characterization of P5C3 Fab in complex with the Spike demonstrates a neutralizing activity defined by a large buried surface area, highly overlapping with the receptor-binding domain (RBD) surface necessary for ACE2 interaction. We further demonstrate that P5C3 shows complete prophylactic protection in the SARS-CoV-2 infected hamster challenge model. These results indicate that P5C3 opens exciting perspectives either as a prophylactic agent in immunocompromised individuals with poor response to vaccination or as combination therapy in SARS-CoV-2-infected individuals.
Referências	FENWICK, C. <i>et al.</i> A highly potent antibody effective against SARS-CoV-2 variants of concern. Cell Reports , [Netherlands], p. 109814, Sept. 20, 2021. DOI: 10.1016/j.celrep.2021.109814. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S221112472101278X . Acesso em: 1 out. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S2211-1247%2821%2901278-X



Título	Symptoms and Health Outcomes Among Survivors of COVID-19 Infection 1 Year After Discharge From Hospitals in Wuhan, China
Autor(es)	Xue Zhang, Fang Wang, Ye Shen, Xiaohua Zhang, Yuan Cen, Bin Wang, Songtao Zhao, Yi Zhou; Baoman Hu, Man Wang, Yuhui Liu, Hongming Miao, Paul Jones, Xiangyu Ma, Yong He, Guoqiang Cao, Lixia Cheng, Li Li
Resumo	The long-term health outcomes and symptom burden of COVID-19 remain largely unclear. To evaluate health outcomes of COVID-19 survivors 1 year after hospital discharge and to identify associated risk factors. This retrospective, multicenter cohort study was conducted at 2 designated hospitals, Huoshenshan Hospital and Taikang Tongji Hospital, both in Wuhan, China. All adult patients with COVID-19 discharged between February 12 and April 10, 2020, were screened for eligibility. Of a consecutive sample of 3988 discharged patients, 1555 were excluded (796 declined to participate and 759 were unable to be contacted) and the remaining 2433 patients were enrolled. All patients were interviewed via telephone from March 1 to March 20, 2021. Statistical analysis was performed from March 28 to April 18, 2021.COVID-19.All patients participated in telephone interviews using a series of questionnaires for evaluation of symptoms, along with a chronic obstructive pulmonary disease (COPD) assessment test (CAT). Logistic regression models were used to evaluate risk factors for fatigue, dyspnea, symptom burden, or higher CAT scores.Of 2433 patients at 1-year follow-up, 1205 (49.5%) were men and 680 (27.9%) were categorized into the severe disease group as defined by the World Health Organization guideline; the median (IQR) age was 60.0 (49.0-68.0) years. In total, 1095 patients (45.0%) reported at least 1 symptom. The most common symptoms included fatigue, sweating, chest tightness, anxiety, and myalgia. Older age (odds ratio [OR], 1.02; 95% CI, 1.01-1.02; P &It .001), female sex (OR, 1.27; 95% CI, 1.06-1.52; P = .008), and severe disease during hospital stay (OR, 1.43; 95% CI, 1.18-1.74; P &It .001) were associated with higher risks of fatigue. Older age (OR, 1.02; 95% CI, 1.01-1.03; P &It .001) and severe disease (OR, 1.51; 95% CI, 1.14-1.99; P = .004) were associated with higher risks of having at least 3 symptoms. The median (IQR) CAT score was 2 (0-4), and a total of 161 patients (6.6%) had a CAT score of at least 10. Sev
Referências	XUE, Zhang et al. Symptoms and Health Outcomes Among Survivors of COVID-19 Infection 1 Year After Discharge From Hospitals in Wuhan, China. JAMA network open, [United States], v. 4, n. 9, p. e2127403, Sept. 29, 2021. DOI: 10.1001/jamanetworkopen.2021.27403. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.27403 . Acesso em: 1 out. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2784558



Título	Current understanding of an Emerging Coronavirus using in silico approach: Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2)
Autor(es)	S. Khalid, R. Siddique, S. Shaheen, M. N. Shahid, Z. Shamim, M. K. A. Khan, Ç. Uluba Serçe
Resumo	Novel coronavirus (nCoV) namely "SARS-CoV-2" is being found responsible for current PANDEMIC commenced from Wuhan (China) since December 2019 and has been described with epidemiological linkage to China in about 221 countries and territories until now. In this study we have characterized the genetic lineage of SARS-CoV-2 and report the recombination within the genus and subgenus of coronaviruses. Phylogenetic relationship of thirty nine coronaviruses belonging to its four genera and five subgenera was analyzed by using the Neighbor-joining method using MEGA 6.0. Phylogenetic trees of full length genome, various proteins (spike, envelope, membrane and nucleocapsid) nucleotide sequences were constructed separately. Putative recombination was probed via RDP4. Our analysis describes that the "SARS-CoV-2" although shows great similarity to Bat-SARS-CoVs sequences through whole genome (giving sequence similarity 89%), exhibits conflicting grouping with the Bat-SARS-like coronavirus sequences (MG772933 and MG772934). Furthermore, seven recombination events were observed in SARS-CoV-2 (NC_045512) by RDP4. But not a single recombination event fulfills the high level of certainty. Recombination mostly housed in spike protein genes than rest of the genome indicating breakpoint cluster arises beyond the 95% and 99% breakpoint density intervals. Genetic similarity levels observed among "SARS-CoV-2" and Bat-SARS-CoVs advocated that the latter did not exhibit the specific variant that cause outbreak in humans, proposing a suggestion that "SARS-CoV-2" has originated possibly from bats. These genomic features and their probable association with virus characteristics along with virulence in humans require further consideration.
Referências	KHALID, S. <i>et al.</i> Current understanding of an Emerging Coronavirus using in silico approach: Severe Acute Respiratory Syndrome-Coronavirus-2 (SARS-CoV-2). Braz. J. Biol. , [Brazil], v. 83, p. e247237, 2021. DOI: 10.1590/1519-6984.247237. Disponível em: http://www.scielo.br/scielo.php?script=sci arttext&pid=S1519-69842023000100217&tlng=en. Acesso em: 1 out. 2021.
Fonte	https://www.scielo.br/j/bjb/a/gRWjLb5nbPd3cyzdbmqy65J/?format=pdf⟨=en



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Título	Prevalence of SARS-CoV-2 infections among students, teachers, and household members during lockdown and split classes in Berlin, Germany
Autor(es)	Welmoed van Loon, Stefanie Theuring, Franziska Hommes, Marcus A. Mall, Joachim Seybold, Tobias Kurth, Frank Mockenhaupt
Resumo	Introduction Children tend to bear a smaller proportion of the COVID-19 disease burden but are particularly affected by pandemic restrictions, including school closures. The occurrence of SARS-CoV-2 infection in school communities tends to be isolated and to produce few secondary cases. Between June 2020 and March 2021, we examined 24 school classes (12 primary and 12 secondary) across Berlin, Germany, on 4 occasions. In November 2020, there were 9 (2.7%), 2 (1.4%), and 14 (2.3%) SARS-CoV-2 infections among 338 students, 140 teachers, and 611 household members during the second pandemic peak, respectively (7-day incidence of 185 to 210 per 100,000). No secondary cases occurred among individuals in classes. After SARS-CoV-2 infections declined in early 2021, they increased again in mid-February and peaked by mid-April (Figure). In parallel, the SARS-CoV-2 B.1.1.7 variant gained predominance. Here, we present data observed with our cohort (1) at the end of February 2021, after a 2-month lockdown, and (2) at the end of March 2021, 2 to 3 weeks after schools resumed instruction with split classes half of the original size attending school on alternate weeks.
Referências	VAN LOON, W. <i>et al.</i> Prevalence of SARS-CoV-2 Infections Among Students, Teachers, and Household Members During Lockdown and Split Classes in Berlin, Germany. JAMA network open , [United States], v. 4, n. 9, p. e2127168, Sept. 28, 2021. DOI: 10.1001/jamanetworkopen.2021.27168 . Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.27168 . Acesso em: 1 out. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2784548



Título	Repercussões da pandemia da COVID-19 em mães-crianças com síndrome congênita do Zika
Autor(es)	Paulo Roberto Lima Falcão do Vale, Evelyn Siqueira da Silva, Jessica Santos Passos Costa, Rosely Cabral de Carvalho, Evanilda Souza de Santana Carvalho
Resumo	Objetivo: Analisar as repercussões da pandemia da COVID-19 em mães-crianças com síndrome congênita do vírus Zika. Métodos: Estudo misto sequencial exploratório (QUAL->QUAN), realizado com 44 mães de crianças com SCZ respondentes de questionário online aplicado entre abril e maio de 2020. Os dados qualitativos foram submetidos à análise de conteúdo temática e os quantitativos à estatística descritiva, com aplicação do teste t de Student emparelhado. A integração dos dados foi realizada de acordo com a técnica joint display. Resultados O distanciamento físico reconfigura a rotina da mãe-criança, limita a desenvolver atividades no ambiente doméstico, altera hábitos, aumenta a sobrecarga da cuidadora (p<0,05), implica em alteração do padrão do sono e gera sinais de estresse e ansiedade. As mães se preocupam com a diminuição da renda familiar e se esforçam para realizar exercícios de estimulação e atividades escolares no ambiente doméstico após a interrupção dos cuidados profissionais de reabilitação e o fechamento das escolas. Conclusão: A pandemia da COVID-19 repercutiu no incremento de novas tarefas de cuidado com a criança e ambiente doméstico, bem como elevou os níveis de sobrecarga de cuidado das mães, o que pode resultar em alterações importantes na saúde física e mental delas.
Referências	VALE, P. R. L. F. do <i>et al.</i> Repercussões da pandemia da COVID-19 em mães-crianças com síndrome congênita do Zika. Acta Paulista de Enfermagem , [Brasil], v. 34, p. eAPE03123, 2021. DOI: 10.37689/acta-ape/2021AO03123. Disponível em: https://acta-ape.org/article/repercussoes-da-pandemia-da-covid-19-em-maes-criancas-com-sindrome-congenita-do-zika/ . Acesso em: 1 out. 2021.
Fonte	https://acta-ape.org/wp-content/uploads/articles_xml/1982-0194-ape-34-eAPE03123/1982-0194-ape-34-eAPE03123.pdf



Título	Airports, highways and COVID-19: An analysis of spatial dynamics in Brazil
Autor(es)	Carlos Dornels Freire de Souza, Michael Ferreira Machado, Adeilton Gonçalves da Silva Junior, Bruno Eduardo Bastos Rolim Nunes, Rodrigo Feliciano do Carmo
Resumo	Introduction: The high transmissibility and infectivity of the new coronavirus, the high proportion of asymptomatic transmitters and the rapid and continuous spatial displacement of people, by the different mechanisms of locomotion, are elements that can contribute to the dissemination of COVID-19. This study aims to describe the geographical dispersion of COVID-19 in the state of Bahia and the importance of major airports and highways in the dynamics of disease transmission. Methods: This is an ecological study involving all cases of COVID-19 registered in the state of Bahia between March 6, date of the first registered case and May 16, 2020. After collection, an exploratory spatial analysis was performed, considering the cases accumulated on the last day of each epidemiological week. Results: The first cases of COVID-19 were concentrated in areas served by three important airport complexes in the state, located in Salvador, Ilhéus and Porto Seguro. From week 16-20, there was a more intense expansion of COVID-19 to the interior of the state. A global spatial autocorrelation was observed (I Moran 0.2323; p = 0.01), with the influence of distance: positive correlation at distances less than 205.8 km (I Moran 0.040; p = 0.01) and greater than 800 km (I Moran 0.080; p = 0.01). Conclusions: Based on the spatial dispersion pattern of COVID-19 in the state of Bahia, airports and highways that cross the state were responsible for the interiorization of the disease.
Referências	FREIRE DE SOUZA, C. D. <i>et al.</i> Airports, highways and COVID-19: An analysis of spatial dynamics in Brazil. Journal of transport & health , [Netherlands], v. 21, p. 101067, 2021. DOI: 10.1016/j.jth.2021.101067. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8039633/ . Acesso em: 1 out. 2021.
Fonte	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8039633/



Título	Infections, hospitalisations, and deaths averted via a nationwide vaccination campaign using the Pfizer–BioNTech BNT162b2 mRNA COVID-19 vaccine in Israel: a retrospective surveillance study
Autor(es)	Eric J Haas, John M McLaughlin, Farid Khan, Frederick J Angulo, Emilia Anis, Marc Lipsitch, Shepherd R Singer, Gabriel Mircus, Nati Brooks, Meir Smaja, Kaijie Pan, Jo Southern, David L Swerdlow, Luis Jodar, Yeheskel Levy, Sharon Alroy-Preis
Resumo	On Dec 20, 2020, Israel initiated a nationwide COVID-19 vaccination campaign for people aged 16 years and older and exclusively used the Pfizer–BioNTech BNT162b2 mRNA COVID-19 vaccine (tozinameran). We provide estimates of the number of SARS-CoV-2 infections and COVID-19-related admissions to hospital (ie, hospitalisations) and deaths averted by the nationwide vaccination campaign.
Referências	HAAS, E. J. <i>et al.</i> Infections, hospitalisations, and deaths averted via a nationwide vaccination campaign using the Pfizer–BioNTech BNT162b2 mRNA COVID-19 vaccine in Israel: a retrospective surveillance study. The Lancet. Infectious diseases , [United Kingdom], p. S1473309921005661, Sept. 22, 2021. DOI: 10.1016/S1473-3099(21)00566-1. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S1473309921005661 . Acesso em: 24 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900566-1



Título	Risk factors for death due to COVID-19, in the state of Acre, Brazil, 2020: a retrospective cohort study
Autor(es)	Patrícia Rezende do Prado, Fernanda Raphael Escobar Gimenes, Marcos Venicius Malveira de Lima, Virgilio Batista do Prado, Carolina Pontes Soares, Thatiana Lameira Maciel Amaral
Resumo	OBJECTIVE: To analyze risk factors for death in individuals with severe acute respiratory syndrome due to COVID-19. METHODS: This was a retrospective cohort study, comprised of adult individuals with COVID-19, from March to September 2020, notified by the Epidemiological Surveillance System in the state of Acre, Brazil. Cox regression was used. RESULTS: Among 57,700 individuals analyzed, the incidence was 2,765.4/100,000 inhabitants, and mortality was, 61.8/100,000 inhabitants. The risk factors for death were: being male (HR=1.48 -95% CI 1.25;1.76), age ≥60 years (HR=10.64 -95% CI 8.84;12.81), symptom of dyspnea (HR=4.20 -95% CI 3.44;5.12) and multimorbidity (HR=2.23 -95% CI 1.77;2.81), with emphasis on heart disease and diabetes mellitus. 'Sore throat' and 'headache' were symptoms present in mild cases of COVID-19.CONCLUSION: Being male, elderly, having heart disease, diabetes mellitus and dyspnea were characteristics associated with death due to COVID-19.
Referências	PRADO, P. R. do <i>et al.</i> Risk factors for death due to COVID-19, in the state of Acre, Brazil, 2020: a retrospective cohort study. Epidemiol. Serv. Saúde , [Brazil], v. 30, n. 3, p. e2020676, July 19, 2021. DOI: 10.1590/S1679-49742021000300018. Disponível em: https://www.scielo.br/j/ress/a/5t7R7sxN5wdLYYVvkJkLBxf/?lang=pt . Acesso em: 24 set. 2021.
Fonte	https://pubmed.ncbi.nlm.nih.gov/34287555/



Título	Correlation of overweight condition and obesity with mortality by COVID-19 in Brazil's state capitals
Autor(es)	Raquel Alencastro Veiga Domingues Carneiro, Danúbia Hillesheim, Ana Luiza Curi Hallal
Resumo	Objective: To evaluate the correlation between the prevalence of overweight condition and obesity with mortality rates due to COVID-19 in Brazil's state capitals. Materials and methods: This is an ecological study, whose units of analysis were the 26 state capitals and the Federal District of Brazil. Prevalence was estimated by the results of the Vigilância de Fatores de Risco e Proteção para Doenças Crônicas por Inquérito Telefônico 2019 (VIGITEL). The general mortality rates due to COVID-19 were collected on the official website of the Brazilian Ministry of Health (MH) and stratified by the same Brazilian capitals evaluated in the VIGITEL survey. The rates included the period between the 1st and 29th Epidemiological Weeks of 2020. The Partial Correlation Test (r) was used, controlled for confounding factors, to evaluate the correlation between the prevalence of overweight/obesity and the overall mortality rates due to COVID-19. Results: The mean mortality rate for COVID-19 in the period was 65.1 deaths per 100,000 inhabitants. Regarding the prevalence of obesity and overweight, 20.2% and 54.7% were the mean values observed in the state capitals, respectively. The prevalence of obesity was positively correlated with the overall mortality rate due to COVID-19, with mean positive correlation (r=0.380) and statistically significant correlation (p=0.034). Conclusion: This study pointed out that, at the aggregate level, there is a concomitant and correlated increase in mortality rates due to COVID-19 and prevalence of obesity in Brazilian capitals. The data found may contribute to actions to cope with the pandemic aimed at this population.
Referências	CARNEIRO, R. A. V. D.; HILLESHEIM, D.; HALLAL, A. L. C. Correlation of overweight condition and obesity with mortality by COVID-19 in Brazil's state capitals. Archives of Endocrinology and Metabolism, [Brazil], v. 65, p. 386–391, May- Jun. 2021. DOI: 10.20945/2359-3997000000351. Disponível em: http://www.scielo.br/j/aem/a/frXg9MHFpCQvDf6Qn6MXK5w/?lang=en . Acesso em: 24 set. 2021.
Fonte	https://www.scielo.br/j/aem/a/frXg9MHFpCQvDf6Qn6MXK5w/?format=pdf⟨=en



Factors associated with death in confirmed cases of COVID-19 in the state of Rio de Janeiro
Marcella Cini Oliveira, Tatiana de Araujo Eleuterio, Allan Bruno de Andrade Corrêa, Lucas Dalsenter Romano da Silva, Renata Coelho Rodrigues, Bruna Andrade de Oliveira, Marlos Melo Martins, Carlos Eduardo Raymundo, Roberto de
Andrade Medronho
COVID-19 can occur asymptomatically, as influenza-like illness, or as more severe forms, which characterize severe acute respiratory syndrome (SARS). Its mortality rate is higher in individuals over 80 years of age and in people with comorbidities, so these constitute the risk group for severe forms of the disease. We analyzed the factors associated with death in confirmed cases of COVID-19 in the state of Rio de Janeiro. This cross-sectional study evaluated the association between individual demographic, clinical, and epidemiological variables and the outcome (death) using data from the Unified Health System information systems.
CINI OLIVEIRA, M. <i>et al.</i> Factors associated with death in confirmed cases of COVID-19 in the state of Rio de Janeiro. BMC infectious diseases , [United Kingdom], v. 21, n. 1, p. 687, July 16, 2021. DOI: 10.1186/s12879-021-06384-1. Disponível em: https://doi.org/10.1186/s12879-021-06384-1 . Acesso em: 24 set. 2021.
https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-021-06384-1



Título	Aglomerados ativos de COVID-19 em Santa Catarina, Brasil, e tendência de mobilidade dos locais de trabalho
Autor(es)	Ivan Merêncio, Gecielli Martins Monteiro, Carlos Antônio Oliveira Vieira
Resumo	A aplicação da análise espacial destinada ao estudo de dados epidemiológicos humanos se tornou notória nas últimas duas décadas. Nesse sentido, este artigo aborda a estatística scan para a detecção de clusters espaço-temporais de casos da COVID-19 em Santa Catarina, Brasil. O objetivo é aplicar a estatística scan para a identificação de agrupamentos ativos, determinando sua localização, dimensão e ordem (prioridade). A organização da base descritiva abrangeu os casos de COVID-19 entre 1º de março e 31 de agosto de 2020, disponíveis no Portal de Dados Abertos do Estado de Santa Catarina. A base vetorial dos limites municipais e mesorregiões catarinenses, e as populações estimadas para 2020 foram obtidas no site do Instituto Brasileiro de Geografia e Estatística (IBGE). A covariável tendência de mobilidade dos locais de trabalho foi obtida no documento COVID-19: Relatório de Mobilidade da Comunidade do Google. Para a execução da estatística, considerou-se o modelo discreto de Poisson, apoiado na abordagem prospectiva. No resultado do trabalho, evidenciou-se a capacidade do procedimento para delimitação dos clusters, o qual identificou 17 clusters ativos com a variável resposta e 18 ativos após a inclusão da covariável, distribuídos em todo estado, predominantes no litoral e no Oeste Catarinense. O cluster primário localizou-se no Sul Catarinense. A covariável tendência de mobilidade dos locais de trabalho influenciou moderadamente em 38,89% dos aglomerados. O método foi eficiente para a compreensão da distribuição espacial da epidemia. Isso caracteriza a estatística scan como uma ferramenta de apoio a execução de ações a serem tomadas por gestores, priorizando áreas mais afetadas pela doença.
Referências	MERÊNCIO, I.; MONTEIRO, G. M.; VIEIRA, C. A. O. Aglomerados ativos de COVID-19 em Santa Catarina, Brasil, e tendência de mobilidade dos locais de trabalho. Cad. Saúde Pública , [Rio de Janeiro], v. 37, n. 6, p. e00301620, 2021. DOI: 10.1590/0102-311X00301620. Disponível em: http://www.scielo.br/j/csp/a/6hXvPDmd4QYfrQyhsYQhnpr/?lang=pt . Acesso em: 24 set. 2021.
Fonte	https://www.scielo.br/j/csp/a/6hXvPDmd4QYfrQyhsYQhnpr/?lang=pt



Título	Mortalidade por COVID-19 padronizada por idade nas capitais das diferentes regiões do Brasil
Autor(es)	Gulnar Azevedo e Silva, Beatriz Cordeiro Jardim, Paulo Andrade Lotufo
Resumo	O crescimento acentuado de casos e óbitos por COVID-19 tem levado à grande sobrecarga do sistema de saúde no Brasil, em especial em cidades como Manaus (Amazonas), Rio de Janeiro e São Paulo. A descrição do impacto da pandemia tem se baseado em números absolutos ou taxas de mortalidade brutas, não considerando o padrão de distribuição das faixas etárias nas diferentes regiões do país. Este estudo tem por objetivo comparar as taxas de mortalidade brutas por COVID-19 com as taxas padronizadas por idade nas capitais dos estados brasileiros e no Distrito Federal. As informações sobre óbito foram acessadas no Sistema de Informação de Vigilância da Gripe (SIVEP-Gripe), e os denominadores populacionais foram baseados nas estimativas disponibilizadas pelo Ministério da Saúde. Para o cálculo das taxas padronizadas por idade, utilizou-se a estrutura etária da população do Brasil estimada para 2020. Os resultados mostram que as maiores taxas brutas foram em Manaus (253,6/100 mil) e no Rio de Janeiro (253,2/100 mil). Após padronização por idade, houve aumento expressivo das taxas na Região Norte. A maior taxa ajustada foi vista em Manaus (412,5/100 mil) onde 33% de óbitos por COVID-19 ocorreram entre menores de 60 anos. A mortalidade em Manaus acima de 70 anos foi o dobro se comparada à do Rio de Janeiro e o triplo se comparada à de São Paulo. A utilização de taxas de mortalidade padronizadas por idade elimina vieses interpretativos, expondo, de forma marcante, o peso ainda maior da COVID-19 na Região Norte do país.
Referências	SILVA, G. A. e; JARDIM, B. C.; LOTUFO, P. A. Mortalidade por COVID-19 padronizada por idade nas capitais das diferentes regiões do Brasil. Cad. Saúde Pública, [Rio de Janeiro], v. 37, n. 6, p. e00039221, 2021. DOI: 10.1590/0102-311x00039221. Disponível em: http://www.scielo.br/scielo.php?script=sci arttext&pid=S0102-311X2021000606001&tlng=pt. Acesso em: 24 set. 2021.
Fonte	https://www.scielo.br/j/csp/a/BSdNnmSRWRxf9hZsx7CWB5Q/?lang=pt&format=pdf



Título	Surveillance of SARS-CoV-2 transmission in educational institutions, August to December 2020, Germany
Autor(es)	Anja Schoeps, Dietmar Hoffmann, Claudia Tamm, Bianca Vollmer, Sabine Haag, Tina Kaffenberger, Kimberly Ferguson-Beiser, Berit Kohlhase-Griebel, Silke Basenach, Andrea Missal, Katja Höfling, Harald Michels, Anett Schall, Holger Kappes, Manfred Vogt, Klaus Jahn, Till Bärnighausen, Philipp Zanger
Resumo	This study aims at providing estimates on the transmission risk of SARS-CoV-2 in schools and day-care centres. We calculated secondary attack rates (SARs) using individual-level data from state-wide mandatory notification of index cases in educational institutions, followed by contact tracing and PCR-testing of high-risk contacts. From August to December 2020, every sixth of overall 784 independent index cases was associated with secondary cases in educational institutions. Monitoring of 14594 institutional high-risk contacts (89% PCR-tested) of 441 index cases during quarantine revealed 196 secondary cases (SAR 1.34%, 0.99-1.78). SARS-CoV-2 infection among high-risk contacts was more likely around teacher-indexes compared to student-/child-indexes (incidence rate ratio [IRR] 3.17, 1.79-5.59), and in day-care centres compared to secondary schools (IRR 3.23, 1.76-5.91), mainly due to clusters around teacher-indexes in day-care containing a higher mean number of secondary cases per index case (142/113 = 1.26) than clusters around student-indexes in schools (82/474 = 0.17). In 2020, SARS-CoV-2 transmission risk in educational settings was low overall, but varied strongly between setting and role of the index case, indicating the chance for targeted intervention. Surveillance of SARS-CoV-2 transmission in educational institutions can powerfully inform public health policy and improve educational justice during the pandemic.
Referências	SCHOEPS, A. <i>et al.</i> Surveillance of SARS-CoV-2 transmission in educational institutions, August to December 2020, Germany. Epidemiology and infection , [United Kingdom], p. 1–25, Sep. 22, 2021. DOI: 10.1017/S0950268821002077. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002077/type/journal_article . Acesso em: 24 set. 2021.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/surveillance-of-sarscov2-transmission-in-educational-institutions-august-to-december-2020-germany/79C60F88D782C352CE898D0F2E475425



Título	An outbreak of SARS-CoV-2 infections among hospital personnel with high mRNA vaccine uptake
Autor(es)	Yael Tene, Katia Levytskyi, Amos Adler, Ora Halutz, Yael Paran, Hanoch Goldshmidt, Ayelet Itzhaki, Tamar Halperin, Sarit Stefansky, Ronen Ben-Ami, Oryan Henig
Resumo	Real world studies have demonstrated impressive effectiveness of the BNT162b2 COVID-19 vaccine in preventing symptomatic and asymptomatic SARS-CoV-2 infection. We describe an outbreak of SARS-CoV-2 infections in a hospital with high vaccine uptake. We found low secondary attack rate(7%), suggesting low infectivity of vaccinated persons with vaccine breakthrough SARS-CoV-2 infections.
Referências	TENE, Y. <i>et al.</i> An outbreak of SARS-CoV-2 infections among hospital personnel with high mRNA vaccine uptake. Infection control and hospital epidemiology , [United Kingdom], p. 1–12, Sep. 20, 2021. DOI: 10.1017/ice.2021.412. Disponível em: https://www.cambridge.org/core/product/identifier/S0899823X21004128/type/journal_article . Acesso em: 24 set. 2021.
Fonte	https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/an-outbreak-of-sarscov2-infections-among-hospital-personnel-with-high-mrna-vaccine-uptake/7CAB2EFD0F1473AA3689F26782535472



Título	Daily testing for contacts of individuals with SARS-CoV-2 infection and attendance and SARS-CoV-2 transmission in English secondary schools and colleges: an open-label, cluster-randomised trial
Autor(es)	Bernadette C Young, David W Eyre, Saroj Kendrick, Chris White, Sylvester Smith, George Beveridge, Toby Nonnenmacher, Fegor Ichofu, Joseph Hillier, Sarah Oakley, Ian Diamond, Emma Rourke, Fiona Dawe, Ieuan Day, Lisa Davies, Paul Staite, Andrea Lacey, James McCrae, Ffion Jones, Joseph Kelly, Urszula Bankiewicz, Sarah Tunkel, Richard Ovens, David Chapman, Vineta Bhalla, Peter Marks, Nick Hicks, Tom Fowler, Susan Hopkins, Lucy Yardley, Tim E A Peto
Resumo	School-based COVID-19 contacts in England have been asked to self-isolate at home, missing key educational opportunities. We trialled daily testing of contacts as an alternative to assess whether this resulted in similar control of transmission, while allowing more school attendance.
Referências	YOUNG, B. C. <i>et al.</i> Daily testing for contacts of individuals with SARS-CoV-2 infection and attendance and SARS-CoV-2 transmission in English secondary schools and colleges: an open-label, cluster-randomised trial. Lancet , [United Kingdom], p. S0140673621019085, Sept. 14, 2021. DOI: 10.1016/S0140-6736(21)01908-5. Disponível em: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01908-5/fulltext . Acesso em: 17 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2901908-5



Título	Safety and immunogenicity of an inactivated COVID-19 vaccine, BBIBP-CorV, in people younger than 18 years: a randomised, double-blind, controlled, phase 1/2 trial
Autor(es)	ShengLi Xia, YunTao Zhang, YanXia Wang, Hui Wang, YunKai Yang, George Fu Gao, WenJie Tan, GuiZhen Wu, Miao Xu, ZhiYong Lou, WeiJin Huang, WenBo Xu, BaoYing Huang, Wei Wang, Wei Zhang, Na Li, ZhiQiang Xie, Xiujuan Zhu, Ling Ding, WangYang You, YuXiu Zhao, Jun Zhao, LiLi Huang, XueZhong Shi, YongLi Yang, GuangXue Xu, WenLing Wang, PeiPei Liu, Meng Ma, YuLing Qiao, SuHua Zhao, JingJing Chai, QinQin Li, Hui Fu, Ying Xu, XiaoTong Zheng, WanShen Guo, XiaoMing Yang
Resumo	Although SARS-CoV-2 infection often causes milder symptoms in children and adolescents, young people might still play a key part in SARS-CoV-2 transmission. An efficacious vaccine for children and adolescents could therefore assist pandemic control. For further evaluation of the inactivated COVID-19 vaccine candidate BBIBP-CorV, we assessed the safety and immunogenicity of BBIBP-CorV in participants aged 3–17 years.
Referências	SHENGLI, Xia <i>et al.</i> Safety and immunogenicity of an inactivated COVID-19 vaccine, BBIBP-CorV, in people younger than 18 years: a randomised, double-blind, controlled, phase 1/2 trial. Lancet. Infectious diseases , [United Kingdom], p. S147330992100462X, Sept. 15, 2021. DOI: 10.1016/S1473-3099(21)00462-X. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S147330992100462X . Acesso em: 17 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900462-X



Título	Hospital admission and emergency care attendance risk for SARS-CoV-2 delta (B.1.617.2) compared with alpha (B.1.1.7) variants of concern: a cohort study
Autor(es)	Katherine A Twohig, Tommy Nyberg, Asad Zaidi, Simon Thelwall, Mary A Sinnathamby, Shirin Aliabadi, Shaun R Seaman, Ross J Harris, Russell Hope, Jamie Lopez-Bernal, Eileen Gallagher, Andre Charlett, Daniela De Angelis, the COVID-19 Genomics UK (COG-UK) consortium†, Anne M Presanis, Gavin Dabrera
Resumo	The SARS-CoV-2 delta (B.1.617.2) variant was first detected in England in March, 2021. It has since rapidly become the predominant lineage, owing to high transmissibility. It is suspected that the delta variant is associated with more severe disease than the previously dominant alpha (B.1.1.7) variant. We aimed to characterise the severity of the delta variant compared with the alpha variant by determining the relative risk of hospital attendance outcomes.
Referências	TWOHIG, K. A. <i>et al.</i> Hospital admission and emergency care attendance risk for SARS-CoV-2 delta (B.1.617.2) compared with alpha (B.1.1.7) variants of concern: a cohort study. Lancet. Infectious diseases , [United Kingdom], p. S1473309921004758, Aug. 27, 2021. DOI: 10.1016/S1473-3099(21)00475-8. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S1473309921004758 . Acesso em: 17 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900475-8



Título	Global characteristics and outcomes of SARS-CoV-2 infection in children and adolescents with cancer (GRCCC): a cohort study
Autor(es)	Sheena Mukkada, Nickhill Bhakta, Guillermo L Chantada, Yichen Chen, Yuvanesh Vedaraju, Lane Faughnan, Maysam R Homsi, Hilmarie Muniz-Talavera, Radhikesh Ranadive, Monika Metzger, Paola Friedrich, Asya Agulnik, Sima Jeha, Catherine Lam, Rashmi Dalvi, Laila Hessissen, Daniel C Moreira, Victor M Santana, Michael Sullivan, Eric Bouffet, Miguela A Caniza, Meenakshi Devidas, Kathy Pritchard-Jones, Carlos Rodriguez-Galindo, on behalf of the Global Registry of COVID-19 in Childhood Cancer
Resumo	Previous studies have shown that children and adolescents with COVID-19 generally have mild disease. Children and adolescents with cancer, however, can have severe disease when infected with respiratory viruses. In this study, we aimed to understand the clinical course and outcomes of SARS-CoV-2 infection in children and adolescents with cancer.
Referências	MUKKADA, S. <i>et al.</i> Global characteristics and outcomes of SARS-CoV-2 infection in children and adolescents with cancer (GRCCC): a cohort study. Lancet. Oncology , [United Kingdom], p. S147020452100454X, Aug. 26, 2021. DOI: 10.1016/S1470-2045(21)00454-X. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S147020452100454X . Acesso em: 17 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1470-2045%2821%2900454-X



Título	Discovery and validation of a three-gene signature to distinguish COVID-19 and other viral infections in emergency infectious disease presentations: a case-control and observational cohort study
Autor(es)	Ho Kwong Li, Myrsini Kaforou, Jesus Rodriguez-Manzano, Samuel Channon-Wells, Ahmad Moniri, Dominic Habgood-Coote, Rishi K Gupta, Ewurabena A Mills, Dominique Arancon, Jessica Lin, Yueh-Ho Chiu, Ivana Pennisi, Luca Miglietta, Ravi Mehta, Nelofar Obaray, Jethro A Herberg, Victoria J Wright, Pantelis Georgiou, Laura J Shallcross, Alexander J Mentzer, Michael Levin, Graham S Cooke, Mahdad Noursadeghi, Shiranee Sriskandan
Resumo	Emergency admissions for infection often lack initial diagnostic certainty. COVID-19 has highlighted a need for novel diagnostic approaches to indicate likelihood of viral infection in a pandemic setting. We aimed to derive and validate a blood transcriptional signature to detect viral infections, including COVID-19, among adults with suspected infection who presented to the emergency department.
Referências	HO KWONG, Li. <i>et al.</i> Discovery and validation of a three-gene signature to distinguish COVID-19 and other viral infections in emergency infectious disease presentations: a case-control and observational cohort study. The Lancet microbe , [United Kingdom], p. S2666524721001452, Aug. 16, 2021. DOI: 10.1016/S2666-5247(21)00145-2. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2666524721001452 . Acesso em: 17 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2821%2900145-2



Título	First Reported Nosocomial SARS-CoV-2 Outbreak in a Hospital-Based Laundry Facility
Autor(es)	Miki Goldenfeld, Neta Zuckerman, Sharon Amit, Ilana Tal, Sabrina Hasson, Shiraz Gefen-Halevi, Asaf Biber, Orna Mor, Gili Regev-Yochay
Resumo	Nosocomial SARS-CoV-2 outbreaks among health care workers have been scarcely reported so far. This report presents the results of an epidemiologic and molecular investigation of a SARS-CoV-2 outbreak among laundromat facility workers in a large tertiary center in Israel. Following the first 3 reported cases of SARS-CoV-2 among laundromat workers, all 49 laundromat personnel were screened by qRT-PCR tests using naso- and oropharingeal swabs. Epidemiologic investigations included questionnaires, interviews, and observations of the laundromat facility. Eleven viral RNA samples were then sequenced, and a phylogenetic analysis was performed using MEGAX. The integrated investigation defined three genetic clusters and helped identify the index cases and the assumed routes of transmission. It was then deduced that shared commute and public showers played a role in SARS-CoV-2 transmission in this outbreak, in addition to improper PPE use and social gatherings (such as social eating and drinking). In this study, we present an integrated epidemiologic and molecular investigation may help detect the routes of SARS-CoV-2 transmission, emphasizing such routes that are less frequently discussed. Our work reinforces the notion that person-to-person transmission is more likely to cause infections than environmental contamination (eg, from handling dirty laundry).
Referências	GOLDENFELD, M. <i>et al.</i> First Reported Nosocomial SARS-CoV-2 Outbreak in a Hospital-Based Laundry Facility. Epidemiology and Infection , [United Kingdo], p. 1–17, Sept. 15, 2021. DOI: 10.1017/S0950268821002016. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002016/type/journal_article . Acesso em: 17 set. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/DF034684ECA81211507A1F42A84ECA69/S0950268821002016a.pdf/first_reported_nosocomial_sarscov2_outbreak_in_a_hospitalbased_lau_ndry_facility.pdf



Título	Occupational Health and Safety Measures in Healthcare Settings During COVID-19: Strategies for Protecting Staff, Patients and Visitors
Autor(es)	Isra Asma Ahmad, Ernest Osei
Resumo	The COVID-19 (SARS-CoV-2) pandemic has profoundly impacted almost every aspect of healthcare systems worldwide, placing the health and safety of frontline healthcare workers at risk and still continues to remain an important public health challenge. Several hospitals have put in place strategies to manage space, staff, and supplies in order to continue to deliver optimum care to patients while at the same time protecting the health and safety of staff and patients. However, the emergence of the second and third waves of the virus with the influx of new cases continue to add an additional level of complexity to the already challenging situation of containing the spread and lowering the rate of transmission and thus pushing healthcare systems to the limit. In this narrative review paper we describe various strategies including administrative controls, environmental controls and use of personal protective equipment implemented by occupational health and safety departments for the protection of healthcare workers, patients and visitors from SARS-CoV-2 virus infection. The protection and safeguard of the health and safety of healthcare workers and patients through the implementation of effective infection control measures, adequate management of possible outbreaks and minimization of risk of nosocomial transmission is an important and effective strategy of SARS-CoV-2 pandemic management in any healthcare facility. High quality patient care hinges on ensuring that the care providers are well protected and supported so they can provide the best quality of care to their patients.
Referências	AHMAD, I. A.; OSEI, E. Occupational Health and Safety Measures in Healthcare Settings During COVID-19: Strategies for Protecting Staff, Patients and Visitors. Disaster medicine and public health preparedness, [United States.], p. 1–27, Sep. 14, . DOI: 10.1017/dmp.2021.294. Disponível em: https://www.cambridge.org/core/product/identifier/S1935789321002949/type/journal article . Acesso em: 17 set. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/9020BB396F446B9AD2A056F5A157627F/S1935789321002949a.pdf/occupational health and safety measures in healthcare settings dur ing covid19 strategies for protecting staff patients and visitors.pdf



Título	Aglomerados ativos de COVID-19 em Santa Catarina, Brasil, e tendência de mobilidade dos locais de trabalho
Autor(es)	Ivan Merêncio, Gecielli Martins Monteiro, Carlos Antônio Oliveira Vieira
Resumo	A aplicação da análise espacial destinada ao estudo de dados epidemiológicos humanos se tornou notória nas últimas duas décadas. Nesse sentido, este artigo aborda a estatística scan para a detecção de clusters espaço-temporais de casos da COVID-19 em Santa Catarina, Brasil. O objetivo é aplicar a estatística scan para a identificação de agrupamentos ativos, determinando sua localização, dimensão e ordem (prioridade). A organização da base descritiva abrangeu os casos de COVID-19 entre 10 de março e 31 de agosto de 2020, disponíveis no Portal de Dados Abertos do Estado de Santa Catarina. A base vetorial dos limites municipais e mesorregiões catarinenses, e as populações estimadas para 2020 foram obtidas no site do Instituto Brasileiro de Geografia e Estatística (IBGE). A covariável tendência de mobilidade dos locais de trabalho foi obtida no documento COVID-19: Relatório de Mobilidade da Comunidade do Google. Para a execução da estatística, considerou-se o modelo discreto de Poisson, apoiado na abordagem prospectiva. No resultado do trabalho, evidenciou-se a capacidade do procedimento para delimitação dos clusters, o qual identificou 17 clusters ativos com a variável resposta e 18 ativos após a inclusão da covariável, distribuídos em todo estado, predominantes no litoral e no Oeste Catarinense. O cluster primário localizou-se no Sul Catarinense. A covariável tendência de mobilidade dos locais de trabalho influenciou moderadamente em 38,89% dos aglomerados. O método foi eficiente para a compreensão da distribuição espacial da epidemia. Isso caracteriza a estatística scan como uma ferramenta de apoio a execução de ações a serem tomadas por gestores, priorizando áreas mais afetadas pela doença.
Referências	MERÊNCIO, I.; MONTEIRO, G. M.; VIEIRA, C. A. O. Aglomerados ativos de COVID-19 em Santa Catarina, Brasil, e tendência de mobilidade dos locais de trabalho. Cad. Saúde Pública , [Brasil], v. 37, n. 6, p. e00301620, 2021. DOI: 10.1590/0102-311x00301620. Disponível em: http://www.scielo.br/scielo.php?script=sci arttext&pid=S0102-311X2021000605015&tlng=pt. Acesso em: 17 set. 2021.
Fonte	https://www.scielo.br/j/csp/a/6hXvPDmd4QYfrQyhsYQhnpr/?lang=pt&format=pdf



Título	Risk Factors Associated With SARS-CoV-2 Infection Among Farmworkers in Monterey County, California
Autor(es)	Ana M. Mora, Joseph A. Lewnard, Katherine Kogut, Stephen A. Rauch, Samantha Hernandez, Marcus P.Wong, Karen Huen, Cynthia Chang, Nicholas P. Jewell, Nina Holland, Eva Harris, Maximiliano Cuevas, Brenda Eskenazi, for the CHAMACOS-Project-19 Study Team
Resumo	Essential workers in agriculture and food production have been severely affected by the ongoing COVID-19 pandemic.To identify risk factors associated with SARS-CoV-2 infection among farmworkers in California.This cross-sectional study invited farmworkers in California's Salinas Valley (Monterey County) receiving transcription-mediated amplification (TMA) tests for SARS-CoV-2 infection at federally qualified community clinics and community sites to participate. Individuals were eligible if they were not pregnant, were 18 years or older, had conducted farmwork since the pandemic started, and were proficient in English or Spanish. Survey data were collected and SARS-CoV-2 tests were conducted among participants from July 16 to November 30, 2020.Sociodemographic, household, community, and workplace characteristics.TMA- and immunoglobulin G (IgG)—positive SARS-CoV-2 infection.A total of 1107 farmworkers (581 [52.5%] women; mean [SD] age, 39.7 [12.6] years) were included in these analyses. Most participants were born in Mexico (922 [83.3%]), were married or living with a partner (697 [63.0%]), and worked in the fields (825 [74.5%]). Overall, 118 of 911 (13.0%) had a positive result on their TMA test for SARS-CoV-2 infection, whereas 201 of 1058 (19.0%) had antibody evidence of infection. In multivariable analyses accounting for recruitment venue and enrollment period, the incidence of TMA-positive SARS-CoV-2 infection was higher among those with lower than primary school—level education (adjusted relative risk [aRR], 1.32; 95% CI, 0.99-1.76; non–statistically significant finding), who spoke an Indigenous language at home (aRR, 1.30; 95% CI, 0.97-1.73; non–statistically significant finding), who spoke an Indigenous language at home (aRR, 1.30; 95% CI, 0.97-1.73; non–statistically significant finding), who spoke an Indigenous language at home (aRR, 1.59; 95% CI, 1.11-2.14). Positive results on IgG tests for SARS-CoV-2 infection were more common among those who lived in crowded housing (aRR, 1.23; 95% CI, 0.98-1.53; non



Referências	2.70) or diabetes (aRR, 1.31; 95% CI, 0.98-1.75; non–statistically significant finding). In this cross-sectional study of farmworkers in California, both residential and workplace exposures were associated with SARS-CoV-2 infection. Urgent distribution of COVID-19 vaccines and intervention on modifiable risk factors are warranted given this population's increased risk of infection and the essential nature of their work. MORA, A. M. <i>et al.</i> Risk Factors Associated With SARS-CoV-2 Infection Among Farmworkers in Monterey County, California. JAMA network open , [United States], v. 4, n. 9, p. e2124116, Sept. 15, 2021. DOI: 10.1001/jamanetworkopen.2021.24116. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.24116 . Acesso em: 17 set. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2784117



Título	Investigation of an outbreak of COVID-19 in a French nursing home with most residents vaccinated
Autor(es)	Catherine Burugorri-Pierre, Carmelo Lafuente-Lafuente, Christel Oasi, Emmanuel Lecorche, Sylvie Pariel, Cristiano Donadio, Joël Belmin
Resumo	Introdução There is great hope that vaccination against SARS-CoV-2 will decrease the burden of COVID-19 on nursing home (NH) residents, who have been significantly affected by this pandemic. The efficacy and effectiveness of COVID-19 vaccines are not well known in this population. Recent immunogenic studies have found decreased titers of postvaccine neutralizing antibodies against SARS-CoV-2 among NH residents, suggesting the potential for diminished effectiveness in this population. L2 We report an outbreak of COVID-19 in a French nursing home where most residents had been fully vaccinated with the BNT162b2 vaccine [].
Referências	BURUGORRI-PIERRE, C. <i>et al.</i> Investigation of an Outbreak of COVID-19 in a French Nursing Home With Most Residents Vaccinated. JAMA network open , [United States], v. 4, n. 9, p. e2125294, Sept. 13, 2021. DOI: 10.1001/jamanetworkopen.2021.25294. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.25294 . Acesso em: 17 set. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2783985



Título	Estimates of COVID-19 cases and deaths among nursing home residents not reported in federal data
Autor(es)	Karen Shen, Lacey Loomer, Hannah Abrams, David C. Grabowski, Ashvin Gandhi
Resumo	Federal data underestimate the impact of COVID-19 on US nursing homes because federal reporting guidelines did not require facilities to report case and death data until the week ending May 24, 2020.To assess the magnitude of unreported cases and deaths in the National Healthcare Safety Network (NHSN) and provide national estimates of cases and deaths adjusted for nonreporting. This is a cross-sectional study comparing COVID-19 cases and deaths reported by US nursing homes to the NHSN with those reported to state departments of health in late May 2020. The sample includes nursing homes from 20 states, with 4598 facilities in 12 states that required facilities to report cases and 7401 facilities in 19 states that required facilities to report deaths. Estimates of nonreporting were extrapolated to infer the national (15 397 facilities) unreported cases and deaths in both May and December 2020. Data were analyzed from December 2020 to May 2021. Nursing home ownership (for-profit or not-for-profit), chain affiliation, size, Centers for Medicare & (amp; Medicaid Services star rating, and state. The main outcome was the difference between the COVID-19 cases and deaths reported by each facility to their state department of health vs those reported to the NHSN. Among 15 415 US nursing homes, including 4599 with state case data and 7405 with state death data, a mean (SE) of 43.7% (1.4%) of COVID-19 cases and 40.0% (1.1%) of COVID-19 deaths prior to May 24 were not reported in the first NHSN submission in sample states, suggesting that 68 613 cases and 16 623 deaths were omitted nationwide, representing 11.6% of COVID-19 cases and 14.0% of COVID-19 deaths among nursing home residents in 2020. These findings suggest that federal NHSN data understated total cases and deaths in nursing homes. Failure to account for this issue may lead to misleading conclusions about the role of different facility characteristics and state or federal policies in explaining COVID outbreaks.
Referências	SHEN, K. <i>et al.</i> Estimates of COVID-19 Cases and Deaths Among Nursing Home Residents Not Reported in Federal Data. JAMA network open , [United States], v. 4, n. 9, p. e2122885, Sept. 9, 2021. DOI: 10.1001/jamanetworkopen.2021.22885. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.22885 . Acesso em: 17 set. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2784031



Título	Younger Brazilians hit by COVID-19 – What are the implications?
Autor(es)	Raphael Mendonça Guimarães, Margareth Crisóstomo Portela, Daniel Antunes MacielVillela, GustavoCorrea Matta, Carlos Machado de Freitas
Resumo	Introdução Desde o início de 2021, houve uma aceleração significativa da incidência e mortalidade da COVID-19 no Brasil. Até a primeira semana de junho, o Brasil havia atingido quase 17 milhões de casos e pouco mais de 472 mil mortes ¹ . Notável mudança demográfica tem sido observada neste período, em que adultos jovens e de meia-idade representam uma parcela crescente dos pacientes em enfermarias e unidades de terapia intensiva (UTI) ² . O mix de casos de hospitais mudou, substituindo pacientes idosos, com maior probabilidade de desenvolver formas graves ³ devido a condições crônicas pré-existentes, por pacientes COVID-19 mais jovens []
Referências	GUIMARÃES, R. M. <i>et al.</i> Younger Brazilians hit by COVID-19 – What are the implications?. The Lancet regional health. Americas , [United Kingdom.], v. 1, p. 100014, Sept. 2021. DOI: 10.1016/j.lana.2021.100014. Disponível em: https://www.sciencedirect.com/science/article/pii/S2667193X21000065 . Acesso em: 10 set. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S2667193X21000065



Título	The first eight months of COVID-19 pandemic in three West African countries: leveraging lessons learned from responses to the 2014-2016 Ebola virus disease outbreak
Autor(es)	Benido Impouma, George Sie Williams, Fleury Moussana1, Franck Mboussou1, Bridget Farham, Caitlin M. Wolfe, Charles Okot, Katrina Downing, Claudia Codeço Tores, Antoine Flahault, Cyril Pervilhac, Georges Ki-Zerbo, Peter Clement, Steven Shongwe, Olivia Keiser, Ibrahima Socé Fall
Resumo	Experience gained from responding to major outbreaks may have influenced the early COVID-19 pandemic response in several countries across Africa. We retrospectively assessed whether Guinea, Liberia, and Sierra Leone, the three West African countries at the epicentre of the 2014-2016 Ebola virus disease outbreak, leveraged the lessons learned in responding to COVID-19 following the World Health Organization's declaration of a public health emergency of international concern (PHEIC). We found relatively lower incidence rates across the three countries compared to many parts of the globe. Time to case reporting and laboratory confirmation also varied, with Guinea and Liberia reporting significant delays compared to Sierra Leone. Most of the selected readiness measures were instituted before confirmation of the first case and response measures were initiated rapidly after the outbreak confirmation. We conclude that the rapid readiness and response measures instituted by the three countries can be attributed to their lessons learned from the devastating Ebola outbreak, although persistent health systems weaknesses and the unique nature of COVID-19 continue to challenge control efforts.
Referências	IMPOUMA, B. <i>et al.</i> The first eight months of COVID-19 pandemic in three West African countries: leveraging lessons learned from responses to the 2014-2016 Ebola virus disease outbreak. Epidemiology and infection , [United Kingdom], p. 1–22, Sept. 8, 2021. DOI: 10.1017/S0950268821002053. Disponível em: https://www.cambridge.org/core/product/identifier/S0950268821002053/type/journal_article . Acesso em: 10 set. 2021.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/first-eight-months-of-covid19-pandemic-in-three-west-african-countries-leveraging-lessons-learned-from-responses-to-the-20142016-ebola-virus-disease-outbreak/A99B6733DAD1DF87BB4766A8E52B78E2



Título	Predicted COVID-19 positive cases, hospitalisations, and deaths associated with the Delta variant of concern, June–July, 2021
Autor(es)	Syed Ahmar Shah, Emily Moore, Chris Robertson, Jim McMenamin, Srinivasa Vittal Katikireddi, Colin R Simpson, Ting Shi, Uktarsh Agrawal, Colin McCowan, Sarah Stock, Lewis D Ritchie, *Aziz Sheikh, on behalf of Public Health Scotland and the EAVE II collaborators
Resumo	Introdução We previously reported on the speed with which the Delta variant of concern (VOC) took hold in Scotland.1 The Delta VOC has subsequently established itself in many other parts of the world and has emerged as the dominant strain internationally.2 Recent data have shown that the Delta VOC is more transmissible []
Referências	SHAH, S. A. <i>et al.</i> Predicted COVID-19 positive cases, hospitalisations, and deaths associated with the Delta variant of concern, June–July, 2021. The Lancet. Digital health , [United Kingdom], v. 3, n. 9, p. e539–e541, Aug. 9, 2021. DOI: 10.1016/S2589-7500(21)00175-8. Disponível em: https://www.thelancet.com/journals/landig/article/PIIS2589-7500(21)00175-8/fulltext . Acesso em: 10 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900175-8



Título	Characteristics of SARS-CoV-2 Infections in Israeli Children During the Circulation of Different SARS-CoV-2 Variants
Autor(es)	Ido Somekh, Michal Stein, Isabella Karakis, Eric A. F. Simões, Eli Somekh
Resumo	Introducão Since December 2020, the SARS-CoV-2 B.1.1.7 variant has been spreading in Israel, and by January or February 2021 it quickly became the predominant circulating strain, isolated in more than 80% of cases. Concomitantly, a mass COVID-19 vaccination campaign was launched in Israel []
Referências	SOMEKH, I. <i>et al.</i> Characteristics of SARS-CoV-2 Infections in Israeli Children During the Circulation of Different SARS-CoV-2 Variants. JAMA network open , [United States], v. 4, n. 9, p. e2124343—e2124343, Sept. 7, 2021. DOI: 10.1001/jamanetworkopen.2021.24343. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.24343 . Acesso em: 10 set. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2783851



Título	Spontaneous Abortion Following COVID-19 Vaccination During Pregnancy
Autor(es)	Elyse O. Kharbanda, Jacob Haapala, Malini DeSilva, Gabriela Vazquez-Benitez, Kimberly K. Vesco, Allison . Naleway, Heather S. Lipkind
Resumo	COVID-19 infection during pregnancy can be associated with severe maternal morbidity. In the United States, 1 COVID-19 vaccine has been approved and 2 have been authorized for use for pregnant women. To date, data on maternal COVID-19 vaccine safety come primarily from passive surveillance, and studies lack an unvaccinated comparison group. Spontaneous abortion has been identified as a priority outcome in studies of maternal vaccine safety, and concerns regarding risks of spontaneous abortion may be a barrier to vaccination during pregnancy. We present findings from case-control surveillance of COVID-19 vaccination during pregnancy and spontaneous abortion.
Referências	KHARBANDA, E. O. <i>et al.</i> Spontaneous Abortion Following COVID-19 Vaccination During Pregnancy. JAMA , [United States], Sept. 8, 2021. DOI: 10.1001/jama.2021.15494. Disponível em: https://doi.org/10.1001/jama.2021.15494. Acesso em: 10 set. 2021.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2784193



Título	Symptoms Reported With New Onset of Loss of Taste or Smell in Individuals With and Without SARS-CoV-2 Infection
Autor(es)	Alain K. Koyama, David A. Siegel, Eghosa Oyegun, William Hampton, Nicole Maddox, Emilia H. Koumans
Resumo	There have been reports of loss of taste or smell associated with viral infections, including SARS-CoV-2. However, it is not clear whether these symptoms are more frequent in SARS-CoV-2 infection compared with other viral infections. Prior studies among individuals with SARS-CoV-2 infection suggest loss of taste or smell occurs early in the disease course and is associated with younger age, female sex, and milder disease. Those studies largely have not examined which symptoms occur with new loss of taste or smell. Identifying concomitant symptoms may guide future studies to identify a pattern of symptoms that form a unique clinical presentation. We therefore described which symptoms were reported with new loss of taste or smell among individuals with and without SARS-CoV-2 infection.
Referências	KOYAMA, A. K. <i>et al.</i> Symptoms Reported With New Onset of Loss of Taste or Smell in Individuals With and Without SARS-CoV-2 Infection. JAMA otolaryngology–head & neck surgery , [United States], Sept. 2, 2021. DOI: 10.1001/jamaoto.2021.2239 . Disponível em: https://doi.org/10.1001/jamaoto.2021.2239. Acesso em: 10 set. 2021.
Fonte	https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/2783972



Título	Prevalence of SARS-CoV-2 Antibodies From a National Serosurveillance of Kenyan Blood Donors, January-March 2021
Autor(es)	Sophie Uyoga, Ifedayo M. O. Adetifa, Mark Otiende, Christine Yegon, Ambrose Agweyu, George M. Warimwe, J. Anthony G. Scott
Resumo	High SARS-CoV-2 antibody levels have been achieved in most of the population in high-income countries through vaccination. However, global inequity exists in COVID-19 vaccine distribution, as highlighted at the June 2021 G7 Summit, which committed to providing 1 billion doses to low-income countries. This focus on doses overlooks the pace of transmission in low-income settings. To monitor seroprevalence in Kenya, we began surveillance of blood donors (aged 16-64 years) in April 2020. The national prevalence of SARS-CoV-2 antibodies was estimated at 4.3% in April to June 2020 and 9.1% in August to September 2020. In this article we estimate seroprevalence for January to March 2021.
Referências	UYOGA, S. <i>et al.</i> Prevalence of SARS-CoV-2 Antibodies From a National Serosurveillance of Kenyan Blood Donors, January-March 2021. JAMA , [United States], Sept. 2, 2021. DOI: 10.1001/jama.2021.15265. Disponível em: https://doi.org/10.1001/jama.2021.15265. Acesso em: 10 set. 2021.
Fonte	https://jamanetwork.com/journals/jama/fullarticle/2784014



Título	Comparison of SARS-CoV-2 Antibody Response by Age Among Recipients of the BNT162b2 vs the mRNA-1273 Vaccine
Autor(es)	Nathan E. Richards, Behnam Keshavarz, Lisa J. Workman, Michael R. Nelson, Thomas A. E. Platts-Mills, Jeffrey M. Wilson,
Resumo	Introdução Two COVID-19 mRNA vaccines, BNT162b2 (ie, Pfizer/BioNTech) and mRNA-1273 (ie, Moderna), were approved via the US Food and Drug Administration Emergency Use Authorization (FDA-EUA) for adults in December 2020. Both incorporate mRNA that encodes for the prefusion stabilized spike glycoprotein, use a prime-boost strategy, and have shown strong immunogenicity in preclinical and clinical studies. Although the 2 vaccines share similar features and both showed strong efficacy in clinical trials, there are formulation differences, and there has been little head-to-head evaluation of antibody responses. In this cohort study, we used a quantitative assay for IgG to SARS-CoV-2 spike-receptor binding protein to compare antibody responses in an employee cohort in which both BNT162b2 and mRNA-1273 were administered. We hypothesized that there could be differences in antibody levels elicited by the 2 vaccines and explored the effect of age on immunogenicity.
Referências	RICHARDS, N. E. <i>et al.</i> Comparison of SARS-CoV-2 Antibody Response by Age Among Recipients of the BNT162b2 vs the mRNA-1273 Vaccine. JAMA network open , [United States], v. 4, n. 9, p. e2124331—e2124331, Sept. 2, 2021. DOI: 10.1001/jamanetworkopen.2021.24331. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.24331 . Acesso em: 10 set. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2783685



Título	Emergence and Spread of a B.1.1.28-Derived P.6 Lineage with Q675H and Q677H Spike Mutations in Uruguay
Autor(es)	Natalia Rego, Cecilia Salazar, Mercedes Paz, Alicia Costábile, Alvaro Fajardo, Ignacio Ferrés, Paula Perbolianachis, Tamara Fernández-Calero, Veronica Noya, Matias R. Machado, Mariana Brandes, Rodrigo Arce, Mailen Arleo, Tania Possi, Natalia Reyes, María Noel Bentancor, Andrés Lizasoain, Viviana Bortagaray, Ana Moller, Odhille Chappos, Nicolas Nin, Javier Hurtado, Melissa Duquía, Maria Belén González, Luciana Griffero, Mauricio Méndez, Maria Pía Techera, Juan Zanetti, Emiliano Pereira, Bernardina Rivera, Matías Maidana, Martina Alonso, Pablo Smircich, Ighor Arantes, Daiana Mir, Cecilia Alonso, Julio Medina, Henry Albornoz, Rodney Colina, Gonzalo Bello, Pilar Moreno, Gonzalo Moratorio, Gregorio Iraola, Lucía Spangenberg
Resumo	Uruguay controlled the viral dissemination during the first nine months of the SARS-CoV-2 pandemic. Unfortunately, towards the end of 2020, the number of daily new cases exponentially increased. Herein, we analyzed the country-wide genetic diversity of SARS-CoV-2 between November 2020 and April 2021. We identified that the most prevalent viral variant during the first epidemic wave in Uruguay (December 2020–February 2021) was a B.1.1.28 sublineage carrying Spike mutations Q675H + Q677H, now designated as P.6, followed by lineages P.2 and P.7. P.6 probably arose around November 2020, in Montevideo, Uruguay's capital department, and rapidly spread to other departments, with evidence of further local transmission clusters; it also spread sporadically to the USA and Spain. The more efficient dissemination of lineage P.6 with respect to P.2 and P.7 and the presence of mutations (Q675H and Q677H) in the proximity of the key cleavage site at the S1/S2 boundary suggest that P.6 may be more transmissible than other lineages co-circulating in Uruguay. Although P.6 was replaced by the variant of concern (VOC) P.1 as the predominant lineage in Uruguay since April 2021, the monitoring of the concurrent emergence of Q675H + Q677H in VOCs should be of worldwide interest.
Referências	REGO, N. <i>et al.</i> Emergence and Spread of a B.1.1.28-Derived P.6 Lineage with Q675H and Q677H Spike Mutations in Uruguay. Viruses , [Switzerland.], v. 13, n. 9, p. 1801, Sept. 10, 2021. DOI: 10.3390/v13091801. Disponível em: https://www.mdpi.com/1999-4915/13/9/1801 . Acesso em: 10 set. 2021.
Fonte	https://www.mdpi.com/1999-4915/13/9/1801/htm



Título	Prevalence of COVID-19 in children, adolescents and adults in remote education situations in the city of Fortaleza, Brazil
Autor(es)	Valdester Cavalcante Pinto Júnior, Luiz Francisco Wemmenson Gonçalves Moura, Rodrigo Cardoso Cavalcante, José Rubens Costa Lima, Arnaldo Solheiro Bezerra, Daylana Régia de Sousa Dantas, Cícero Matheus Lima Amaral, Daniel Freire Lima, Antonio Brazil Viana Júnior, Maria Izabel Florindo Guedes
Resumo	OBJECTIVES: A retrospective study was conducted to identify the prevalence of COVID-19 through serology and RT-PCR in children, adolescents and adults. A database of the COVID-19 Tracking Program in school children was used. METHODS: The data comprised sociodemographic and clinical variables, results of serological tests (IgM and IgG), and real-time-polymerase chain reaction (RT-PCR) results of IgM-positive individuals. The statistical analysis was performed with a 5% significance level.RESULTS: Among 423 children, 107 (25.3%) exhibited seroprevalence with IgG, IgM or IgG/IgM; among 854 adolescents, 250 (29.2%) had positive serology; and among 282 adults, 59 (20.9%) were positive. The frequency of positivity on RT-PCR for SARS-CoV-2 was 3.5%, 3.6% and 6.0% in children, adolescents and adults, respectively. Children had a lower incidence of symptoms than adolescents (p = 0.001) and adults (p = 0.003); the most frequent were fever, ageusia, anosmia, headache, dry cough, sore throat, muscle pain, runny nose, dyspnoea, and diarrhoea.CONCLUSIONS: The prevalence rate for all groups was 26.7% in serology and 4.04% in RT-PCR. Children had lower rates of IgM and fewer symptoms compared with adolescents and adults. The data suggest the potential for transmissibility in all age groups.
Referências	PINTO JÚNIOR, V. C. <i>et al.</i> Prevalence of COVID-19 in children, adolescents and adults in remote education situations in the city of Fortaleza, Brazil. International journal of infectious diseases, [Netherlands], v. 108, p. 20–26, July 2021. DOI: 10.1016/j.ijid.2021.04.086. Disponível em: Acesso em: 10 set. 2021.
Fonte	https://pubmed.ncbi.nlm.nih.gov/33945867/



Título	COVID-19 and immune-mediated inflammatory diseases: effect of disease and treatment on COVID-19 outcomes and vaccine responses
Autor(es)	Filippo Fagni, David Simon, Koray Tascilar, Verena Schoenau, Michael Sticherling, Markus F Neurath, Georg Schett
Resumo	At the beginning of the COVID-19 pandemic, patients with immune-mediated inflammatory diseases were considered to be at high risk for SARS-CoV-2 infection and the development of severe COVID-19. Data collected over the past year, however, suggest that a diagnosis of inflammatory arthritis, psoriasis, or inflammatory bowel diseases does not increase risk for SARS-CoV-2 infection or severe COVID-19 compared with people without these diseases. Furthermore, substantial data suggest that certain medications frequently used in patients with immune-mediated inflammatory diseases, in particular cytokine inhibitors, might even lower the risk for severe COVID-19. Conversely, glucocorticoids and potentially B-cell-depleting treatments seem to worsen COVID-19 outcomes. Additionally, the first data on SARS-CoV-2 vaccination in patients with these diseases suggest that tolerability of vaccination in patients with immune-mediated inflammatory diseases is good, although the immune response to vaccination can be somewhat reduced in this patient group, particularly those taking methotrexate or CD20-targeted treatment.
Referências	FAGNI, F. <i>et al.</i> COVID-19 and immune-mediated inflammatory diseases: effect of disease and treatment on COVID-19 outcomes and vaccine responses. The Lancet. Rheumatology , [United Kingdom], Aug. 27, 2021. DOI: 10.1016/S2665-9913(21)00247-2. Disponível em: https://www.thelancet.com/journals/lanrhe/article/PIIS2665-9913(21)00247-2/abstract. Acesso em: 3 set. 2021.
Fonte	https://www.thelancet.com/journals/lanrhe/article/PIIS2665-9913(21)00247-2/fulltext



Título	Hospital admission and emergency care attendance risk for SARS-CoV-2 delta (B.1.617.2) compared with alpha (B.1.1.7) variants of concern: a cohort study
Autor(es)	Katherine A Twohig, Tommy Nyberg, Asad Zaidi, Simon Thelwall, Mary A Sinnathamby, Shirin Aliabadi, Shaun R Seaman, Ross J Harris, Russell Hope, Jamie Lopez-Bernal, Eileen Gallagher, Andre Charlett, Daniela De Angelis, the COVID-19 Genomics UK (COG-UK) consortium†, Anne M Presanis, Gavin Dabrera
Resumo	The SARS-CoV-2 delta (B.1.617.2) variant was first detected in England in March, 2021. It has since rapidly become the predominant lineage, owing to high transmissibility. It is suspected that the delta variant is associated with more severe disease than the previously dominant alpha (B.1.1.7) variant. We aimed to characterise the severity of the delta variant compared with the alpha variant by determining the relative risk of hospital attendance outcomes.
Referências	TWOHIG, K. A. <i>et al.</i> Hospital admission and emergency care attendance risk for SARS-CoV-2 delta (B.1.617.2) compared with alpha (B.1.1.7) variants of concern: a cohort study. Lancet. Infectious diseases , [Netherlands], p. S1473309921004758, Aug. 27, 2021. DOI: 10.1016/S1473-3099(21)00475-8. Disponível em: https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00475-8/abstract . Acesso em: 3 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900475-8



Título	The association of community mobility with the time-varying reproduction number (R) of SARS-CoV-2: a modelling study across 330 local UK authorities
Autor(es)	You Li, Xin Wang, Harry Campbell, Harish Nair, for the Usher Network for COVID-19 Evidence Reviews (UNCOVER) group
Resumo	Community mobility data have been used to assess adherence to non-pharmaceutical interventions and its impact on SARS-CoV-2 transmission. We assessed the association between location-specific community mobility and the reproduction number (R) of SARS-CoV-2 across UK local authorities.
Referências	YOU, Li. <i>et al.</i> The association of community mobility with the time-varying reproduction number (R) of SARS-CoV-2: a modelling study across 330 local UK authorities. The Lancet. Digital health , [United Kingdom], p. S2589750021001448, Aug. 31, 2021. DOI: 10.1016/S2589-7500(21)00144-8. Disponível em: https://www.thelancet.com/journals/landig/article/PIIS2589-7500(21)00144-8/abstract . Acesso em: 3 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900144-8



Título	Effectiveness of BNT162b2 and mRNA-1273 covid-19 vaccines against symptomatic SARS-CoV-2 infection and severe covid-19 outcomes in Ontario, Canada: test negative design study
Autor(es)	Hannah Chung, Siyi He, Sharifa Nasreen, Maria E Sundaram, Sarah A Buchan, Sarah E Wilson, Branson Chen, Andrew Calzavara, Deshayne B Fell, Peter C Austin, 1,7 Kumanan Wilson, Kevin L Schwartz, Kevin A. Brown, Jonathan B Gubbay, Nicole E Basta, Salaheddin M Mahmud, Christiaan H Righolt, Lawrence W Svenson, Shannon E MacDonald, Naveed Z Janjua, Mina Tadrous, Jeffrey C Kwong, em nome da Canadian Immunization Investigadores da Rede de Pesquisa (CIRN) Provincial Collaborative Network (PCN
Resumo	Objective: To estimate the effectiveness of mRNA covid-19 vaccines against symptomatic infection and severe outcomes (hospital admission or death). Design: Test negative design study. Setting: Ontario, Canada between 14 December 2020 and 19 April 2021. Participants: 324 033 community dwelling people aged ≥16 years who had symptoms of covid-19 and were tested for SARS-CoV-2 Interventions: BNT162b2 (Pfizer-BioNTech) or mRNA-1273 (Moderna) vaccine. Main outcome measures: Laboratory confirmed SARS-CoV-2 by reverse transcription polymerase chain reaction (RT-PCR) and hospital admissions and deaths associated with SARS-CoV-2 infection. Multivariable logistic regression was adjusted for personal and clinical characteristics associated with SARS-CoV-2 and vaccine receipt to estimate vaccine effectiveness against symptomatic infection and severe outcomes. Results: Of 324 033 people with symptoms, 53 270 (16.4%) were positive for SARS-CoV-2 and 21 272 (6.6%) received at least one dose of vaccine. Among participants who tested positive, 2479 (4.7%) were admitted to hospital or died. Vaccine effectiveness against symptomatic infection observed ≥14 days after one dose was 60% (95% confidence interval 57% to 64%), increasing from 48% (41% to 54%) at 14-20 days after one dose to 71% (63% to 78%) at 35-41 days. Vaccine effectiveness observed ≥7 days after two doses was 91% (89% to 93%). Vaccine effectiveness against hospital admission or death observed ≥14 days after one dose was 70% (60% to 77%), increasing from 62% (44% to 75%) at 14-20 days to 91% (73% to 97%) at ≥35 days, whereas vaccine effectiveness observed ≥7 days after two doses was 98% (88% to 100%). For adults aged ≥70 years, vaccine effectiveness estimates were observed to be lower for intervals shortly after one dose but were comparable to those for younger people for all intervals after 28 days. After two doses, high vaccine effectiveness was observed against variants with the E484K mutation. Conclusions: Two doses of mRNA covid-19



	vaccines were observed to be highly effective against symptomatic infection and severe outcomes. Vaccine effectiveness of one dose was observed to be lower, particularly for older adults shortly after the first dose.
Referências	CHUNG, H. <i>et al.</i> Effectiveness of BNT162b2 and mRNA-1273 covid-19 vaccines against symptomatic SARS-CoV-2 infection and severe covid-19 outcomes in Ontario, Canada: test negative design study. BMJ , [United Kingdom], v. 374, p. n1943, Aug. 20, 2021. DOI: 10.1136/bmj.n1943. Disponível em: https://www.bmj.com/lookup/doi/10.1136/bmj.n1943 . Acesso em: 3 set. 2021.
Fonte	https://translate.googleusercontent.com/translate_c?hl=en-US&sl=en&tl=pt- BR&prev=search&u=https://www.bmj.com/content/bmj/374/bmj.n1943.full.pdf&usg=ALkJrhjsEVVm4QNvpuKIrvoVm8GSM65g6w



Título	International travel-related control measures to contain the COVID-19 pandemic: a rapid review
Autor(es)	Burns J, Movsisyan A, Stratil JM, Biallas RL, Coenen M, Emmert-Fees KMF, Geffert K, Hoffmann S, Horstick O, Laxy M, Klinger C, Kratzer S, Litwin T, Norris S, Pfadenhauer LM, von Philipsborn P, Sell K, Stadelmaier J, Verboom B, Voss S, Wabnitz K, Rehfuess E
Resumo	What are international travel-related control measures? International travel control measures are methods to manage international travel to contain the spread of COVID-19. Measures include: - closing international borders to stop travellers crossing from one country to another; - restricting travel to and from certain countries, particularly those with high infection levels; - screening or testing travellers entering or leaving a country if they have symptoms or have been in contact with an infected person; - quarantining newly-arrived travellers from another country, that is, requiring travellers to stay at home or in a specific place for a certain time. What did we want to find out? We wanted to find out how effective international travel-related control measures are in containing the COVID-19 pandemic. What we did We searched for studies on the effects of these measures on the spread of COVID-19. Studies had to report how many cases these measures prevented or detected, or whether they changed the course of the pandemic. The studies could include people of any age, anywhere. They could be of any design including those that used 'real-life' data (observational studies) or hypothetical data from computer-generated simulations (modelling studies). This is the first update of our review. This update includes only studies on COVID-19, published up to 13 November 2020. What we found We found 62 studies. Most (49 studies) were modelling studies; only 13 used real-life data (observational studies). Studies took place across the world and at different times during the pandemic. Levels of COVID-19 within countries varied. Most studies compared current travel-related control measures with no travel-related controls. However, some modelling studies also compared current measures against possible measures, for example, to see what might happen if controls were more or less relaxed or were combined with other measures. Main results Below we summarise the findings of some outcomes. Travel restrictions reducing or stopping



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Resumo

travel were beneficial, but this beneficial effect ranged from small to large. Additionally, some studies found no effect. Studies also predicted that these restrictions would delay the outbreak, but the delay ranged from one day to 85 days in different studies. Screening at borders (13 modelling studies and 13 observational studies) These studies assessed screening at borders, including screening people with symptoms or who had potentially been exposed to COVID-19, or testing people, before or after they travelled. For screening based on symptoms or potential exposure to COVID-19, modelling studies found that screening reduced imported or exported cases and delayed outbreaks. Modelling studies predicted that 1% to 53% of cases would be detected. Observational studies reported a wide range of cases detected, from 0% to 100%, with the majority of studies reporting less than 54% of cases detected. For screening based on testing, studies reported that testing travellers reduced imported or exported cases, and cases detected. Observational studies reported that the proportion of cases detected varied from 58% to 90%. This variation might be due to the timing of testing. Quarantine (12 modelling studies) All studies suggested that quarantine may be beneficial, but the size of this effect ranged from small to large in the different studies. Modelling studies, for example, predicted that quarantine could lead to between 450 and over 64,000 fewer cases in the community. Differences in effects may depend on how long people were quarantined for and how well they followed the rules. Quarantine and screening at borders (7 modelling studies and 4 observational studies) For quarantine and screening at borders, most studies suggested some benefit, however the size of this effect differed between studies. For example, observational studies reported that between 68% and 92% of cases would be detected. Differences in effects may depend on how long people were quarantined for and how often they were tested while in quarantine. How reliable are these results? Our confidence in these results is limited. Most studies were based on mathematical predictions (modelling), so we lack real-life evidence. Further, we were not confident that models used correct assumptions, so our confidence in the evidence on travel restrictions and quarantine, in particular, is very low. Some studies were published quickly online as 'preprints'. Preprints do not undergo the normal rigorous checks of published studies, so we are not certain how reliable they are. Also, the studies were very different from each other and their results varied according to the specification of each travel measure (e.g. the type of screening approach), how it was put into practice and enforced, the amount of cross-border travel, levels of community transmission and other types of national measures to control the pandemic. What this means Overall, international travel-related control measures may help to limit the spread of COVID-19 across national borders. Restricting cross-border travel can be a helpful measure. Screening travellers only for symptoms at borders is likely to miss many cases; testing may be more effective but may also miss cases if only performed upon arrival. Quarantine that lasts at least 10 days can prevent travellers spreading COVID-19 and may be more effective if combined with another measure such as testing, especially if people follow the



	rules. Future research needs to be better reported. More studies should focus on real-life evidence, and should assess potential benefits and risks of travel-related control measures to individuals and society as a whole.
Referências	BURNS, J. <i>et al.</i> International travel-related control measures to contain the COVID-19 pandemic: a rapid review. Cochrane library [United Kingdom], v. 2021, n. 3, Marc. 25, 2021. DOI: 10.1002/14651858.CD013717.pub2. Disponível em: https://www.readcube.com/articles/10.1002%2F14651858.CD013717.pub2. Acesso em: 3 set. 2021.
Fonte	https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013717.pub2/epdf/full?cookiesEnabled



Título	Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review
Autor(es)	Nussbaumer-Streit B, Mayr V, Dobrescu AI, Chapman A, Persad E, Klerings I, Wagner G, Siebert U, Ledinger D, Zachariah C, Gartlehner G
Resumo	Coronavirus disease 2019 (COVID-19) is caused by a new virus that has spread quickly throughout the world. Most infected people either experience no symptoms or suffer mild, flu-like symptoms, but some become seriously ill, and may die. There is no vaccine (a medicine that stops people catching a specific disease) for COVID-19, so other ways of slowing its spread are needed. One way of controlling the disease is quarantine. This means separating healthy people from other healthy people, who may have the virus after being in close contact with an infected person, or because they have returned from an area with high infection rates. Similar recommendations include isolation (like quarantine, but for people who tested positive for COVID-19) and physical distancing (people without symptoms keep a distance from each other). What did we want to find out? We wanted to find out whether and how effectively quarantine stops COVID-19 spreading and if it prevents death. We wanted to know if it was more effective when combined with other measures, and how much it costs. Study characteristics COVID-19 is spreading rapidly, so we needed to answer these questions as quickly as possible. This meant we shortened some steps of the normal Cochrane Review process. Nevertheless, we are confident that these changes do not affect our overall conclusions. We looked for studies that assessed the effect of any type of quarantine, anywhere, on the spread and severity of COVID-19. We also looked for studies that assessed quarantine alongside other measures, such as isolation, physical distancing or school closures. COVID-19 is a new disease, so, to find as much evidence as possible, we also looked for studies on similar viruses, such as SARS (severe acute respiratory syndrome) and MERS (Middle East respiratory syndrome). Studies measured the number of COVID-19, SARS or MERS cases, how many people were infected, how quickly the virus spread, how many people died, and the costs of quarantine. Key results We included 51 studies. Thirty-two st



Fonte	https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013574.pub2/full?cookiesEnabled
Referências	NUSSBAUMER-STREIT, B. <i>et al.</i> Quarantine alone or in combination with other public health measures to control COVID-19: a rapid review. Cochrane library [United Kingdom], n. 9, Sept. 14, 2020. DOI: 10.1002/14651858.CD013574.pub2. Disponível em: https://www.readcube.com/articles/10.1002%2F14651858.CD013574.pub2. Acesso em: 3 set. 2021.
Resumo	quarantine (observational studies) on 6064 individuals in China, Greece and Singapore. Twenty-eight COVID-19 studies simulated outbreaks in Algeria, China, Canada, Italy, Kazakhstan, Nepal, UK, USA, Singapore, South Korea, on the cruise ship Diamond Princess, and in a general population. Four studies looked back on the effect of quarantine on 178,122 people involved in SARS and MERS outbreaks. The remaining 15 studies modelled SARS and MERS outbreaks. The modelling studies all found that simulated quarantine measures reduce the number of people with COVID-19 and the number of deaths. With quarantine, estimates showed a minimum reduction in the number of people with COVID-19 of 44%, and a maximum reduction of 96%. Similarly, with quarantine, estimates of the number of deaths showed a minimum reduction of 31%, and a maximum reduction of 76%. Combining quarantine with other measures, such as closing schools or physical distancing, may be more effective at reducing the spread of COVID-19 than quarantine alone. The SARS and MERS studies agreed with the studies on COVID-19.Two SARS modelling studies assessed costs. They found that the costs may be lower when quarantine measures start earlier.Reliability of the evidenceWe are uncertain about the evidence we found for several reasons. The observational studies on COVID-19 did not include a comparison group without quarantine. The COVID-19 studies based their models on limited data and made different assumptions about the virus (e.g. how quickly it would spread). The other studies investigated SARS and MERS so they only provide indirect evidence. Conclusion Despite limited evidence, all the studies found quarantine to be important in reducing the number of people infected and the number of deaths. Results suggest that quarantine was most effective, and cost less, when it started earlier. Combining quarantine with other prevention and control measures may have a greater effect than quarantine alone. This review includes evidence published up to 23 June 2020.



Título	The impact of phased university reopenings on mitigating the spread of COVID-19: a modeling study
Autor(es)	Lior Rennert, Corey A. Kalbaugh, , Christopher McMahan, Lu Shi, Christopher C. Colenda
Resumo	Several American universities have experienced COVID-19 outbreaks, risking the health of their students, employees, and local communities. Such large outbreaks have drained university resources and forced several institutions to shift to remote learning and send students home, further contributing to community disease spread. Many of these outbreaks can be attributed to the large numbers of active infections returning to campus, alongside high-density social events that typically take place at the semester start. In the absence of effective mitigation measures (e.g., high-frequency testing), a phased return of students to campus is a practical intervention to minimize the student population size and density early in the semester, reduce outbreaks, preserve institutional resources, and ultimately help mitigate disease spread in communities. Methods: We develop dynamic compartmental SARS-CoV-2 transmission models to assess the impact of a phased reopening, in conjunction with pre-arrival testing, on minimizing on-campus outbreaks and preserving university resources (measured by isolation bed capacity). We assumed an on-campus population of N = 7500, 40% of infected students require isolation, 10 day isolation period, pre-arrival testing removes 90% of incoming infections, and that phased reopening returns one-third of the student population to campus each month. We vary the disease reproductive number (Rt) between 1.5 and 3.5 to represent the effectiveness of alternative mitigation strategies throughout the semester. Results: Compared to pre-arrival testing only or neither intervention, phased reopening with pre-arrival testing reduced peak active infections by 3 and 22% (Rt = 1.5), 22 and 29% (Rt = 2.5), 41 and 45% (Rt = 3.5), and 54 and 58% (improving Rt), respectively. Required isolation bed capacity decreased between 20 and 57% for values of Rt ≥ 2.5. Conclusion: Unless highly effective mitigation measures are in place, a reopening with pre-arrival testing substantially reduces peak number of active infectio



Referências	RENNERT, L. <i>et al.</i> The impact of phased university reopenings on mitigating the spread of COVID-19: a modeling study. BMC public health , [United Kingdom], v. 21, n. 1, p. 1520, Aug. 6, 2021. DOI: 10.1186/s12889-021-11525-x. Disponível em: https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-021-11525-x . Acesso em: 3 set. 2021.
Fonte	https://bmcpublichealth.biomedcentral.com/track/pdf/10.1186/s12889-021-11525-x.pdf



Título	Epidemiology of COVID-19 in Prisons, England, 2020 - Volume 27, Number 8—August 2021 - Emerging Infectious Diseases journal - CDC
Autor(es)	Wendy M. Rice, Dimple Y. Chudasama, James Lewis, Francis Senyah, Isaac Florence, Simon Thelwall, Lisa Glaser, Maciej Czachorowski, Emma Plugge, Hilary Kirkbride, Gavin Dabrera, and Theresa Lamagni
Resumo	Using laboratory data and a novel address matching methodology, we identified 734 cases of coronavirus disease in 88 prisons in England during March 16–October 12, 2020. An additional 412 cases were identified in prison staff and household members. We identified 84 prison outbreaks involving 86% of all prison-associated cases.
Referências	RICE, W. M. et al. Epidemiology of COVID-19 in Prisons, England, 2020. Emerging infectious diseases, [United States], v. 27, n. 8, p. 2183–2186, 2021. dói: 10.3201/eid2708.204920. Disponível em: https://wwwnc.cdc.gov/eid/article/27/8/20-4920 article. Acesso em: 3 st. 2021.
Fonte	https://wwwnc.cdc.gov/eid/article/27/8/20-4920_article



Título	COVID-19 Outbreak in a Large Penitentiary Complex, April-June 2020, Brazil
Autor(es)	Fernando A Gouvea-Reis, Patrícia D Oliveira, Danniely C S Silva, Lairton S Borja, Jadher Percio, Fábio S Souza, Cássio Peterka, Claudia Feres, Janaína de Oliveira, Giselle Sodré, Wallace Dos Santos, Camile de Moraes
Resumo	An outbreak of coronavirus disease began in a large penitentiary complex in Brazil on April 1, 2020. By June 12, there were 1,057 confirmed cases among inmates and staff. Nine patients were hospitalized, and 3 died. Mean serial interval was ≈2.5 days; reproduction number range was 1.0-2.3.
Referências	GOUVEA-REIS, F. A. <i>et al.</i> COVID-19 Outbreak in a Large Penitentiary Complex, April-June 2020, Brazil. Emerging infectious diseases , [United States], v. 27, n. 3, p. 924–927, Marc. 27, 2021. DOI: 10.3201/eid2703.204079. Disponível em: https://pubmed.ncbi.nlm.nih.gov/33434475/ . Acesso em: 3 set. 2021.
Fonte	https://pubmed.ncbi.nlm.nih.gov/33434475/



Título	Efficacy of the Measures Adopted to Prevent COVID-19 Outbreaks in an Italian Correctional Facility for Inmates Affected by Chronic Diseases
Autor(es)	Angela Stufano, Nicola Buonvino, Francesco Cagnazzo, Nicola Armenise, Daniela Pontrelli2, Giovanna Curzio, Leonarda De Benedictis, Piero Lovreglio
Resumo	COVID-19 outbreaks in prisons and jails may affect both inmates and correctional workers. An observational study has been performed to investigate the efficacy of specific procedures and of a serial testing approach adopted for the COVID-19 prevention in an Italian correctional facility (Bari, Apulia) for inmates affected by chronic diseases. Methods: Two SARS-CoV-2 antigen testing campaigns were carried out for all the prisoners and correctional workers, including correctional officers (CO), administrative staff (AS), correctional health care workers (HCW), and operators working with people completing their sentence outside the prison (OOP). Antigen testing was conducted on nasopharyngeal swab specimens, using a fluorescence immunoassay for the qualitative detection of nucleocapsid SARS-CoV-2 antigen. All subjects positive to the antigen test underwent confirmation by rRT-PCR test.Results: In total, 426 new and residential inmates were tested during the first campaign and 480 during the second campaign. Only two new inmates resulted positive at the first campaign and 325 at the second. At the second campaign or outside of the testing campaigns. In total, 367 correctional workers were tested at the first campaign and 325 at the second. At the first, 4 CO and 2 HCW showed positive test results, while no new positive cases were observed at the second. Moreover, 1 CO and 1 HCW resulted positive outside of the testing campaigns for the onset of symptoms while at home. Conclusion: The implementation of a full risk management plan in a correctional facility, including both a strict protocol for the application of preventive measures and a serial testing approach, seems to be able to prevent COVID-19 outbreaks in both inmates and correctional workers.
Referências	STUFANO, A. <i>et al.</i> Efficacy of the Measures Adopted to Prevent COVID-19 Outbreaks in an Italian Correctional Facility for Inmates Affected by Chronic Diseases. Frontiers in public health , [Switzerland], v. 9, p. 694795, 2021. DOI: 10.3389/fpubh.2021.694795. Disponível em: https://www.frontiersin.org/articles/10.3389/fpubh.2021.694795/full . Acesso em: 3 set. 2021.
Fonte	https://www.frontiersin.org/articles/10.3389/fpubh.2021.694795/full



Título	Risk factors and disease profile of post-vaccination SARS-CoV-2 infection in UK users of the COVID Symptom Study app: a prospective, community-based, nested, case-control study
Autor(es)	Michela Antonelli, Rose S Penfold, Jordi Merino, Carole H Sudre, Erika Molteni, Sarah Berry, Liane S Canas, Mark S Graham, Kerstin Klaser, Marc Modat, Benjamin Murray, Eric Kerfoot, Liyuan Chen, Jie Deng, Marc F Österdahl, Nathan J Cheetham, David A Drew, Long H Nguyen, Joan Capdevila Pujol, Christina Hu, Somesh Selvachandran, Lorenzo Polidori, Anna May, Jonathan Wolf, Andrew T Chan, Alexander Hammers, Emma L Duncan, Tim D Spector, Sebastien Ourselin, Claire J Steves
Resumo	COVID-19 vaccines show excellent efficacy in clinical trials and effectiveness in real-world data, but some people still become infected with SARS-CoV-2 after vaccination. This study aimed to identify risk factors for postvaccination SARS-CoV-2 infection and describe the characteristics of post-vaccination illness.
Referências	ANTONELLI, M. <i>et al.</i> Risk factors and disease profile of post-vaccination SARS-CoV-2 infection in UK users of the COVID Symptom Study app: a prospective, community-based, nested, case-control study. The Lancet. Infectious diseases , [United Kingdom], Sept. 1, 2021. DOI: 10.1016/S1473-3099(21)00460-6. Disponível em: https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(21)00460-6/abstract. Acesso em: 3 set. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900460-6



Título	1-year outcomes in hospital survivors with COVID-19: a longitudinal cohort study
Autor(es)	Lixue Huang, Qun Yao, Xiaoying Gu, Qiongya Wang, Lili Ren, Yeming Wang, Ping Hu, Li Guo, Min Liu, Jiuyang Xu, Xueyang Zhang, Yali Qu, Yanqing Fan, Xia Li, Caihong Li, Ting Yu, Jiaan Xia, Ming Wei, Li Chen, Yanping Li, Fan Xiao, Dan Liu, Jianwei Wang, Xianguang Wang, Bin Cao
Resumo	The full range of long-term health consequences of COVID-19 in patients who are discharged from hospital is largely unclear. The aim of our study was to comprehensively compare consequences between 6 months and 12 months after symptom onset among hospital survivors with COVID-19.
Referências	LIXUE, Huang . <i>et al.</i> 1-year outcomes in hospital survivors with COVID-19: a longitudinal cohort study. The Lancet , [Netherlands], v. 398, n. 10302, p. 747–758, Aug. 28, 2021. DOI: 10.1016/S0140-6736(21)01755-4. Disponível em: https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01755-4/abstract . Acesso em: 27 ago. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2901755-4



Título	The effect of population mobility on COVID-19 incidence in 314 Latin American cities: a longitudinal ecological study with mobile phone location data
Autor(es)	Josiah L Kephart, Xavier Delclòs-Alió, Daniel A Rodríguez, Olga L Sarmiento, Tonatiuh Barrientos-Gutiérrez, Manuel Ramirez-Zea, D Alex Quistberg, Usama Bilal, Ana V Diez Roux
Resumo	Little is known about the effect of changes in mobility at the subcity level on subsequent COVID-19 incidence, which is particularly relevant in Latin America, where substantial barriers prevent COVID-19 vaccine access and non-pharmaceutical interventions are essential to mitigation efforts. We aimed to examine the longitudinal associations between population mobility and COVID-19 incidence at the subcity level across a large number of Latin American cities.
Referências	KEPHART, J. L. <i>et al.</i> The effect of population mobility on COVID-19 incidence in 314 Latin American cities: a longitudinal ecological study with mobile phone location data. The Lancet Digital Health , [United Kingdom.], Aug. 26, 2021. DOI: 10.1016/S2589-7500(21)00174-6. Disponível em: https://www.thelancet.com/journals/landig/article/PIIS2589-7500(21)00174-6/abstract. Acesso em: 27 ago. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900174-6



Título	Molecular epidemiology of a familial cluster of SARS-CoV-2 infection during lockdown period in Sant Kabir Nagar, Uttar Pradesh, India Epidemiology & Infection Cambridge Core
Autor(es)	Kamran Zaman, Prem Shankar, Pragya D.Yadav, DimpalA.Nyayanit, SthitaPragnyaBehera,PoojaBhardwaj, Anita Shete, TriparnaMajumdar, RajaramYadav, SavitaPatil, Hirawati Deval, Gaurav Raj Dwivedi, Ashok K Pandey, Rajeev Singh, Brij R Misra, Niraj Kumar, Kaushik Kumar, PriyankaYadav, Girijesh Kumar Yadav, Manoj Kumar, Kamlesh Kumar Sah, Ravi Shankar Singh, Sanjeev Kumar, Asif Kavathekar, Vijay Kumar, Rajni Kan
Resumo	We report a familial cluster of 24 individuals infected with SARS-CoV-2. The index case had a travel history & spent twenty four days in the house before being tested and was asymptomatic. Physical overcrowding in the house provided a favourable environment for intracluster infection transmission. Restriction of movement of family members due to countrywide lockdown limited the spread in community. Among the infected, only 4 individuals developed symptoms. The complete genome sequences of SARS-CoV-2 was retrieved using nextgeneration sequencing from eight clinical samples which demonstrated a 99.99% similarity with reference to Wuhan strain and the phylogenetic analysis demonstrated a distinct cluster, lying in the B.6.6 pangolin lineage.
Referências	ZAMAN, K. <i>et al.</i> Molecular epidemiology of a familial cluster of SARS-CoV-2 infection during lockdown period in Sant Kabir Nagar, Uttar Pradesh, India. Epidemiology and infection , [United Kingdom], p. 1–11, Aug. 25, 2021. DOI: 10.1017/S0950268821001989. Disponível em: Acesso em: 27 ago. 2021.
Fonte	https://www.cambridge.org/core/services/aop-cambridge-core/content/view/DE0FED6211CAE3358C7D432FD5883E7D/S0950268821001989a.pdf/molecular_epidemiology_of_a_familial_cl_uster_of_sarscov2_infection_during_lockdown_period_in_sant_kabir_nagar_uttar_pradesh_india.pdf



Título	Global variants of COVID-19: Current understanding
Autor(es)	Roy, B., Dhillon, J., Habib, N., & Pugazhandhi, B.
Resumo	SARS-CoV-2 is an RNA virus that undergoes mutation producing a variety of strains. Mutagens include UV radiation, metals, and endogenous components of organisms. Each strain is specific in terms of virulence, immune response in the body and efficacy of the vaccines. Conclusion: Researchers need to gather data and collaborate with global organizations to learn about the newly evolving strains. Information about the mutations and variants are inevitable in understanding virus transmission and developing vaccines to end the COVID-19 pandemic.
Referências	ROY, B. <i>et al.</i> Global variants of COVID-19: Current understanding. Journal of Biomedical Sciences , [Nepal], v. 8, n. 1, p. 8–11, July 16, 2021. DOI: 10.3126/jbs.v8i1.38453. Disponível em: https://www.nepjol.info/index.php/JBS/article/view/38453 . Acesso em: 27 ago. 2021.
Fonte	https://www.nepjol.info/index.php/JBS/article/view/38453



Título	Transmission Dynamics of an Outbreak of the COVID-19 Delta Variant B.1.617.2 — Guangdong Province, China, May–June 2021
Autor(es)	Meng Zhang; Jianpeng Xiao; Aiping Deng1; Yingtao Zhang; Yali Zhuang; Ting Hu; Jiansen Li;Hongwei Tu; Bosheng Li; Yan Zhou; Jun Yuan; Lei Luo; Zimian Liang; Youzhi Huang;Guoqiang Ye; Mingwei Cai; Gongli Li; Bo Yang; Bin Xu; Ximing Huang;Yazun Cui; Dongsheng Ren; Yanping Zhang; Min Kang; Yan Li
Resumo	On May 21, 2021, a local case of coronavirus disease 2019 (COVID-19) was confirmed in a 75-year-old woman (experienced onset of symptoms on May 18) in Liwan District, Guangzhou City, Guangdong Province, China. The number of infections hás increased in the following 10 days and led to 5 generations of transmission. As of June 23, a total of 167 locally transmitted cases related to this outbreak were observed in 4 cities (Guangzhou, Maoming, Foshan, and Zhanjiang) in Guangdong (Figure 1A). The cases identified have been found to share the same []
Referências	ZHANG, M. et al. Transmission Dynamics of an Outbreak of the COVID-19 Delta Variant B.1.617.2 — Guangdong Province, China, May—June 2021. China CDC Weekly, [China], v. 3, n. 27, p. 584–586, 2021. DOI: 10.46234/ccdcw2021.148. Disponível em: http://weekly.chinacdc.cn/cn/article/doi/10.46234/ccdcw2021.148 . Acesso em: 27 ago. 2021.
Fonte	http://weekly.chinacdc.cn/cn/article/doi/10.46234/ccdcw2021.148



Título	Novo coronavírus SARS-CoV-2 em Cabo Verde: Análise situacional após um ano de notificação do 1º caso
Autor(es)	Maria José Carvalho Moreno, Delisa Soraia Monteiro Vera-Cruz Martins, Cilliavini Fonseca de Sousa Afonso Varela, Mara Yone Soares Dias Fernandes, Andrêa Jaqueline Fortes Ferreira
Resumo	O vírus SARS-CoV-2, agente etiológico da COVID-19, foi identificado pela primeira vez na China em janeiro de 2020, tendo rapidamente espalhado pelo mundo em proporções pandêmicas e causando inúmeras mortes. Entre os Países Africanos de Língua Oficial Portuguesa (PALOP), Cabo Verde foi o primeiro a notificar casos de infeção por SARS-CoV-2. Neste contexto, este estudo objetiva analisar criticamente a situação epidemiológica da COVID-19 em Cabo Verde, e as medidas governamentais adotadas para a mitigação da pandemia entre 19 de março de 2020 e 27 maio de 2021. Para tal, realizamos uma revisão da literatura em diversas bases de dados, entre as quais, as disponibilizadas pelo governo de Cabo Verde em boletins oficiais, jornais e revistas nacionais, assim como os periódicos e portais, com destaque para a base de dados da Medline (PubMed). Os resultados sugerem que, não obstante as medidas sanitárias e socioeconômicas adotadas pelo governo, o país tem oscilado entre os picos de incidência do SARS-CoV-2, estando, um ano após a notificação do primeiro caso, com maior incidência diária e mortalidade pela COVID-19, sendo tal cenário atribuído, em parte, aos eventos político-partidários decorridos nos últimos meses, os quais geraram aglomerações e, consequentemente, aumento da morbimortalidade pelo vírus. Todavia, com a chegada das vacinas anti-SARS-CoV-2 em Cabo Verde, espera-se uma redução no número de notificações de casos diários, e das taxas da mortalidade no país.
Referências	GARCIA, G. A. F. <i>et al.</i> Novo coronavírus SARS-CoV-2 em Cabo Verde: Análise situacional após um ano de notificação do 1º caso. Multidisciplinary Reviews , [Brasil], v. 4, p. e2021019–e2021019, 19 ago. 2021. DOI: 10.29327/multi.2021019. Disponível em: https://malque.pub/ojs/index.php/mr/article/view/150 . Acesso em: 27 ago. 2021.
Fonte	https://malque.pub/ojs/index.php/mr/article/view/150



Título	Ecologia do vírus SARS-CoV-2 e estado atual da COVID-19 / SARS-CoV-2 virus ecology and current state of COVID-19
Autor(es)	Fernando Portela Câmara, Marcelo Moreno
Resumo	Embora o SARS-CoV-2 tenha sido colocado no subgênero Sarbecovirus, seu protótipo genético não foi isolado ainda de morcegos, além do fato de ele não ser relevantemente infeccioso para esses animais. Ele também possui uma inserção de 12 nucleotídeos não encontrada em outros coronavírus e que que o torna muito infeccioso para humanos. Da mesma forma, não foi ainda identificado o possível hospedeiro intermediário que supostamente tenha sido o elo que deu início a atual pandemia a partir de Wuhan. Em síntese, nada sabemos sobre como surgiu a Covid-19. A OMS denominou a doença que ora fustiga o planeta de COVID-19, uma designação inadequada e que nada informa. Trata-se, porém de uma forma altamente infecciosa da SARS, e por isso deveria ser denominada de SARS-2, conforme os virologistas reconheceram ao classificar o vírus causador.
Referências	CAMARA, F. P.; MORENO, M. Ecologia do vírus SARS-CoV-2 e estado atual da COVID-19 / SARS-CoV-2 virus ecology and current state of COVID-19. Brazilian Journal of Medicine and Human Health , [s. l.], p. 13106–13112, 15 jun. 2021. DOI: 10.34119/bjhrv4n3-263. Disponível em: https://www.brazilianjournals.com/index.php/BJHR/article/view/31303 . Acesso em: 27 ago. 2021.
Fonte	https://www.researchgate.net/profile/Marcelo-Moreno-10/publication/352897607_Ecologia_do_virus_SARS-CoV-2_e_estado_atual_da_COVID-19_SARS-CoV-2_virus_ecology_and_current_state_of_COVID-19-SARS-CoV-2-virus-ecology-and-current_state_of_COVID-19-SARS-CoV-2-virus-ecology-and-current_state_of_COVID-19.pdf



Título	Generation and transmission of inter-lineage recombinants in the SARS-CoV-2 pandemic
Autor(es)	Ben Jackson, Maciej F. Boni, Matthew J. Bull, Amy Colleran, Rachel M. Colquhoun, Alistair C. Darby, Sam Haldenby, Verity Hill, Anita Lucaci, John T. McCrone, Samuel M. Nicholls, Áine O'Toole, Nicole Pacchiarini, Radoslaw Poplawski, Emily Scher, Flora Todd, Hermione J. Webster, Mark Whitehead, Claudia Wierzbicki, The COVID-19 Genomics UK (COG-UK) consortium, Nicholas J. Loman, Thomas R. Connor, David L. Robertson, Oliver G. Pybus, Andrew Rambaut
Resumo	We present evidence for multiple independent origins of recombinant SARS-CoV-2 viruses sampled from late 2020 and early 2021 in the United Kingdom. Their genomes carry single nucleotide polymorphisms and deletions that are characteristic of the B.1.1.7 variant of concern, but lack the full complement of lineage-defining mutations. Instead, the remainder of their genomes share contiguous genetic variation with non-B.1.1.7 viruses circulating in the same geographic area at the same time as the recombinants. In four instances there was evidence for onward transmission of a recombinant-origin virus, including one transmission cluster of 45 sequenced cases over the course of two months. The inferred genomic locations of recombination breakpoints suggest that every community-transmitted recombinant virus inherited its spike region from a B.1.1.7 parental virus, consistent with a transmission advantage for B.1.1.7's set of mutations.
Referências	JACKSON, B. <i>et al.</i> Generation and transmission of inter-lineage recombinants in the SARS-CoV-2 pandemic. Cell , [United States], p. S0092867421009843, 2021. DOI: 10.1016/j.cell.2021.08.014. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S0092867421009843 . Acesso em: 27 ago. 2021.
Fonte	https://www.cell.com/action/showPdf?pii=S0092-8674%2821%2900984-3



Título	A vaccine-induced public antibody protects against SARS-CoV-2 and emerging variants
Autor(es)	Aaron J. Schmitz, Jackson S. Turner, Zhuoming Liu, Julian Q. Zhou, Ishmael D. Aziati, Rita E. Chen, Astha Joshi, Traci L. Bricker, Tamarand L. Darling, Daniel C. Adelsberg, Clara G. Altomare, Wafaa B. Alsoussi, James Brett Case, Laura A. VanBlargan, Tingting Lei, Mahima Thapa, Fatima Amanat, Trushar Jeevan, Thomas Fabrizio, Jane A. O'Halloran, Pei-Yong Shi, Rachel M. Presti, Richard J. Webby, Florian Krammer, Sean P.J. Whelan, Goran Bajic, Michael S. Diamond, Adrianus C.M. Boon, Ali H. Ellebedy
Resumo	The emergence of SARS-CoV-2 antigenic variants with increased transmissibility is a public health threat. Some variants show substantial resistance to neutralization by SARS-CoV-2 infection- or vaccination-induced antibodies. Here, we analyzed receptor binding domain-binding monoclonal antibodies derived from SARS-CoV-2 mRNA vaccine-elicited germinal center B cells for neutralizing activity against the WA1/2020 D614G SARS-CoV-2 strain and variants of concern. Of five monoclonal antibodies that potently neutralized the WA1/2020 D614G strain, all retained neutralizing capacity against the B.1.617.2 variant, four also neutralized the B.1.1.7 variant, and only one, 2C08, also neutralized the B.1.351 and B.1.1.28 variants. 2C08 reduced lung viral load and morbidity in hamsters challenged with the WA1/2020 D614G, B.1.351, or B.1.617.2 strains. Clonal analysis identified 2C08-like public clonotypes among B cells responding to SARS-CoV-2 infection or vaccination in 41 out of 181 individuals. Thus, 2C08-like antibodies can be induced by SARS-CoV-2 vaccines and mitigate resistance by circulating variants of concern.
Referências	SCHMITZ, A. J. <i>et al.</i> A vaccine-induced public antibody protects against SARS-CoV-2 and emerging variants. Immunity , [United States], p. S1074761321003459, Aug. 16, 2021. DOI: 10.1016/j.immuni.2021.08.013.Disponível em: https://www.cell.com/immunity/abstract/S1074-7613(21)00345-9 . Acesso em: 27 ago. 2021.
Fonte	https://www.cell.com/immunity/fulltext/S1074-7613(21)00345-9#relatedArticles



Título	The dissemination of COVID-19: an expectant and preventive role in global health
Autor(es)	Renata Macedo Martins Pimentel, Blanca Elena Guerrero Daboin, Adriana Gonçalves de Oliveira, Hugo Macedo Jr
Resumo	Coronaviruses (CoV) make up a large family of viruses, known since the mid-1960s, which received this name due to the spikes on its surface, which resemble a crown (from the Latin corona). CoV infections can cause everything from a common cold to severe respiratory syndromes, such as severe acute respiratory syndrome (SARS-CoV) and Middle Eastern respiratory syndrome (MERS-CoV). COVID-19 is a new variant of the coronavirus, and its isolation occurred in China on January 7th, 2020. COVID-19 has stood out with a high impact on public health due to the high number of cases with infection in a short period of time. However, it is possible to observe that 17% of patients confirmed with COVID-19 have severe infections and about 2.5% of these patients die. Current studies have shown that the number of mild and asymptomatic cases may be even greater. Thus, the challenges for controlling unreported cases of patients with mild symptoms that are spreading the virus and interfering with the magnitude and real data of the cases stand out. The transmission of the coronavirus occurs between humans, and it can occur from person to person through the air, through coughing or sneezing, by touching or shaking hands or by contact with contaminated objects or surfaces, followed by contact with the mouth, nose or eyes. Given the fluctuation in the incidence and the lethality rate, it is essential to stand out the precepts of health promotion in search of reorienting hygiene practices, considering that there is validity in health care models, still with a curative approach and the current situation experienced by the world population requires a preventive stance.
Referências	PIMENTEL, R. M. M. et al. The dissemination of COVID-19: an expectant and preventive role in global health. J. Hum. Growth Dev., [Brazil], v. 30, n. 1, p. 135–140, 2020. DOI: 10.7322/jhgd.v30.9976. Disponível em: https://revistas.marilia.unesp.br/index.php/jhgd/article/view/9976 . Acesso em: 27 ago. 2021.
Fonte	https://revistas.marilia.unesp.br/index.php/jhgd/article/view/9976/6425



Título	Assessing the nationwide impact of COVID-19 mitigation policies on the transmission rate of SARS-CoV-2 in Brazil
Autor(es)	Daniel C.P.Jorge; Moreno S.Rodrigues; Mateus S.Silva; Luciana L.Cardim; Nívea B.da Silva; Ismael H.Silveira; Vivian A.F.Silva; Felipe A.C.Pereira; ; Alan A.S.Amad ^g Suani T.R.Pinho; Roberto F.S.Andrad; Pablo I.P.Ramo; Juliane F.Oliveira
Resumo	COVID-19 is now identified in almost all countries in the world, with poorer regions being particularly more disadvantaged to efficiently mitigate the impacts of the pandemic. In the absence of efficient therapeutics or large-scale vaccination, control strategies are currently based on non-pharmaceutical interventions, comprising changes in population behavior and governmental interventions, among which the prohibition of mass gatherings, closure of non-essential establishments, quarantine and movement restrictions. In this work we analyzed the effects of 707 governmental interventions published up to May 22, 2020, and population adherence thereof, on the dynamics of COVID-19 cases across all 27 Brazilian states, with emphasis on state capitals and remaining inland cities. A generalized SEIR (Susceptible, Exposed, Infected and Removed) model with a time-varying transmission rate (TR), that considers transmission by asymptomatic individuals, is presented. We analyze the effect of both the extent of enforced measures across Brazilian states and population movement on the changes in the TR and effective reproduction number. The social mobility reduction index, a measure of population movement, together with the stringency index, adapted to incorporate the degree of restrictions imposed by governmental regulations, were used in conjunction to quantify and compare the effects of varying degrees of policy strictness across Brazilian states. Our results show that population adherence to social distance recommendations plays an important role for the effectiveness of interventions and represents a major challenge to the control of COVID-19 in low- and middle-income countries.
Referências	JORGE, D. C. P. <i>et al.</i> Assessing the nationwide impact of COVID-19 mitigation policies on the transmission rate of SARS-CoV-2 in Brazil. Epidemics , [Netherlands], v. 35, p. 100465, June 2021. DOI: 10.1016/j.epidem.2021.100465. Disponível em: https://www.sciencedirect.com/science/article/pii/S1755436521000232 . Acesso em: 27 ago. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S1755436521000232



Título	Covid-19: Two vaccine doses are crucial for protection against delta, study finds
Autor(es)	Elisabeth Mahase
Resumo	The two dose regimen of the Pfizer-BioNTech covid-19 vaccine is 88% effective against symptomatic disease caused by the delta variant, while the Oxford-AstraZeneca vaccine is 67% effective, research has found.1 The study, funded by Public Health England, estimated the effectiveness of vaccination against symptomatic disease caused by the delta and alpha variants in people aged 16 or over between 5 April and 16 May 2021. It found that although two doses of either vaccine offered good protection against delta, a single dose of either vaccine
Referências	MAHASE, E. Covid-19: Two vaccine doses are crucial for protection against delta, study finds. BMJ , [United Kingdom], v. 374, p. n2029, 2021. DOI: 10.1136/bmj.n2029. Disponível em: https://www.bmj.com/content/374/bmj.n2029 . Acesso em: 20 ago. 2021.
Fonte	https://iezl6xoaojwzo737ulzwipcdnq-jj2cvlaia66be-www-bmj-com.translate.goog/content/374/bmj.n2029



Título	Covid-19: Cases in children rise sharply in US as doctors call for vaccine approval
Autor(es)	Janice Hopkins Tanne
Resumo	Children too young to be vaccinated are increasingly becoming infected with SARS-CoV-2 in the US, just as schools begin to reopen for in-person classes. The American Academy of Pediatrics, which represents 67 000 primary care and specialist paediatricians, urged the Food and Drug Administration to work "aggressively toward authorising safe and effective covid-19 vaccines for children under age 12 as soon as possible." During July 12 000 new infections were recorded in children, increasing to 94 000 by the first week of August, said the academy.12 As of 14 August a record 1902 children were admitted to hospital with covid-19.3 The US has nearly 74 million children under 18. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, said at a White House briefing, "The delta variant is much more highly transmissible than was alpha. So, given that, you will see more children likely to get infected a certain percentage of them will require hospitalisation."4The academy and the Children's Hospital Association said that the week ending 29 July "saw the largest week-over-week percentage increase in paediatric covid-19 cases since the
Referências	TANNE, J. H. Covid-19: Cases in children rise sharply in US as doctors call for vaccine approval. BMJ , [United Kingdom], v. 374, p. n2030, 2021. DOI: 10.1136/bmj.n2030. Disponível em: https://www.bmj.com/content/374/bmj.n2030 . Acesso em: 20 ago. 2021.
Fonte	https://iezl6xoaojwzo737ulzwipcdnq-jj2cvlaia66be-www-bmj-com.translate.goog/content/374/bmj.n2030



Título	Neutralisation titres against SARS-CoV-2 are sustained 6 months after onset of symptoms in individuals with mild COVID-19
Autor(es)	Alexander P. Underwood, Christina Sølund, Carlota Fernandez-Antunez, Signe Lysemose Villadsen, Anni Assing Winckelmann, Signe Bollerup, Lotte S. Mikkelsen, Anna-Louise Sørensen, Shan Feng, Ulrik Fahnøe, Ria Lassauniere, Anders Fomsgaard, Santseharay Ramirez, Nina Weis, Jens Bukh
Resumo	Given the importance of neutralising antibodies in protection against SARS-CoV-2 infection, it is critical to assess neutralisation persistence long-term following recovery. This study investigated neutralisation titres against SARS-CoV-2 up to 6 months post-symptom onset in individuals with mild COVID-19. Methods: Plasma neutralisation titres in convalescent COVID-19 individuals were determined at baseline and 6 months post-symptom onset using a cell culture infectious SARS-CoV-2 assay. Total SARS-CoV-2 spike-specific IgG and IgA binding was measured using a lectin capture ELISA and compared between timepoints and correlated to neutralising titres. Findings: All 48 convalescent COVID-19 individuals were found to have detectable SARS-CoV-2 50% inhibitory dilution neutralisation titres (ID50) at baseline and 6 months post-symptom onset with mean ID50 of 1/943 and 1/411, respectively. SARS-CoV-2 neutralisation titres peaked within 1-2 months post-symptom onset. However, 50% of individuals showed comparable ID50 at baseline and 6 months post-symptom onset. Both SARS-CoV-2 spike-specific IgG and IgA levels correlated well with neutralising titres. IgG binding was found to be sustained up to 6 months post-symptom onset, whereas IgA levels declined. Interpretation: This study demonstrates durability of SARS-CoV-2 spike-specific IgG and neutralisation responses following recovery from mild COVID-19. Thus, all subjects included in this study might potentially have protective levels of neutralising antibodies 6 months post-symptom onset. This study also demonstrates a relationship between spike-specific IgA and neutralisation decline, with implications for long-term protection against SARS-CoV-2 infection. Funding: Novo Nordisk Foundation, Independent Research Fund Denmark and Danish Agency for Science and Higher Education.
Referências	UNDERWOOD, A. P. <i>et al.</i> Neutralisation titres against SARS-CoV-2 are sustained 6 months after onset of symptoms in individuals with mild COVID-19. EBioMedicine , [Netherlands], v. 71, 2021. DOI: 10.1016/j.ebiom.2021.103519. Disponível em: https://www.thelancet.com/journals/ebiom/article/PIIS2352-3964(21)00312-1/abstract. Acesso em: 20 ago. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-3964%2821%2900312-1



Título	A comprehensive review on Covid-19 Delta variant
Autor(es)	Dr.S.Alexandar , M.Ravisankar, Dr.R.Senthil Kumar , Dr.Kannan Jakkan
Resumo	The Delta variant is a variant of SARS-CoV-2, which was the main reason behind the severity of the second wave in India. This variant had increased transmissibility and more severe infections. Currently, the Delta variant has dominated the number of infections all over the world. In England, as of June 14, there were 33,630 cases of delta variants in a weekCoronavirus, like all the other kinds of viruses, keeps mutating a process in which genetic information of the virus changes because of repeated copying errors. These mutations result in new variants, some of which can spread more easily, or cause more severe symptoms of covid-19 disease and a higher fatality rate.
Referências	M.RAVISANKAR <i>et al.</i> A Comprehensive Review on Covid-19 Delta variant. International journal of pharmacology and clinical research , [Ethiopia], v. 2021, n. 5, p. 83–85, Apr. –Jun. 2021. DOI: https://ijpcr.net/ijpcr/article/view/141 . Acesso em: 20 ago. 2021.
Fonte	https://www.researchgate.net/profile/Ravisankar-Mathesan/publication/353179027_A_Comprehensive_Review_on_Covid-19_Delta_variant/links/60ec151630e8e50c01fbf87c/A-Comprehensive-Review-on-Covid-19-Delta-variant.pdf



Título	COVID-19 in Amazonas, Brazil, was driven by the persistence of endemic lineages and P.1 emergence
Autor(es)	Felipe Gomes Naveca, Valdinete Nascimento, Victor Costa de Souza, André de Lima Corado, Fernanda Nascimento, George Silva, Ágatha Costa, Débora Duarte, Karina Pessoa, Matilde Mejía, Maria Júlia Brandão, Michele Jesus, Luciana Gonçalves, Cristiano Fernandes da Costa, Vandeson Sampaio, Daniel Barros, Marineide Silva, Tirza Mattos, Gemilson Pontes, Ligia Abdalla, João Hugo Santos, Ighor Arantes, Filipe Zimmer Dezordi, Marilda Mendonça Siqueira, Gabriel Luz Wallau, Paola Cristina Resende, Edson Delatorre, Tiago Gräf and Gonzalo Bello
Resumo	The northern state of Amazonas is among the regions in Brazil most heavily affected by the COVID-19 epidemic and has experienced two exponentially growing waves, in early and late 2020. Through a genomic epidemiology study based on 250 severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) genomes from different Amazonas municipalities sampled between March 2020 and January 2021, we reveal that the first exponential growth phase was driven mostly by the dissemination of lineage B.1.195, which was gradually replaced by lineage B.1.1.28 between May and June 2020. The second wave coincides with the emergence of the variant of concern (VOC) P.1, which evolved from a local B.1.1.28 clade in late November 2020 and replaced the parental lineage in <2 months. Our findings support the conclusion that successive lineage replacements in Amazonas were driven by a complex combination of variable levels of social distancing measures and the emergence of a more transmissible VOC P.1 virus. These data provide insights to understanding the mechanisms underlying the COVID-19 epidemic waves and the risk of dissemination of SARS-CoV-2 VOC P.1 in Brazil and, potentially, worldwide.
Referências	NAVECA, F. G. <i>et al.</i> COVID-19 in Amazonas, Brazil, was driven by the persistence of endemic lineages and P.1 emergence. Nature Medicine , [United States], v. 27, n. 7, p. 1230–1238, May 25, 2021. DOI: 10.1038/s41591-021-01378-7. Disponível em: https://www.nature.com/articles/s41591-021-01378-7 . Acesso em: 20 ago. 2021.
Fonte	https://www.nature.com/articles/s41591-021-01378-7



Título	Ethnicity and acute hospital admissions: Multi-center analysis of routine hospital data
Autor(es)	Yize I. Wan, Alexander J. Robbins, Vanessa J. Apea, Chloe M. Orkin, Rupert M. Pearse, Zudin A. Puthucheary, , John R. Prowle
Resumo	The effects of ethnic and social inequalities on patient outcomes in acute healthcare remain poorly understood. Methods: Prospectively-defined analysis of registry data from four acute NHS hospitals in east London including all patients 2 18 years with a first emergency admission between 1st January 2013 and 31st December 2018. We calculated adjusted one-year mortality risk using logistic regression. Results are presented as n (%), median (IQR), and odds ratios (OR) with 95% confidence intervals.
Referências	WAN, Y. I. <i>et al.</i> Ethnicity and acute hospital admissions: Multi-center analysis of routine hospital data. EClinicalMedicine , [Netherlands], p. 101077, 2021. DOI: 10.1016/j.eclinm.2021.101077. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2589537021003576 . Acesso em: 20 ago. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900357-6



Título	Clinical characteristics of the first and second COVID-19 waves in the Bronx, New York: A retrospective cohort study
	Wouter S. Hoogenboom, Antoine Phama, Harnadar Anand, Roman Fleysher, Alexandra Buczek, Selvin Soby, Parsa Mirhaji, Judy Yee, Tim Q. Duong
Autor(es)	
Resumo	There is limited clinical patient data comparing the first and second waves of the coronavirus disease 2019 (COVID-19) in the United States and the effects of a COVID-19 resurgence on different age, racial and ethnic groups. We compared the first and second COVID-19 waves in the Bronx, New York, among a racially and ethnically diverse population. Methods: Patients in this retrospective cohort study were included if they had a laboratory-confirmed SARS-CoV-2 infection by a real-time PCR test of a nasopharyngeal swab specimen detected between March 11, 2020, and January 21, 2021. Main outcome measures were critical care, in-hospital acquired disease and death. Patient demographics, comorbidities, vitals, and laboratory values were also collected. Findings: A total of 122,983 individuals were tested for SARS-CoV-2 infection, of which 12,659 tested positive. The second wave was characterized by a younger demographic, fewer comorbidities, less extreme laboratory values at presentation, and lower risk of adverse outcomes, including in-hospital mortality (adj. OR = 0·23, 99·5% CI = 0·17 to 0·30), hospitalization (adj. OR = 0·65, 99·5% CI = 0·58 to 0·74), invasive mechanical ventilation (adj. OR = 0·70, 99·5% CI = 0·56 to 0·89), acute kidney injury (adj. OR = 0·62, 99·5% CI = 0·54 to 0·71), and length of stay (adj. OR = 0·71, 99·5% CI = 0·60 to 0·85), with Black and Hispanic patients demonstrating most improvement in clinical outcomes. Interpretation: The second COVID-19 wave in the Bronx exhibits improved clinical outcomes compared to the first wave across all age, racial, and ethnic groups, with minority groups showing more improvement, which is encouraging news in the battle against health disparities
Referências	HOOGENBOOM, W. S. <i>et al.</i> Clinical characteristics of the first and second COVID-19 waves in the Bronx, New York: A retrospective cohort study. The Lancet. Regional health. Americas , [United Kingdom?], p. 100041, 2021. DOI: 10.1016/j.lana.2021.100041. Disponível em: https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(21)00033-8/abstract . Acesso em: 20 ago. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2667-193X%2821%2900033-8



Título	Covid-19: o vírus e suas variantes semióticas
Autor(es)	Denis Bertrand, Ivan Darrault-Harris
Resumo	A reflexão aqui proposta parte das perturbações causadas pela pandemia de Covid-19 e procura entender se ela produz um "mundo" paradigmaticamente distinto. Assim, são estudadas a flutuação do gênero, a disseminação do Destinador, a proliferação de variantes de antissujeitos. São, porém, a crise da verdade e o desaparecimento das certezas que, acima de tudo, marcam o possível surgimento de uma subcultura alternativa àquela que precedeu o início da pandemia. Mais precisamente, são examinadas a transformação radical das relações proxêmicas ou, ainda, as modificações, devido ao uso da máscara, na qualidade fática das interações. No entanto, apesar das recategorizações impostas, essa pandemia poderia provocar a ressurreição da Humanidade, unidade actancial coletiva engajada unissonamente, dentro de uma nova cultura e de uma nova narrativa, na luta contra um inimigo muito mais perigoso que ameaça o mundo, a mudança climática.
Referências	BERTRAND, D.; DARRAULT-HARRIS, I. Covid-19: o vírus e suas variantes semióticas. Estudos Semióticos , [Brasil], v. 17, n. 2, p. 321–339, 13 ago. 2021. DOI: 10.11606/issn.1980-4016.esse.2021.188929. Disponível em: https://www.revistas.usp.br/esse/article/view/188929 . Acesso em: 20 ago. 2021.
Fonte	https://www.revistas.usp.br/esse/article/view/188929/175074



Título	The reproductive number of the Delta variant of SARS-CoV-2 is far higher compared to the ancestral SARS-CoV-2 virus
Autor(es)	Ying Liu, Joacim Rocklöv
Resumo	The Delta variant is now replacing all other SARS-CoV-2 variants. We found a mean R0 of 5.08 which is much higher than the R0 of the ancestral strain of 2.79. Rapidly ramping up vaccine coverage rates while enhancing public health and social measures is now even more urgent and important.
Referências	YIN, Liu; ROCKLÖV, J. The reproductive number of the Delta variant of SARS-CoV-2 is far higher compared to the ancestral SARS-CoV-2 virus. Journal of travel medicine , [United Kingdom], n. taab124, Aug. 9, 2021. DOI: 10.1093/jtm/taab124. Disponível em: https://doi.org/10.1093/jtm/taab124 . Acesso em: 20 ago. 2021.
Fonte	https://academic.oup.com/jtm/advance-article/doi/10.1093/jtm/taab124/6346388?login=true



Título	COVID-19 and the effects on pulmonary function following infection: A retrospective analysis
Autor(es)	Kristyn L. Lewis, Scott A. Helgeson, Mehmet M. Tatari, Jorge M. Mallea, Hassan Z. Baig, Neal M. Patel
Resumo	The coronavirus disease 2019 (COVID-19) has been identified in over 110 million people with no studies comparing pre-infection pulmonary function to post-infection. This study's aim was to compare preinfection and post-infection pulmonary function tests (PFT) in COVID-19 infected patients to better delineate between preexisting abnormalities and effects of the virus.
Referências	LEWIS, K. L. <i>et al.</i> COVID-19 and the effects on pulmonary function following infection: A retrospective analysis. EClinicalMedicine , [Netherlands], p. 101079, Aut. 12, 2021. DOI: 10.1016/j.eclinm.2021.101079 . Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S258953702100359X . Acesso em: 13 ago. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900359-X



Título	Covid-19: How effective are vaccines against the delta variant?
Autor(es)	Chris Baraniuk
Resumo	The delta variant is now the dominant form of SARS-CoV-2 in the UK and many other countries. Chris Baraniuk asks how effective the leading vaccines are against this new threat.
Referências	BARANIUK, C. Covid-19: How effective are vaccines against the delta variant?. BMJ , [United Kingdom], v. 374, p. n1960, Aug. 9, 2021. DOI: 10.1136/bmj.n1960. Disponível em: https://www.bmj.com/content/374/bmj.n1960 . Acesso em: 13 ago. 2021.
Fonte	https://iezl6xoaojwzo737ulzwipcdnq-jj2cvlaia66be-www-bmj-com.translate.goog/content/374/bmj.n1960



Título	Risk factors for excess deaths during lockdown amng older users of secondary care mental health services without confirmed COVID-19: A retrospective cohort study
Autor(es)	Shanquan Chen, Peter B. Jones, Ben Underwood, Emilio Fernandez-Egea, pei qin, Jonathan R. Lewis, Rudolf N. Cardinal
Resumo	Objective To investigate factors contributing to excess deaths of older patients during the initial 2020 lockdown beyond those attributable to confirmed COVID-19. MethodsRetrospective cohort study comparing patients treated between 23 March 2020 and 14 June 2020, deemed exposed to the pandemic/lockdown, to patients treated between 18 December 2019 and 10 March 2020, deemed to be unexposed. Data came from electronic clinical records from secondary care mental health services in Cambridgeshire and Peterborough NHS Foundation Trust (CPFT), UK (catchment area population ~0.86 million). Eligible patients were aged 65 years or over at baseline with at least 14 days' follow-up, excluding patients diagnosed with confirmed or suspected SARS-CoV-2 infection. The primary outcome was all-cause mortality. FindingsIn the two cohorts, 3,073 subjects were exposed to lockdown and 4,372 subjects were unexposed; the cohorts were followed up for an average of 74 days and 78 days, respectively. After controlling for confounding by sociodemographic factors, smoking status, mental comorbidities, and physical comorbidities, patients with dementia suffered an additional 53% risk of death (HR = 1.53, 95% CI = 1.02-2.31), and patients with severe mental illness suffered an additional 123% risk of death (HR = 2.23, 95% CI = 1.42-3.49). No significant additional mortality risks were identified from physical comorbidities, potentially due to low statistical power in that respect. Conclusion During lockdown people with dementia or severe mental illness had a higher risk of death without confirmed COVID-19. These data could inform future health service responses and policymaking to help prevent avoidable excess death during future outbreaks of this or a similar infectious disease. This article is protected by copyright. All rights reserved.
Referências	SHANQUAN, Chen <i>et al.</i> Risk factors for excess deaths during lockdown amng older users of secondary care mental health services without confirmed COVID-19: A retrospective cohort study. International journal of geriatric psychiatry , [United Kingdom], v. n/a, n. n/a, DOI: 10.1002/gps.5610. Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1002/gps.5610. Acesso em: 13 ago. 2021.
Fonte	https://onlinelibrary.wiley.com/doi/epdf/10.1002/gps.5610



Título	Peptide-Based Inhibitors for SARS-CoV-2 and SARS-CoV
Autor(es)	Disha Panchal, Jeena Kataria, Kamiya Patel, Kaytlyn Crowe, Varun Pai, Abdul-Rahman Azizogli, Neil Kadian, Sreya Sanyal, Abhishek Roy, Joseph Dodd-o, Amanda M. Acevedo-Jake, Vivek A. Kumar
Resumo	The COVID-19 (coronavirus disease) global pandemic, caused by the spread of the SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) virus, currently has limited treatment options which include vaccines, anti-virals, and repurposed therapeutics. With their high specificity, tunability, and biocompatibility, small molecules like peptides are positioned to act as key players in combating SARS-CoV-2, and can be readily modified to match viral mutation rate. A recent expansion of the understanding of the viral structure and entry mechanisms has led to the proliferation of therapeutic viral entry inhibitors. In this comprehensive review, inhibitors of SARS and SARS-CoV-2 are investigated and discussed based on therapeutic design, inhibitory mechanistic approaches, and common targets. Peptide therapeutics are highlighted, which have demonstrated in vitro or in vivo efficacy, discuss advantages of peptide therapeutics, and common strategies in identifying targets for viral inhibition.
Referências	PANCHAL, D. <i>et al.</i> Peptide-Based Inhibitors for SARS-CoV-2 and SARS-CoV. Advanced Therapeutics , [Germany], v. n/a, n. n/a, p. 2100104. DOI: 10.1002/adtp.202100104. Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1002/adtp.202100104 . Acesso em: 13 ago. 2021.
Fonte	https://onlinelibrary.wiley.com/doi/10.1002/adtp.202100104



Título	Delta variant: What is happening with transmission, hospital admissions, and restrictions?
Autor(es)	Elisabeth Mahase
Resumo	More than 71 million doses of covid-19 vaccine have been administered in the UK, and in many areas lockdown has eased. But, as the delta variant dominates, Elisabeth Mahase asks: is another wave on the horizon?
Referências	MAHASE, E. Delta variant: What is happening with transmission, hospital admissions, and restrictions? BMJ , [United Kingdom], v. 373, p. n1513, June 15, 2021. DOI: 10.1136/bmj.n1513. Disponível em: https://www.bmj.com/content/373/bmj.n1513 . Acesso em: 13 ago. 2021.
Fonte	https://www.bmj.com/content/373/bmj.n1513



Título	Changing composition of SARS-CoV-2 lineages and rise of Delta variant in England
Autor(es)	Swapnil Mishra, Soren Mindermann, Mrinank Sharma, Charles Whittaker, Thomas A Mellana, Thomas Wilton, Dimitra Klapsa, Ryan Mate, Martin Fritzsche, Maria Zambon, Janvi Ahuja, Adam Howe, Xenia Miscouridou, Guy P Nason, Oliver Ratmann, Elizaveta Semenovai, Gavin Leechj, Julia Fabienne Sandkuhler € k, Charlie Rogers-Smithl, Michaela Vollmera, g, H Juliette T Unwin, Yarin Galb, Meera Chand, Axel Gandy, Javier Martin, Erik Volz, Neil M Ferguson, Samir Bhatt, Jan M Brauner, Seth Flaxman, The COVID-19 Genomics UK (COG-UK) Consortium
Resumo	Since its emergence in Autumn 2020, the SARS-CoV-2 Variant of Concern (VOC) B.1.1.7 (WHO label Alpha) rapidly became the dominant lineage across much of Europe. Simultaneously, several other VOCs were identified globally. Unlike B.1.1.7, some of these VOCs possess mutations thought to confer partial immune escape. Understanding when and how these additional VOCs pose a threat in settings where B.1.1.7 is currently dominant is vital. Methods We examine trends in the prevalence of non-B.1.1.7 lineages in London and other English regions using passive-case detection PCR data, cross-sectional community infection surveys, genomic surveillance, and wastewater monitoring. The study period spans from 31st January 2021 to 15th May 2021. Findings: Across data sources, the percentage of non-B.1.1.7 variants has been increasing since late March 2021. This increase was initially driven by a variety of lineages with immune escape. From mid-April, B.1.617.2 (WHO label Delta) spread rapidly, becoming the dominant variant in England by late May. Interpretation: The outcome of competition between variants depends on a wide range of factors such as intrinsic transmissibility, evasion of prior immunity, demographic specificities and interactions with non-pharmaceutical interventions. The presence and rise of non-B.1.1.7 variants in March likely was driven by importations and some community transmission. There was competition between non-B.1.17 variants which resulted in B.1.617.2 becoming dominant in April and May with considerable community transmission. Our results underscore that early detection of new variants requires a diverse array of data sources in community surveillance. Continued real-time information on the highly dynamic composition and trajectory of different SARS-CoV-2 lineages is essential to future control efforts Funding: National Institute for Health Research, Medicines and Healthcare products Regulatory Agency, DeepMind, EPSRC, EA Funds programme, Open Philanthropy, Academy of Medical Sciences Bill,Melinda Gate
Referências	MISHRA, S. <i>et al.</i> Changing composition of SARS-CoV-2 lineages and rise of Delta variant in England. EClinicalMedicine , [Netherlands], v. 39, p. 101064, 2021. DOI: 10.1016/j.eclinm.2021.101064. Disponível em: https://linkinghub.elsevier.com/retrieve/pii/S2589537021003448 . Acesso em: 13 ago. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S2589537021003448



Título	Vulnerabilidade social e incidência de COVID-19 em uma metrópole brasileira
Autor(es)	Virna Ribeiro Feitosa Cestari, Raquel Sampaio Florêncio, George Jó Bezerra Sousa, Thiago Santos Garces, Thatiana Araújo Maranhão, Révia Ribeiro Castro, Luana Ibiapina Cordeiro, Lara Lídia Ventura Damasceno, Vera Lucia Mendes de Paula, Maria Lúcia Duarte Pereira, Thereza Maria Magalhães Moreira
Resumo	A vulnerabilidade é um fator chave no enfrentamento da COVID-19 tendo em vista que pode influenciar no agravamento da doença. Desse modo, ela deve ser considerada no controle da COVID-19, prevenção e promoção da saúde. O objetivo deste artigo é analisar a distribuição espacial da incidência de casos de COVID-19 em uma metrópole brasileira e sua associação com indicadores de vulnerabilidade social. Estudo ecológico. Foi utilizada a análise de varredura espacial (scan) para identificar aglomerados de COVID-19. As variáveis para identificação da vulnerabilidade foram inseridas em um modelo de Regressão Espacial Geograficamente Ponderado (GWR) para identificar sua relação espacial com os casos de COVID-19. A incidência de COVID-19 em Fortaleza foi de 74,52/10 mil habitantes, com notificação de 3.554 casos, sendo pelo menos um caso registrado em cada bairro. A regressão espacial GWR mostrou relação negativa entre incidência de COVID-19 e densidade demográfica (β=-0,0002) e relação positiva entre incidência de COVID-19 e percentual de ocupados >18 anos trabalhadores autônomos (β=1,40), assim como, renda domiciliar per capita máxima do quinto mais pobre (β=0,04). A influência dos indicadores de vulnerabilidade sobre a incidência evidenciou áreas que podem ser alvo de políticas públicas a fim de impactar na incidência de COVID-19.
Referências	CESTARI, V. R. F. et al. Vulnerabilidade social e incidência de COVID-19 em uma metrópole brasileira. Ciênc. saúde Coletiva, [Brasil], v. 26, n. 3, p. 1023–1033, mar. 2021. DOI: 10.1590/1413-81232021263.42372020. Disponível em: Aesso em: 13 ago. 2021.
Fonte	https://www.scielo.br/j/csc/a/dh9JmJfQLXKG3tcHHndQ55H/?format=html⟨=pt



Título	Surto hospitalar de COVID-19 numa área administrativa do Instituto Central do HC-FMUSP
Autor(es)	ThaísGuimarãesIcaroBoszczowskiIngraMoralesLaína BubachCarvalhoSuely Luzia dosSantosLuis Vicente L.RoblesNuno RodriguesFariaDarlan da SilvaCandidoEsterSabinoSilvia FigueiredoCosta
Resumo	Introdução Profissionais da área da saúde atuam na linha de frente dos cuidados a pacientes com COVID-19 e por isto são considerados grupos de alto risco. Entretanto, profissionais de áreas administrativas, mesmo que trabalhando em hospitais, são considerados de baixo risco para aquisição da doença.
Referências	GUIMARÃES, T. <i>et al.</i> Surto hospitalar de COVID-19 numa área administrativa do Instituto Central do HC-FMUSP. The Brazilian Journal of Infectious Diseases , [Brasil], v. 25, p. 101065, 25 jan. 2021. DOI: 10.1016/j.bjid.2020.101065. Disponível em: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7936825/ . Acesso em: 13 ago. 2021.
Fonte	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7936825/



Título	Integração ensino e serviço no contexto da pandemia de COVID-19: relato de experiência da práxis dos residentes sanitaristas na vigilância epidemiológica
Autor(es)	Isaac Newton Machado Bezerra, Aline Vanessa da Silva, Shirlley Jackllanny Martins de Farias, Maria Heloisa Moura de Oliveira, Andreza Amanda de Araújo, Thayná Menezes Santos, Diego Francisco da Silva, Antônio Flaudiano Bem Leite, Fabiana de Oliveira Silva Sousa,
Resumo	Introdução: Inicialmente identificada na cidade de Wuhan, na China em 2019, a Coronavirus Disease 2019 (COVID-19) demonstrou-se com um alto poder de disseminação. Devido à potencialidade de contágio, a Organização Mundial da Saúde recomendou aos países medidas de isolamento para evitar aglomerações e diminuir a incidência de casos. Vitória de Santo Antão, município localizado próximo à Região metropolitana de Recife, neste contexto requereu imprescindivelmente uma atuação da vigilância epidemiológica para elaborar ações e estratégias de contingência nesse cenário sanitário pandêmico. Objetivo: Relatar a experiência dos residentes sanitaristas na atuação no setor da vigilância epidemiológica durante o enfrentamento da pandemia de COVID-19. Método:Relato de experiência realizado pelos residentes sanitaristas do Programa de Residência Multiprofissional de Interiorização de Atenção à Saúde para fortalecimento da vigilância epidemiológica no enfrentamento da pandemia no município de Vitória de Santo Antão. Resultados: Foram criados dois formulários via Google Forms com o objetivo de registrar e acompanhar os casos de síndrome gripal, síndrome respiratória aguda grave (SRAG) e COVID-19 no município. Foi adotada pelo setor de vigilância em saúde a criação de boletins epidemiológicos diários para divulgação dos dados, apresentando as informações mais pertinentes obtidas a partir do monitoramento dos casos de síndrome gripal, SRAG e COVID-19 da população local, sempre comparando com o cenário estadual e federal. Conclusões: O cenário de pandemia suscitou uma readequação das atividades dos residentes, ao imprimir sobre esses o desafio de se adequar a um novo contexto epidemiológico, gerando um olhar sobre as necessidades dos territórios e do seu processo de aprendizagem e fortalecendo as ações de vigilância durante o cenário de pandemia.
Referências	BEZERRA, I. N. M. <i>et al.</i> Integração ensino e serviço no contexto da pandemia de COVID-19: relato de experiência da práxis dos residentes sanitaristas na vigilância epidemiológica. Vigilância Sanitária em Debate [Brasil], v. 9, n. 1, p. 55–60, 26 fev. 2021. DOI: 0.22239/2317-269x.01771. Disponível em: https://visaemdebate.incqs.fiocruz.br/index.php/visaemdebate/article/view/1771 . Acesso em: 13 ago. 2021.
Fonte	https://visaemdebate.incqs.fiocruz.br/index.php/visaemdebate/article/view/1771/1246



Título	Perception of the COVID-19 Epidemic and Acceptance of Vaccination Among Healthcare Workers Prior to Vaccine Licensure — Beijing Municipality, China, May–July 2020
Autor(es)	Luodan Suo; Rui Ma; Zhongzhan Wang; Tian Tang; Haihong Wang; Fang Liu; Jinfeng Tang; Xinghui Peng; Xue Guo; Li Lu; Xinghuo Pang
Resumo	What is already known about this topic? The coronavirus disease 2019 (COVID-19) vaccine development has been progressing, but acceptance of the new vaccines by healthcare workers (HCWs) was not well known prior to approval of COVID-19 vaccines in China.
Referências	LUODAN, Suo. <i>et al.</i> Perception of the COVID-19 Epidemic and Acceptance of Vaccination Among Healthcare Workers Prior to Vaccine Licensure — Beijing Municipality, China, May–July 2020. China CDC weekl, [China], v. 3, n. 27, p. 569-575, July 2, 2021. DOI: 10.46234/ccdcw2021.130. Disponível em: http://weekly.chinacdc.cn/en/article/doi/10.46234/ccdcw2021.130 . Acesso em: 6 ago. 2021.
Fonte	http://weekly.chinacdc.cn/en/article/doi/10.46234/ccdcw2021.130



Título	SARS-CoV-2 B.1.617.2 (Delta) variant COVID-19 outbreak associated with a gymnastics facility — Oklahoma, April–May 2021
Autor(es)	Kendra Dougherty, Mike Mannell, Ozair Naqvi, Dakota Matson, Jolianne Stone
Resumo	What is already known about this topic? The SARS-CoV-2 B.1.617.2 (Delta) variant emerged in India and is currently widespread. Evidence suggests that it is potentially more transmissible than other variants. What is added by this report? During April 15—May 3, 2021, 47 COVID-19 cases were linked to a gymnastics facility, including 21 laboratory-confirmed B.1.617.2 cases and 26 epidemiologically linked cases. The overall facility and household attack rates were 20% and 53%, respectively. What are the implications for public health practice? The B.1.617.2 variant is highly transmissible in indoor sports settings and households, which might lead to increased attack rates. Multicomponent prevention strategies including vaccination remain important to reduce the spread of SARS-CoV-2 among persons participating in indoor sports and their contacts.
Referências	DOUGHERTY, K. et al. SARS-CoV-2 B.1.617.2 (Delta) Variant COVID-19 Outbreak Associated with a Gymnastics Facility — Oklahoma, April—May 2021. Morbidity and mortality weekly report, [United States], v. 70, n. 28, p. 1004–1007, July 16, 2021. DOI: 10.15585/mmwr.mm7028e2. Disponível em: https://stacks.cdc.gov/view/cdc/107846 . Acesso em: 6 ago. 2021.
Fonte	http://www.cdc.gov/mmwr/volumes/70/wr/mm7028e2.htm?s_cid=mm7028e2_w



Título	Reduced sensitivity of SARS-CoV-2 variant Delta to antibody neutralization
Autor(es)	Delphine Planas, David Veyer, Artem Baidaliuk, Isabelle Staropoli, Florence Guivel-Benhassine, Maaran Michael Rajah, Cyril Planchais, Françoise Porrot, Nicolas Robillard, Julien Puech, Matthieu Prot, Floriane Gallais, Pierre Gantner, Aurélie Velay, Julien Le Guen, Najiby Kassis-Chikhani, Dhiaeddine Edriss, Laurent Belec, Aymeric Seve, Laura Courtellemont, Hélène Péré, Laurent Hocqueloux, Samira Fafi-Kremer, Thierry Prazuck, Hugo Mouquet, Timothée Brue, Etienne Simon-Lorière, Felix A. Rey, Olivier Schwart
Resumo	The SARS-CoV-2 B.1.617 lineage was identified in October 2020 in India1–5. Since then, it has become dominant in some regions of India and in the UK, and has spread to many other countries6. The lineage includes three main subtypes (B1.617.1, B.1.617.2 and B.1.617.3), which contain diverse mutations in the N-terminal domain (NTD) and the receptor-binding domain (RBD) of the SARS-CoV-2 spike protein that may increase the immune evasion potential of these variants. B.1.617.2—also termed the Delta variant—is believed to spread faster than other variants. Here we isolated an infectious strain of the Delta variant from an individual with COVID-19 who had returned to France from India. We examined the sensitivity of this strain to monoclonal antibodies and to antibodies present in sera from individuals who had recovered from COVID-19 (hereafter referred to as convalescent individuals) or who had received a COVID-19 vaccine, and then compared this strain with other strains of SARS-CoV-2. The Delta variant was resistant to neutralization by some anti-NTD and anti-RBD monoclonal antibodies, including bamlanivimab, and these antibodies showed impaired binding to the spike protein. Sera collected from convalescent individuals up to 12 months after the onset of symptoms were fourfold less potent against the Delta variant relative to the Alpha variant (B.1.1.7). Sera from individuals who had received one dose of the Pfizer or the AstraZeneca vaccine had a barely discernible inhibitory effect on the Delta variant. Administration of two doses of the vaccine generated a neutralizing response in 95% of individuals, with titres three- to fivefold lower against the Delta variant than against the Alpha variant. Thus, the spread of the Delta variant is associated with an escape from antibodies that target non-RBD and RBD epitopes of the spike protein.
Referências	PLANAS, D. <i>et al.</i> Reduced sensitivity of SARS-CoV-2 variant Delta to antibody neutralization. Nature , [United Kingdom], p. 1–5, July 8, 2021. DOI: 10.1038/s41586-021-03777-9. Disponível em: https://www.nature.com/articles/s41586-021-03777-9 . Acesso em: 6 ago. 2021.
Fonte	https://www.nature.com/articles/s41586-021-03777-9



Título	Effectiveness of Covid-19 Vaccines against the B.1.617.2 (Delta) Variant
Autor(es)	Jamie Lopez Bernal, , Nick Andrews, Charlotte Gower, D.Phil., Eileen Gallagher, Ruth Simmons, , Simon Thelwall, Julia Stowe, , Elise Tessier, , Natalie Groves, Gavin Dabrera, Richard Myers, Colin N.J. Campbell, , Gayatri Amirthalingam, Matt Edmunds, Maria Zambon, F.R.C., Kevin E. Brown, .Path., Susan Hopkins, Meera Chand, Mary Ramsay.
Resumo	The B.1.617.2 (delta) variant of the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus that causes coronavirus disease 2019 (COVID-19), has contributed to a surge in cases in India and has now been detected across the globe, including a notable increase in cases in the United Kingdom. The effectiveness of the BNT162b2 and ChAdOx1 nCoV-19 vaccines against this variant has been unclear.
Referências	LOPEZ BERNAL, J. et al. Effectiveness of Covid-19 Vaccines against the B.1.617.2 (Delta) Variant. New England journal of medicine, [United States], July 21, 2021. DOI: 10.1056/NEJMoa2108891. Disponível em: https://www.nejm.org/doi/full/10.1056/NEJMoa2108891#article_citing_articles . Acesso em: 6 ago. 2021.
Fonte	https://www.nejm.org/doi/full/10.1056/NEJMoa2108891



Título	Outbreaks of COVID-19 variants in US prisons: a mathematical modelling analysis of vaccination and reopening policies
Autor(es)	Theresa Ryckman, Elizabeth T Chin, Lea Prince, David Leidner, Elizabeth Long, David M Studdert, Joshua A Salomon, Fernando Alarid-Escudero, Jason R Andrews, Jeremy D Goldhaber-Fiebert
Resumo	Residents of prisons have experienced disproportionate COVID-19-related health harms. To control outbreaks, many prisons in the USA restricted in-person activities, which are now resuming even as viral variants proliferate. This study aims to use mathematical modelling to assess the risks and harms of COVID-19 outbreaks in prisons under a range of policies, including resumption of activities.
Referências	RYCKMAN, T. <i>et al.</i> Outbreaks of COVID-19 variants in US prisons: a mathematical modelling analysis of vaccination and reopening policies. The Lancet. Public health , [United Kingdom], p. S2468266721001626, Aug. 8, 2021. DOI: 10.1016/S2468-2667(21)00162-6. Dipsonível em: https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(21)00162-6/abstract . Acesso em: 6 ago. 2021.
Fonte	https://www.thelancet.com/journals/lanpub/article/PIIS2468-2667(21)00162-6/fulltext



Título	PREPRINT: COVID-19 e SIM-P : morbimortalidade em crianças e adolescentes no Brasil, 2020-2021
	Leonor Maria Pacheco Santos, Erly Catarina Moura, Luciana Gonzaga Oliveira, Fabrício Vieira Cavalcante, Klébya Hellen Dantas Oliveira, Geraldo Magela
Autor(es)	Fernandes, Ivana Cristina de Holanda Cunha Barreto
Resumo	Objetivos: descrever a evolução temporal da morbidade e mortalidade por COVID-19 e síndrome inflamatória multissistêmica pediátrica temporalmente associada àCOVID-19, a SIM-P, em crianças e adolescentes brasileiros. Métodos: trata-se de estudo descritivo, baseado em dados secundários oficiais. A mortalidade por COVID-19foi analisada de acordo com os dados do Portal da Transparência do Registro Civil. A morbimortalidade por SIM-P foi verificada a partir de boletins epidemiológicos estaduais e federal. Resultados: no período de um ano registraram-se 2.346óbitospor COVID-19 em crianças e adolescente. Do total, 78%são óbitos entre adolescentes, que vem aumentando exponencialmente em 2021, na segunda onda da epidemia. A taxa de mortalidade por COVID-19 nas crianças foi de 1,8por 100milhabitantes,enquanto em adolescentes foi três vezes maior (5,6 por 100 mil habitantes). A SIM-P foi notificada em 26 das 27 Unidade da Federação e 77% dos casos incidem em menores de 10anos.Conclusões: o aumento da morbimortalidade por COVID-19 em crianças e adolescentes reforça a necessidade de medidas drásticas de contenção da epidemia. A COVID-19 apresenta consequências a curto e longo prazo, podendo comprometer a saúde de crianças e adolescentes, além de interferir no seu desenvolvimento integral, atividade física, socialização adequada, desempenho escolar e, futuramente, na sua inserção plena na sociedade.
Referências	SANTOS, L. M. P. et al. Mortalidade e morbidade em crianças e adolescentes por COVID-19 no Brasil. SciELO Preprints, [Brazil?], 2021. DOI: 10.1590/SciELOPreprints.2069. Disponível em: https://preprints.scielo.org/index.php/scielo/preprint/view/2069. Acesso em: 6 ago. 2021.
Fonte	https://repositorio.unb.br/handle/10482/40569



Título	COVID-19 symptoms at hospital admission vary with age and sex: results from the ISARIC prospective multinational observational study
Autor(es)	ISARIC Clinical Characterisation Group
Resumo	The ISARIC prospective multinational observational study is the largest cohort of hospitalized patients with COVID-19. We present relationships of age, sex, and nationality to presenting symptoms.
Referências	ABDUKAHIL, S. A. <i>et al.</i> COVID-19 symptoms at hospital admission vary with age and sex: results from the ISARIC prospective multinational observational study. Infection , [Germany], Jun. 25, 2021. DOI: doi.org/10.1007/s15010-021-01599-5. Disponível em: https://doi.org/10.1007/s15010-021-01599-5. Acesso em: 6 ago. 2021.
Fonte	https://link.springer.com/content/pdf/10.1007/s15010-021-01599-5.pdf



Título	Perinatal transmission of SARS-CoV-2 and transfer of maternal IgG/neutralizing anti-SARS-CoV-2 antibodies from mothers with asymptomatic infection during pregnancy
Autor(es)	Nandini Malshe, Suprabha K. Patnaik, Sanjay Lalwani, Pradeep Suryawanshi, Ruta Kulkarni, Suhas Mhaske, Akhilesh Chandra Mishra, · Vidya Arankalle
Resumo	Purpose COVID-19 pandemic remains a serious public health threat worldwide. In view of the limited data on the risk of perinatal transmission of SARS-CoV-2 and transfer of maternal anti-SARS-CoV-2 antibodies, the present study was undertaken. Methods A prospective study including 57 pregnant women with a positive SARS-CoV-2 RNA test (SARS-CoV-2-RNA+) and 59 neonates born to them was conducted at Pune, India. 39 viral RNA negative (SARS-CoV-2-RNA-negative) pregnant women and their 39 neonates were included as controls. Neonatal nasal swab/cord blood samples were subjected to SARSCoV-2 RNA detection by RT-PCR for investigation of perinatal transmission. Transfer of maternal antibodies was studied using ELISA and PRNT. Results 10/57 SARS-CoV-2-RNA+ mothers were symptomatic. The duration between COVID-19 diagnosis and delivery was ≤ 7 days for 82.4%. Perinatal transmission as evidenced by viral RNA in the neonatal nasal swab/cord blood (CB) was 3.6%. IgG-anti-SARS-CoV-2 positivity was 21.6%. Of the 39 neonates born to SARS-CoV-2-RNA-negative mothers, 20 (51%) and none, respectively, were positive for IgG-anti-SARS-CoV-2 and viral RNA. Preterm deliveries were higher in SARS-CoV-2-RNA+ (18.6%) than SARS-CoV-2 RNA-negative (0/39) mothers (p < 0.005). Respiratory distress at birth (< 4 h) was higher among neonates of SARS-CoV-2-RNA+ (20/59, 33.9%) than SARS-CoV-2-RNA-negative mothers (3/39, 7.7%; p < 0.001). ~ 75% IgG-positives exhibited neutralization potential with mean PRNT titers of 42.4 ± 24 (SARS-CoV-2RNA+) and 72.3 ± 46.7 (SARS-CoV-2 RNA-negative); higher in the latter (p < 0.05).Conclusion The rate of perinatal transmission was low. Transfer of maternal antibodies was lower among SARS-CoV-2 RNA+ mothers than SARS-CoV-2-RNA-negative mothers with subclinical infection during pregnancy. Presence of neutralizing antibodies in majority of IgG-positives suggests protection from SARS-CoV-2 in early life.
Referências	MALSHE, N. <i>et al.</i> Perinatal transmission of SARS-CoV-2 and transfer of maternal IgG/neutralizing anti-SARS-CoV-2 antibodies from mothers with asymptomatic infection during pregnancy. Infection , [Germany.], July 7, 2021. DOI: 10.1007/s15010-021-01650-5. Disponível em: https://link.springer.com/10.1007/s15010-021-01650-5 . Acesso em: 6 ago. 2021.
Fonte	https://link.springer.com/content/pdf/10.1007/s15010-021-01650-5.pdf



Título	Immunity to SARS-CoV-2 induced by infection or vaccination
Autor(es)	Xaquin Castro Dopico, Sebastian Ols, Karin Loré, Gunilla B. Karlsson Hedestam
Resumo	Adaptive immune responses play critical roles in viral clearance and protection against re-infection, and SARS-CoV-2 is no exception. What is exceptional, is the rapid characterization of the immune response to the virus performed by researchers during the first 20 months of the pandemic. This has given us a more detailed understanding about SARS-CoV-2 than we have about many viruses that have been with us for a long time. Furthermore, effective COVID-19 vaccines were developed in record time, and their rollout worldwide is already making a significant difference, although major challenges remain in terms of equal access. The pandemic has engaged scientists and the public alike, and terms such as seroprevalence, neutralizing antibodies, antibody escape and vaccine certificates have become familiar to a broad community. Here, we review key findings concerning B cell and antibody (Ab) responses to SARS-CoV-2, focusing on non-severe cases and anti-spike (S) Ab responses in particular, the latter being central to protective immunity induced by infection or vaccination. The emergence of viral variants that have acquired mutations in S acutely highlights the need for continued characterization of both emerging variants and Ab responses against these during the evolving pathogen-immune system arms race.
Referências	DOPICO, X. C. <i>et al.</i> Immunity to SARS-CoV-2 induced by infection or vaccination. Journal of internal medicine , [United Kingdom], Aug. 5, 2021. DOI: 10.1111/joim.13372. Disponível em: https://onlinelibrary.wiley.com/doi/abs/10.1111/joim.13372. Acesso em: 6 ago. 2021.
Fonte	https://onlinelibrary.wiley.com/doi/epdf/10.1111/joim.13372



Título	Risk Factors and Outcomes Associated with Community-Onset and Hospital-Acquired Co-infection in Patients Hospitalized for COVID-19: a Multi-Hospital Cohort Study
Autor(es)	Lindsay A. Petty, Scott A. Flanders, Valerie M. Vaughn, David Ratz, Megan O'Malley, Anurag N. Malani, Laraine Washer, Tae Kim, Keith E. Kocher, Scott Kaatz, Tawny Czilok, Elizabeth McLaughlin, Hallie C. Prescott, Vineet Chopra, Tejal Gandhi
Resumo	Background: We sought to determine the incidence of community-onset and hospital-acquired co-infection in patients hospitalized with COVID-19 and evaluate associated predictors and outcomes. Methods:Multicenter retrospective cohort study of patients hospitalized for COVID-19, 3/2020 to 8/2020, across 38 Michigan hospitals assessed for prevalence, predictors, and outcomes of community-onset or hospital-acquired co-infection. In-hospital and 60-day mortality, readmission, discharge to long-term care facility (LTCF), and mechanical ventilation duration, were assessed for patients with vs. without co-infection. Results:Of 2205 patients with COVID-19, 6.4% (N=141) had a co-infection (3.0% community-onset, 3.4% hospital-acquired). 64.9% of patients without co-infection received antibiotics. Community-onset co-infection predictors include admission from LTCF (OR 3.98, 95% CI 2.34-6.76, p<0.001) and admission to intensive care (OR 4.34, 95% CI 2.87-6.55, p<0.001). Hospital-acquired co-infection predictors include fever (OR 2.46, 95% CI 1.15-5.27, p=0.02) and advanced respiratory support (OR 40.72, 95% CI 13.49-122.93, p<0.001). Patients with (vs. without) community-onset co-infection had longer mechanical ventilation (OR 3.31, 95% CI 1.67-6.56, p=0.001) and higher in-hospital (OR 1.90, 95% CI 1.06-3.40 p=0.03) and 60-day mortality (OR 1.86, 95% CI 1.05-3.29 p=0.03). Patients with (vs. without) hospital-acquired co-infection had higher discharge to LTCF (OR 8.48, 95%CI 3.30-21.76 p<0.001), in-hospital (OR 4.17, 95% CI 2.37-7.33, p=<.001) and 60-day mortality (OR 3.66, 95% CI 2.11-6.33, p=<.001). Conclusion:Despite community-onset and hospital-acquired co-infection being uncommon, most patients hospitalized with COVID-19 received antibiotics. Admission from LTCF and to ICU were associated with increased risk of community-onset co-infection. Future work should prospectively validate predictors of COVID-19 co-infection to facilitate antibiotic reduction.
Referências	PETTY, L. A. <i>et al.</i> Risk Factors and Outcomes Associated with Community-Onset and Hospital-Acquired Co-infection in Patients Hospitalized for COVID-19: A Multi-Hospital Cohort Study. Infection control and hospital epidemiology , [United Kingdom <i>l.</i>], p. 1–28, July 26, 2021. DOI: 10.1017/ice.2021.341. Disponível em: https://doi.org/10.1017/ice.2021.341 . Acesso em: 30 jul. 2021.
Fonte	https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/risk-factors-and-outcomes-associated-with-communityonset-and-hospitalacquired-coinfection-in-patients-hospitalized-for-covid19-a-multihospital-cohort-study/A0BE4707AF206438D1E4A4CDB49BEA39



Título	Fatores associados ao enfrentamento da pandemia da COVID-19 por pessoas idosas com comorbidades
Autor(es)	Zilmar Augusto de Souza Filho, Vera Lúcia Gomes de Oliveira
Resumo	Objetivo identificar fatores associados ao enfrentamento da pandemia da COVID-19 por pessoas idosas com e sem comorbidades. Método estudo descritivo, transversal, com pessoas idosas (n=569), entre 60 e 80 anos, com ou sem comorbidades, nas cinco regiões do Brasil. Coleta de dados com questionário virtual e análise com base na estatística descritiva e inferencial. Resultados os resultados mostram que 351, (61,68%), referem comorbidade. Houve associação significativa entre os grupos nas variáveis: faixa etária (p=0,017), realizar alguma atividade laboral (p≤0,001), pensamento da possibilidade de ser infectado pelo novo coronavírus (p≤0,001), concordar com medidas de prevenção adotadas para o distanciamento social (p≤0,001), se informar por outro meio de comunicação além da televisão (p≤0,001). Conclusão e implicações para a prática os idosos com comorbidades pensam na possibilidade de ser infectado pelo novo coronavírus, concordam mais com as medidas de distanciamento social e se informam mais. Nesse sentido, indica-se a realização de pesquisas com ênfase nos idosos sem comorbidade, para direcionar melhor os cuidados de saúde em tempos de pandemias.
Referências	SOUZA, Z. A. de <i>et al</i> . Fatores associados ao enfrentamento da pandemia da COVID-19 por pessoas idosas com comorbidades. Escola Anna Nery , [Brasil], v. 25, 2021. DOI: 10.1590/2177-9465-EAN-2020-0495. Disponível em: https://doi.org/10.1590/2177-9465-EAN-2020-0495. Acesso em: 30 jul. 2021.
Fonte	https://www.scielo.br/j/ean/a/xzndmwKbd54gmVZG5t3SqvP/



Título	Seropositivity of COVID-19 among asymptomatic healthcare workers: A multi-site prospective cohort study from Northern Virginia, United States
Autor(es)	Abdulla A. Damluji, Siqi Wei, Scott A. Bruce, Amanda Haymond, Emanuel F. Petricoin, Lance Liotta, G. Larry Maxwell, Brian C Moore, Rachel Bell, Stephanie Garofalo, Eric R Houpt, David Trump, Christopher R. deFilipp
Resumo	Because of their direct patient contact, healthcare workers (HCW) face an unprecedented risk of exposure to COVID-19. The aim of this study was to examine incidence of COVID-19 disease among asymptomatic HCW and community participants in Northern Virginia during 6 months of follow-up.
Referências	DAMLUJI, A. A. <i>et al.</i> Seropositivity of COVID-19 among asymptomatic healthcare workers: A multi-site prospective cohort study from Northern Virginia, United States. The Lancet regional health. Americas , [United Kingdom ?], July 29, 2021. DOI: https://doi.org/10.1016/j.lana.2021.100030 . Disponível em: https://doi.org/10.1016/j.lana.2021.100030. Acesso em: 30 jul. 2021.
Fonte	https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(21)00022-3/fulltext



Título	Prospective observational study of gender and ethnicity biases in respiratory protective equipment for healthcare workers in the COVID-19 pandemic
Autor(es)	Clarissa Y M Carvalho, Jan Schumacher, Paul Robert Greig, Danny J N Wong, Kariem El-Boghdadly
Resumo	Objective To describe success rates of respiratory protective equipment (RPE) fit testing and factors associated with achieving suitable fit. Design Prospective observational study of RPE fit testing according to health and safety, and occupational health requirements. Setting A large tertiary referral UK healthcare facility. Population 1443 healthcare workers undergoing quantitative fit testing. Main outcome measures Quantitative fit test success (pass/fail) and the count of tests each participant required before successful fit. Results Healthcare workers were fit tested a median (IQR) 2 (1–3) times before successful fit was obtained. Males were tested a median 1 (1–2) times, while females were tested a median 2 (1–2) times before a successful fit was found. This difference was statistically significant (p<0.001). Modelling each fit test as its own independent trial (n=2359) using multivariable logistic regression, male healthcare workers were significantly more likely to find a well-fitting respirator and achieve a successful fit on first attempt in comparison to females, after adjusting for other factors (adjusted OR=2.07, 95% CI): 1.66 to 2.60, p<0.001). Staff who described their ethnicity as White were also more likely to achieve a successful fit compared with staff who described their ethnicity as Asian (OR=0.47, 95% CI: 0.38 to 0.58, p<0.001), Black (OR=0.54, 95% CI: 0.41 to 0.71, p<0.001), mixed (OR=0.50 95% CI: 0.31 to 0.80, p=0.004) or other (OR=0.53, 95% CI: 0.29 to 0.99, p=0.043). Conclusions Male and White ethnicity healthcare workers are more likely to achieve RPE fit test success. This has broad operational implications to healthcare services with a large female and Black, Asian and minority ethnic group population. Fit testing is imperative in ensuring RPE effectiveness in protecting healthcare workers during the COVID-19 pandemic and beyond.
Referências	CARVALHO, C. Y. M. <i>et al.</i> Prospective observational study of gender and ethnicity biases in respiratory protective equipment for healthcare workers in the COVID-19 pandemic. BMJ open , [United Kingdom], v. 11, n. 5, p. e047716, 2021. DOI: :10.1136/bmjopen-2020-047716. Disponível em: https://doi.org/10.1136/bmjopen-2020-047716 . Acesso em: 30 jul. 2021.
Fonte	https://bmjopen.bmj.com/content/bmjopen/11/5/e047716.full.pdf



Título	Housing, Sanitation and Living Conditions Affecting SARS-CoV-2 Prevention Interventions in 54 African Countries
Autor(es)	Timothy F. Brewer, Mary Zhang, David Gordon, Roger Yat-Nork Chung, Negussie Dejene, Cynthia L. Fonta, Tigist Grieve, Björn Halleröd, Richard Harris, Alba Lanau, Murray Leibbrandt, Yehualashet Mekonen, Bongai Muguni, Hector Najera, Shailen Nandy, S. Jody Heymann.
	The feasibility of non-pharmacological interventions (NPIs) such as physical distancing or isolation at home to prevent Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) transmission in low-resource countries is unknown. Household survey data from 54 African countries were used to investigate the
Resumo	feasibility of SARS-CoV-2 NPIs in low-resource settings. Across the 54 countries, approximately 718 million people lived in households with ≥6 individuals at home (median percentage of at-risk households 56% (95% confidence interval (CI), 51% to 60%)). Approximately 283 million people lived in households where
	≥3 people slept in a single room (median percentage of at-risk households 15% (95% CI, 13% to 19%)). An estimated 890 million Africans lack on-site water (71% (95% CI, 62% to 80%)), while 700 million people lacked in-home soap/washing facilities (56% (95% CI, 42% to 73%)). The median percentage of people without a refrigerator in the home was 79% (95% CI, 67% to 88%), while 45% (95% CI, 39% to 52%) shared toilet facilities with other households. Individuals in low-resource settings have substantial obstacles to implementing NPIs for mitigating SARS-CoV-2 transmission. These populations urgently need to be prioritized for COVID-19 vaccination to prevent disease and to contain the global pandemic.
Referências	BREWER, T. F. <i>et al.</i> Housing, Sanitation and Living Conditions Affecting SARS-CoV-2 Prevention Interventions in 54 African Countries. Epidemiology & infection , [United Kingdom], p. 1–14, undefined/ed., July 23, 2021. DOII: 10.1017/S0950268821001734. Disponível em: https://doi.org/10.1017/S0950268821001734 . Acesso em: 30 jul. 2021.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/housing-sanitation-and-living-conditions-affecting-sarscov2-prevention-interventions-in-54-african-countries/DEA5E20E88D2697CE8EEF8F0F1F6A427



Título	Early detection of COVID-19 in the UK using self-reported symptoms: a large-scale, prospective, epidemiological surveillance study
Autor(es)	Liane S Canas, Carole H Sudre, Joan Capdevila Pujol, Lorenzo Polidori, Benjamin Murray, Erika Molteni, Mark S Graham, Kerstin Klaser, Michela Antonelli, Sarah Berry, Richard Davies, Long H Nguyen, David A Drew, Jonathan Wolf, Andrew T Chan, Tim Spector, Claire J Steves, Sebastien Ourselin, Marc Modat
Resumo	Self-reported symptoms during the COVID-19 pandemic have been used to train artificial intelligence models to identify possible infection foci. To date, these models have only considered the culmination or peak of symptoms, which is not suitable for the early detection of infection. We aimed to estimate the probability of an individual being infected with SARS-CoV-2 on the basis of early self-reported symptoms to enable timely self-isolation and urgent testing.
Referências	CANAS, L. S. <i>et al.</i> Early detection of COVID-19 in the UK using self-reported symptoms: a large-scale, prospective, epidemiological surveillance study. The Lancet. Digital health , [United Kingdom], p. S258975002100131X, July 29, 2021. DOI: 10.1016/S2589-7500(21)00131-X. Disponível em: https://doi.org/10.1016/S2589-7500(21)00131-X . Acesso em: 30 jul. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900131-X



Título	Difference in mortality among individuals admitted to hospital with COVID-19 during the first and second waves in South Africa: a cohort study
Autor(es)	Waasila Jassat, Caroline Mudara, Lovelyn Ozougwu, Stefano Tempia, Lucille Blumberg, Mary-Ann Davies, Yogan Pillay, Terence Carter, Ramphelane Morewane, Milani Wolmarans, Anne von Gottberg, Jinal N Bhiman, Sibongile Walaza, Cheryl Cohen, DATCOV author group
Resumo	The first wave of COVID-19 in South Africa peaked in July, 2020, and a larger second wave peaked in January, 2021, in which the SARS-CoV-2 501Y.V2 (Beta) lineage predominated. We aimed to compare in-hospital mortality and other patient characteristics between the first and second waves.
Referências	JASSAT, W. <i>et al.</i> Difference in mortality among individuals admitted to hospital with COVID-19 during the first and second waves in South Africa: a cohort study. The Lancet. Global health , [Netherlands], p. S2214109X21002898, 2021. DOI: 10.1016/S2214-109X(21)00289-8. Disponível em: https://doi.org/10.1016/S2214-109X(21)00289-8 . Acesso em: 30 jul. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2214-109X%2821%2900289-8



Título	Genomics-informed responses in the elimination of COVID-19 in Victoria, Australia: an observational, genomic epidemiological study
Autor(es)	Courtney R Lane, Norelle L Sherry, Ashleigh F Porter, Sebastian Duchene, Kristy Horan, Patiyan Andersson, Mathilda Wilmot, Annabelle Turner, Sally Dougall, Sandra A Johnson, Michelle Sait, Anders Gonçalves da Silva, Susan A Ballard, Tuyet Hoang, Timothy P Stinear, Leon Caly, Vitali Sintchenko, Rikki Graham, Jamie McMahon, David Smith, Lex EX Leong, Ella M Meumann, Louise Cooley, Benjamin Schwessinger, William Rawlinson, Sebastiaan J van Hal, Nicola Stephens, Mike Catton, Clare Looker, Simon Crouch, Brett Sutton, Charles Alpren, Deborah A Williamson, Torsten Seemann, Benjamin P Howden
Resumo	A cornerstone of Australia's ability to control COVID-19 has been effective border control with an extensive supervised quarantine programme. However, a rapid recrudescence of COVID-19 was observed in the state of Victoria in June, 2020. We aim to describe the genomic findings that located the source of this second wave and show the role of genomic epidemiology in the successful elimination of COVID-19 for a second time in Australia.
Referências	LANE, C. R. <i>et al.</i> Genomics-informed responses in the elimination of COVID-19 in Victoria, Australia: an observational, genomic epidemiological study. The Lancet. Public health , [United Kingdom], v. 6, n. 8, p. e547–e556, July 9, 2021. DOI: 10.1016/S2468-2667(21)00133-X. Disponível em: https://doi.org/10.1016/S2468-2667(21)00133-X . Acesso em: 30 jul. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2468-2667%2821%2900133-X



Título	Variantes do vírus SARS-COV-2 causadoras da COVID-19 no Brasil
Autor(es)	Linconl Agudo Oliveira Benito, Rosana da Cruz Lima, Ana Maria de Lima Palmeira, Margô Gomes de Oliveira Karnikowski, Izabel Cristina Rodrigues da Silva
Resumo	Objetivo: Analisar as variantes do vírus SARS-COV-2 causadoras da COVID-19 no Brasil, identificadas até fevereiro de 2021. Método: Estudo exploratório, descritivo, comparativo e quantitativo. Os dados foram adquiridos no Ministério da Saúde (MS). Resultados: Foram identificadas as variantes "VOC B.1.1.7, VOC202012/01 ou 201/501Y.V1" do Reino Unido, a "VOC B.1.351 ou VOC202012/02 ou 20H/501Y.V2" da África do Sul e a "VOC B.1.1.28.1 ou P.1 ou 20J/501Y.V3" do Brasil/Japão. As variantes VOV P.1 e a VOC B.1.1.7 foram as mais preponderantes do Brasil, com o universo de 334 casos, onde a primeira registrou 89,5% (n=299) e a segunda 10,5% (n=35). A região Nordeste (NE) registrou a maior preponderância das duas variantes contabilizando 32,6% (n=109) e o estado da Paraíba (PB) a maior preponderância da variante VOV P.1 com 23,1% (n=69). Considerações finais: As mutações do vírus SARS-CoV-2, causador da COVID-19, podem ter causado o surgimento de nova linhagem do vírus em circulação no Brasil.
Referências	BENITO, L. A. O. <i>et al.</i> Variantes do vírus SARS-COV-2 causadoras da COVID-19 no Brasil. REVISA [Brasil], v. 10, n. 1, p. 205–219, 20 mar. 2021. Disponível em: https://doi.org/10.3623/revisa.v%.n%.p703% . Acesso em: 30 jul. 2021.
Fonte	http://revistafacesa.senaaires.com.br/index.php/revisa/article/view/703



Título	SARS-CoV, MERS-CoV e SARS-CoV-2: uma revisão narrativa dos principais Coronavírus do século / SARS-CoV, MERS-CoV e SARS-CoV-2: a narrative review of the main Coronaviruses of the century
Autor(es)	Layse Costa de Souza, Tayná Oliveira da Silva, Amanda Rebeca da Silva Pinheiro, Fabíola da Silva dos Santos
Resumo	SARS-CoV e MERS-CoV, vírus da família Coronaviridae, já foram responsáveis por epidemias passadas, no entanto apesar de similares, a magnitude da pandemia ocasionada pelo SARS-CoV-2 está além do já observado. Mesmo que pertençam à mesma família e causem sintomas parecidos, a COVID-19, doença ocasionada pelo SARS-CoV-2, possui diversas particularidades que não são observadas nas outras síndromes respiratórias. Apesar de possui a menor taxa de letalidade, os sintomas desenvolvidos pela COVID-19 podem se tornar persistentes e afetar a qualidade de vida, deixando sequelas significativas. Além disso, sintomas incomuns encontrados em pacientes vítimas da doença causada pelo SARS-CoV-2 ainda estão em constante observação. A grande capacidade de transmissão e a gravidade da doença são fatores que impulsionaram a ciência a trabalhar, em tempo recorde, visando um mesmo objetivo: entender o vírus para controlar a sua disseminação.
Referências	SOUZA, L. C. de <i>et al.</i> SARS-CoV, MERS-CoV e SARS-CoV-2: uma revisão narrativa dos principais Coronavírus do século / SARS-CoV, MERS-CoV e SARS-CoV-2: a narrative review of the main Coronaviruses of the century. Brazilian Journal of Health Review , [Brazil], v. 4, n. 1, p. 1419–1439, 14 jan. 2021. DOI; 10.34119/bjhrv4n1-120. Disponível em: https://doi.org/10.34119/bjhrv4n1-120 . Acesso em: 30 jul. 2021.
Fonte	https://www.brazilianjournals.com/index.php/BJHR/article/view/23263



Título	Principais aspectos do novo coronavírus SARS-CoV-2: uma ampla revisão
Autor(es)	Kleber Augusto Tomé da Cruz, Patrícia de Sousa Lima, André Luiz Araújo Pereira
Resumo	O novo coronavírus (SARS-CoV-2), comumente conhecido como COVID-19, é o agente causador da síndrome respiratória aguda grave, e também o responsável pela pandemia mundial instalada em dezembro de 2019. A rápida dispersão do vírus e o risco de severas complicações na área da saúde internacional motivaram a realização de diversos estudos em busca de maneiras plausíveis para solucionar o problema. Ainda não há alternativa terapêutica eficaz estabelecida, muito embora haja registro de vacinas e medicamentos antivirais em fase de teste. Desta maneira, explorar e aglutinar o maior volume possível de informações sobre o novo coronavírus pode contribuir para promover importantes descobertas, favorecendo a formulação de estratégias de controle do patógeno. Assim, neste trabalho foram compilados os dados mais recentes e relevantes sobre a COVID-19, com ênfase para os aspectos gerais da biologia do vírus incluindo os mecanismos moleculares associados à sua multiplicação na célula hospedeira.
Referências	PEREIRA, A.; CRUZ, K. A. T. da; LIMA, P. S. Principais aspectos do novo coronavírus SARS-CoV-2: uma ampla revisão . Arquivos do Mudi , [Brasil], v. 25, n. 1, p. 73–90, 2021. DOI: 10.4025/arqmudi.v25i1.55455. Disponível em: https://doi.org/10.4025/arqmudi.v25i1.55455 . Acesso em: 30 jul. 2021.
Fonte	https://periodicos.uem.br/ojs/index.php/ArqMudi/article/view/55455/751375151925



Título	Perfil epidemiológico da pandemia de COVID-19 e características do agente etiológico: Revisão
Autor(es)	Amanda Barreto Nogueira, Camila Vasconcelos de Sousa Silva, Larissa Melo da Silva, Marcos Roberto Barros Freitas, Fabiana Batalha Knackfuss
Resumo	Em 2019, na China, houve um surto de uma pneumonia de etiologia desconhecida. Diante disto, o governo chinês realizou uma investigação epidemiológica para identificação do agente causador, que veio a ser denominado SARS-CoV-2, um novo tipo de coronavírus, causador da enfermidade COVID-19. Os coronavírus fazem parte de uma grande família viral, que recebe esse nome devido às espículas que dão aspecto de coroa. Pertencem à ordem Nidovirales, família Coronaviridae e subfamília Orthocoronavirinae, sendo vírus RNA e assim com maiores predisposições a sofrerem mutações e possuem altos índices de transmissibilidade, com infecções podendo causar desde resfriados comuns até síndromes graves. Estudos evidenciaram uma semelhança de 96% do SARS-CoV-2 com o BAT-CoV, um coronavírus encontrado em morcegos. A COVID-19 se destacou na saúde pública, devido ao elevado número de casos em um curto período, eventualmente levando a uma pandemia. Na China, nos primeiros 30 dias foram confirmados 11821 casos, com 259 óbitos, e logo após foi constatado que o vírus havia se espalhado não somente na China, mas também em outros países. O tratamento é sintomático, e medidas preventivas preconizam o controle não medicamentoso, como isolamento, distanciamento social, higiene e uso de máscaras. Esta revisão tem como objetivo reunir informações relevantes sobre o agente etiológico e o perfil epidemiológico da enfermidade.
Referências	NOGUEIRA, A. B. <i>et al.</i> Perfil epidemiológico da pandemia de COVID-19 e características do agente etiológico: Revisão. PUBVET , [Brasil], v. 15, n. 6, p. 181, jun. 2021. Disponível em: https://doi.org/10.31533/pubvet.v15n03a845.1-11 . Acesso em: 30 jul. 2021.
Fonte	https://www.pubvet.com.br/artigo/8055/perfil-epidemioloacutegico-da-pandemia-de-covid-19-e-caracteriacutesticas-do-agente-etioloacutegico-revisatildeo



Título	An outbreak caused by the SARS-CoV-2 Delta (B.1.617.2) variant in a care home after partial vaccination with a single dose of the COVID-19 vaccine Vaxzevria, London, England, April 2021
Autor(es)	Sarah V Williams, Amoolya Vusirikala, Shamez N Ladhani, Elena Fernandez Ruiz De Olano, Nalini Iyanger, Felicity Aiano, Kelly Stoker, Guduru Gopal Rao, Laurence John, Bharat Patel, Nick Andrews, Gavin Dabrera, Mary Ramsay, Kevin E Brown, Jamie Lopez Bernal, Vanessa Saliba
Resumo	We investigated a COVID-19 outbreak of the SARS-CoV-2 Delta variant of concern in a London care home, where 8/21 residents and 14/21 staff had received a single dose of Vaxzevria (ChAdOx1-S; AstraZeneca) vaccine. We identified 24 SARS-CoV-2 infections (16 residents, 8 staff) among 40 individuals (19 residents, 21 staff); four (3 residents, 1 staff) were hospitalised, and none died. The attack rate after one vaccine dose was 35.7% (5/14) for staff and 81.3% (13/16) for residents.
Referências	WILLIAMS, S. V. <i>et al.</i> An outbreak caused by the SARS-CoV-2 Delta (B.1.617.2) variant in a care home after partial vaccination with a single dose of the COVID-19 vaccine Vaxzevria, London, England, April 2021. Eurosurveillance , [s. l.], v. 26, n. 27, July 8, 2021. DOI: 10.2807/1560-7917.ES.2021.26.27.2100626. Disponível em: https://doi.org/10.2807/1560-7917.ES.2021.26.27.2100626. Acesso em: 30 jul. 2021.
Fonte	https://www.eurosurveillance.org/docserver/fulltext/eurosurveillance/26/27/eurosurv-26-27-3.pdf?expires=1627663355&id=id&accname=guest&checksum=0445E6BE97149AF0736349AA6E18E1D9



Título	Observations on the current outbreak of the SARS-CoV-2 Delta Variant in Sydney
Autor(es)	Rick Nunes-Vaz, C Raina Macintyre
Resumo	Sydney, Australia, is currently experiencing an outbreak of the Delta variant of Covid-19. The Delta variant is much more transmissible than the original 'wild' variant of SARS-CoV-2, which was responsible for Australia's first wave of infections, and for the second wave largely confined to Melbourne in mid-2020. Our purpose here is to compare growth rates for the current Sydney outbreak with those of the earlier outbreaks, using doubling times as the principal indicator. By such means, it appears that non-pharmaceutical interventions are achieving similar, if not stronger effects in containing Sydney's Delta-variant outbreak.
Referências	NUNES-VAZ, R.; MACINTYRE, C. Observations on the current outbreak of the SARS-CoV-2 Delta Variant in Sydney. Global biosecurity , [Australia], v. 3, n. 1, July 6, 2021. DOI: 10.31646/gbio.121. Disponível em: https://doi.org/10.31646/gbio.121. Acesso em: 30 jul. 2021.
Fonte	https://jglobalbiosecurity.com/articles/10.31646/gbio.121/



Título	Conhecimento científico sobre infecções pelo novo coronavírus no idoso: scoping review
Autor(es)	Darlene Mara dos Santos Tavares, Nayara Gomes Nunes Oliveira, Marina Aleixo Diniz-Rezende, Graziele Ribeiro Bitencourt, Marcos Barragan da Silva, Alisson Fernandes Bolina
Resumo	Objetivo: mapear o conhecimento científico sobre a COVID-19 no idoso. Método: revisão da literatura do tipo scoping review. Realizou-se uma busca nas bases de dados PubMed, CINAHL, Web of Science e LILACS. Incluíram-se os artigos originais que responderam à questão norteadora: quais os conhecimentos científicos disponíveis no mundo sobre a COVID-19 no idoso? Resultados: foram incluídos 31 artigos, a maioria realizada na China (n=23) e de delineamento retrospectivo (n=13) e estudos de casos/série de casos (n=13). Com base nos achados, emergiram seis categorias temáticas: sinais e sintomas clínicos (n=12); outras informações (n=9); desfechos adversos/complicações decorrentes da COVID-19 (n=8); relação da idade e maior gravidade da COVID-19 (n=8); variáveis relacionadas ao óbito pela COVID-19 (n=8); achados diagnósticos (n=8). Conclusão: os achados reforçam a maior vulnerabilidade do idoso ao agravamento da COVID-19, bem como as complicações decorrentes da doença, incluindo a maior ocorrência de óbito.
Referências	TAVARES, D. M. dos S. <i>et al.</i> Conhecimento científico sobre infecções pelo novo coronavírus no idoso: <i>scoping review</i> . Revista Brasileira de Enfermagem , [Brasil], v. 74, 14 abr. 2021. DOI: 10.1590/0034-7167-2020-0938. Disponível em: https://doi.org/10.1590/0034-7167-2020-0938. Acesso em: 30 jul. 2021.
Fonte	https://www.scielo.br/j/reben/a/6dp6679FhVGr3hntGdfdSfr/?format=pdf⟨=pt



Título	Imunopatologia do SARS-CoV-2 e análise dos imunizantes no território brasileiro
Autor(es)	Igor Gomes de Araújo, Erivan de Souza Oliveira, Francinaldo Filho Castro Monteiro, Valessa Rios Pires, Arlandia Cristina Lima Nobre de Morais
Resumo	O SARS-COV-2 pertence à família <i>Coronaviridae</i> e é responsável pela doença denominada de COVID-19, considerada um problema de saúde pública global. O presente estudo teve como objetivo descrever a imunopatologia da COVID-19 e as vacinas disponíveis atualmente. Trata-se de um estudo de análise descritiva e com abordagem qualitativa, sobre a imunopatologia da COVID-19 e as vacinas disponíveis atualmente. No Brasil, a Agência Nacional de Vigilância Sanitária aprovou em caráter emergencial no dia 17 de janeiro de 2021, os imunizantes CoronaVac do laboratório Chinês SINOVAC em parceria com o Instituto Butantan, localizado no estado de São Paulo, e a AstraZeneca da Universidade de Oxford na Inglaterra em parceria com a Fiocruz no Rio de Janeiro. Ressalta-se que ainda possuem outras vacinas desenvolvidas que aguardam aprovação emergencial pela ANVISA. Entretanto, no contexto atual tornam-se viáveis ao clima brasileiro as que possuem armazenamentos de 2 à 8ºC, comumente para os imunizantes de outras doenças sem a necessidade de ultracongeladores. Conclui-se que as vacinas são garantias de eficácia imunológica para a proteção da população contra a doença.
Referências	ARAÚJO, I. G. de <i>et al.</i> Imunopatologia do SARS-CoV-2 e análise dos imunizantes no território brasileiro. Revista de Casos e Consultoria , [Brasil], v. 12, n. 1, p. e23990–e23990, 26 maio 2021. Disponível em: https://periodicos.ufrn.br/casoseconsultoria/article/view/23990 . Acesso em: 30 jul. 2021.
Fonte	https://periodicos.ufrn.br/casoseconsultoria/article/view/23990



Título	O que a população sabe sobre SARS-CoV-2/COVID-19: prevalência e fatores associados / What the population knows about SARS-CoV-2/COVID-19: prevalence and associated factors
Autor(es)	Amauri Braga Simonetti, Gustavo Olszanski Acrani, Christian Pavan do Amaral, Tiago Teixeira Simon, Julio Cesar Stobbe, Ivana Loraine Lindemann
Resumo	Introdução: desde o início da pandemia de COVID-19 a população tem sido alertada por instituições públicas e privadas a respeito das medidas de proteção individual e coletiva. Objetivo: verificar a prevalência e os fatores associados a diferentes aspectos do conhecimento da população sobre SARS-COV-2/COVID-19. Métodos: inquérito transversal com coleta online de dados sociodemográficos, de saúde, comportamento e conhecimento. Amostrados 920 participantes, sendo prevalências de conhecimento e variáveis associadas a) sinais/sintomas 56%, cor, ocupação, profissional/ estudante da saúde, idosos no domicílio, prevenção, vacinação contra gripe e conhecimento sobre quem faz parte do grupo de risco, quando procurar atendimento e transmissão; b) quando procurar o serviço de saúde 34%, ocupação, idosos no domicílio, autopercepção negativa da saúde, grupo de risco, sinais/sintomas, prevenção, vacinação contra gripe e conhecimento sobre quem faz parte do grupo de risco; c) transmissão 70%, escolaridade, ocupação, profissional/estudante da saúde, grupo de risco, prevenção, vacinação contra gripe, conhecimento sobre quem faz parte do grupo de risco e sobre sinais/sintomas; d) quem faz parte do grupo de risco, prevenção, vacinados contra gripe e que sabem que fazem parte do grupo de risco, sobre sinais/sintomas, quando procurar atendimento e transmissão. Resultados: houve boa compreensão dos participantes sobre as medidas preventivas e aspectos relacionados ao agente etiológico e à doença, como conhecimento sobre sintomatologia, formas de transmissão e quem faz parte do grupo de risco, com provável influência pela alta escolaridade da amostra e da ampla exposição às informações divulgadas por instituições públicas e meios de comunicação. Conclusão: há necessidade de serem intensificadas as informações por órgãos oficiais para melhor esclarecimento da população a fim de reduzir o impacto da pandemia.
Referências	SIMONETTI, A. B. <i>et al.</i> O que a população sabe sobre SARS-CoV-2/COVID-19: prevalência e fatores associados / What the population knows about SARS-CoV-2/COVID-19: prevalence and associated factors. Brazilian Journal of Health Review , [Brasil], v. 4, n. 1, p. 255–271, 7 jul. 2021. DOI: 10.34119/bjhrv4n1-022. Disponível em: https://doi.org/10.34119/bjhrv4n1-022 . Acesso em: 30 jul. 2021.
Fonte	https://www.brazilianjournals.com/index.php/BJHR/article/view/22669



Título	Covid-19: cases of delta variant rise by 79%, but rate of growth slows
Autor(es)	Adrian O'Dowd
Resumo	Almost all new cases of covid-19 are the delta variant but new data suggests that while case numbers are increasing, the rate of growth is slower than a week ago. Public Health England's weekly covid-19 variant cases data1 show that numbers of the delta variant in the UK have risen by 33 630 since last week to a total of 75 953, a 79% increase. The most recent data show 99% of sequenced and genotyped cases across the country are the delta variant. The data also show that 58 830 positive test results were recorded between 11 and 17 June which represents an increase of 33.7% on the previous seven days. Public Health England said that the data showed there was a
Referências	O'DOWD, A. Covid-19: Cases of delta variant rise by 79%, but rate of growth slows. BMJ , [United Kingdom], v. 373, p. n1596, June 21, 2021. DOI: 10.1136/bmj.n1596. Disponível em: https://doi.org/10.1136/bmj.n1596 . Acesso em: 30 jul. 2021.
Fonte	https://www.bmj.com/content/bmj/373/bmj.n1596.full.pdf



Título	Estimating and mitigating the risk of COVID-19 epidemic rebound associated with reopening of international borders in Vietnam: a modelling study
Autor(es)	Quang D Pham, Robyn M Stuart, Thuong V Nguyen, Quang C Luong, Quang D Tran, Thai Q Pham, Lan T Phan, Tan Q Dang, Duong N Tran, Hung T Do, Dina Mistry, Daniel J Klein, Romesh G Abeysuriya, Assaf P Oron, Cliff C Kerr
Resumo	Vietnam has emerged as one of the world's leading success stories in responding to COVID-19. After a prolonged period of little to no transmission, there was an outbreak of unknown source in July, 2020, in the Da Nang region, but the outbreak was quickly suppressed. We aimed to use epidemiological, behavioural, demographic, and policy data from the COVID-19 outbreak in Da Nang to calibrate an agent-based model of COVID-19 transmission for Vietnam, and to estimate the risk of future outbreaks associated with reopening of international borders in the country.
Referências	QUANG, D Pham D. <i>et al.</i> Estimating and mitigating the risk of COVID-19 epidemic rebound associated with reopening of international borders in Vietnam: a modelling study. The Lancet. Global health , [Netherlands], v. 9, n. 7, p. e916–e924, July 1, 2021. DOI: 10.1016/S2214-109X(21)00103-0. Disponível em: https://doi.org/10.1016/S2214-109X(21)00103-0 . Acesso em: 05 jul. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2214-109X%2821%2900103-0



Título	Centenarians and extremely old people living with frailty can elicit durable SARS-CoV-2 spike specific IgG antibodies with virus neutralization functions following virus infection as determined by serological study
Autor(es)	Mary K. Foley, Samuel D. Searleb, Ali Toloue, Ryan Booth, Alec Falkenham, Darryl Falzarano, Salvatore Rubino, Magen E. Francis, Mara McNeil, Christopher Richardsoa, Jason LeBlanc, Sharon Oldford, Volker Gerdts, Melissa K. Andrew, Shelly A. McNeil, Barry Clarke, Kenneth Rockwood, David J. Kelvin, Alyson A. Kelvin
	The SARS-CoV-2 (Severe Acute Respiratory Syndrome coronavirus 2) has led to more than 165 million COVID-19 cases and >3.4 million deaths worldwide. Epidemiological analysis has revealed that the risk of developing severe COVID-19 increases with age. Despite a disproportionate number of older individuals and long-term care facilities being affected by SARS-CoV-2 and COVID-19, very little is understood about the immune responses and development of humoral immunity in the extremely old person after SARS-CoV-2 infection. Here we conducted a serological study to investigate the development of humoral immunity in centenarians
Resumo	following a SARS-CoV-2 outbreak in a long-term care facility. Methods: Extreme aged individuals and centenarians who were residents in a long-term care facility and infected with or exposed to SARS-CoV-2 were investigated between April and June 2020 for the development of antibodies to SARS-CoV-2. Blood samples were collected from positive and bystander individuals 30 and 60 days after original diagnosis of SARS-CoV-2 infection. Plasma was used to quantify IgG, IgA, and IgM isotypes and subsequent subclasses of antibodies specific for SARS-CoV-2 spike protein. The function of antispike was then assessed by virus neutralization assays against the native SARS-CoV-2 virus. Findings: Fifteen long-term care residents were investigated for SARS-CoV-2 infection. All individuals had a Clinical Frailty scale score 5 and were of extreme older age or were centenarians. Six women with a median age of 98.8 years tested positive for SARS-CoV-2. Anti-spike IgG antibody titers were the highest titers observed in our cohort with all IgG positive individuals having virus neutralization ability. Additionally, 5 out of the 6 positive participants had a robust IgA anti-
	SARS-CoV-2 response. In all 5, antibodies were detected after 60 days from initial diagnosis.



Referências	FOLEY, M. K. <i>et al.</i> Centenarians and extremely old people living with frailty can elicit durable SARS-CoV-2 spike specific IgG antibodies with virus neutralization functions following virus infection as determined by serological study. EClinicalMedicine , [Netherlands], p. 100975, June 26, 2021. DOI: 10.1016/j.eclinm.2021.100975. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100975 . Acesso em: 5 jul. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900255-8



Título	Different spreading dynamics throughout Germany during the second wave of the COVID-19 pandemic: a time series study based on national surveillance data
Autor(es)	Andreas Schuppert , Katja Polotzek , Jochen Schmitt , Reinhard Busse , Jens Karschau , Christian Karagiannidis
Resumo	The second wave of the COVID-19 pandemic led to substantial differences in incidence rates across Germany. Methods: Assumption-free k-nearest neighbour clustering from the principal component analysis of weekly incidence rates of German counties groups similar spreading behaviour. Different spreading dynamics was analysed by the derivative plots of the temporal evolution of tuples [x(t),x'(t)] of weekly incidence rates and their derivatives. The effectiveness of the different shutdown measures in Germany during the second wave is assessed by the difference of weekly incidences before and after the respective time periods. Findings: The implementation of non-pharmaceutical interventions of different extents resulted in four distinct time periods of complex, spatially diverse, and age-related spreading patterns during the second wave of the COVID-19 pandemic in Germany. Clustering gave three regions of coincident spreading characteristics. October 2020 showed a nationwide exponential growth of weekly incidence rates with a doubling time of 10 days. A partial shutdown during November 2020 decreased the overall infection rates by 20 40% with a plateau-like behaviour in northern and southwestern Germany. The eastern parts exhibited a further near-linear growth by 30 80%. Allover the incidence rates among people above 60 years still increased by 15 35% during partial shutdown measures. Only an extended shutdown led to a substantial decrease in incidence rates. These measures decreased the numbers among all age groups and in all regions by 15 45%. This decline until January 2021 was about -125 times the October 2020 growth rates with a strong correlation of -096. Interpretation: Three regional groups with different dynamics and different degrees of effectiveness of the applied measures were identified. The partial shutdown was moderately effective and at most stopped the exponential growth, but the spread remained partly plateau-like and regionally continued to grow in a nearly linear fashion. Only the extended shutdo
Referências	SCHUPPERT, A. et al. Different spreading dynamics throughout Germany during the second wave of the COVID-19 pandemic: a time series study based on national surveillance data. The Lancet regional health. Europe , [United Kingdom], v. 6, p. 100151, July 1, 2021. DOI: 10.1016/j.lanepe.2021.100151. Disponível em: https://doi.org/10.1016/j.lanepe.2021.100151 . Acesso em: 5 jul. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900128-9



Título	Report Dissects "Devastating Impact" of COVID-19 in Nursing Homes in 2020
Autor(es)	Joan Stephenson
Resumo	More than 2 in 5 Medicare beneficiaries in nursing homes and skilled nursing facilities were diagnosed with COVID-19 or likely COVID-19 in 2020, according to a new report from the Office of Inspector General (OIG) of the Department of Health and Human Services, with cases spiking during surges in April and December. []
Referências	STEPHENSON, J. Report Dissects "Devastating Impact" of COVID-19 in Nursing Homes in 2020. JAMA health forum , [United States], v. 2, n. 6, p. e212226, June 29, 2021. DOI: 10.1001/jamahealthforum.2021.2226. Disponível em: https://doi.org/10.1001/jamahealthforum.2021.2226 . Acesso em: 5 jul. 2021.
Fonte	https://jamanetwork.com/journals/jama-health-forum/fullarticle/2781716



Título	Trends in Respiratory Virus Infections During the COVID-19 Pandemic in Singapore, 2020
Autor(es)	Wei YeeWan, Koh Cheng Thoon, Liat Hui Loo, Kian Sing Chan, Lynette L. E. Oon, Adaikalavan Ramasamy, Matthias Maiwald
Resumo	Introduction The COVID-19 pandemic brought unprecedented challenges to the world. Many jurisdictions implemented control measures, such as border closures, lockdowns, school and business closures, travel restrictions, mask wearing, and social distancing. This was associated with changes in the prevalence of other respiratory viruses, predominantly influenza viruses1,2 but others as well.3 Singapore represents a unique setting that is credited with having a successful COVID-19 response. It went through different response phases, from prelockdown (pandemic level 3) to a full lockdown (known as circuit breaker), followed by a phased reopening, during which schools and businesses reopened but social distancing measures and universal mask wearing remained in place (eTable in the Supplement). Our aim in this study was to assess the associated changes in respiratory virus prevalence in 2020 compared with the prepandemic year 2019.
Referências	WEI, Yee Wan . <i>et al.</i> Trends in Respiratory Virus Infections During the COVID-19 Pandemic in Singapore, 2020. JAMA network open , [United States], v. 4, n. 6, p. e2115973, June 28, 2021. DOI: 10.1001/jamanetworkopen.2021.15973. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.15973 . Acesso em: 5 jul. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781461



Título	Medidas de contenção de tipo lockdown para prevenção e controle da COVID-19: estudo ecológico descritivo, com dados da África do Sul, Alemanha, Brasil, Espanha, Estados Unidos, Itália e Nova Zelândia, fevereiro a agosto de 2020
Autor(es)	Gbènankpon Mathias Houvèssou, Tatiana Porto de Souza, Mariângela Freitas da Silveira
Resumo	Objetivo: Descrever as medidas de contenção de tipo lockdown e a incidência da COVID-19 em sete países: África do Sul, Alemanha, Brasil, Espanha, Estados Unidos, Itália e Nova Zelândia. Métodos: Estudo ecológico descritivo, com dados da incidência diária dos casos confirmados de COVID-19 entre 22 de fevereiro e 31 de agosto de 2020, e informações sobre medidas de lockdown implementadas pelo governo de cada país. Resultados: Os países que implementaram lockdown tiveram diminuição da incidência diária de COVID-19 (casos por milhão de habitantes) no período de três semanas, a contar do início da medida: África do Sul (3,7 a 1,7), Alemanha (37,5 a 33,7), Espanha (176,3 a 82,0), Itália (92,0 a 52,1) e Nova Zelândia (7,5 a 1,7). O Brasil e os Estados Unidos, que não implementaram lockdown, não apresentaram uma diminuição considerável. Conclusão: Após a implementação de lockdown, houve uma diminuição considerável do número de casos confirmados.
Referências	HOUVÈSSOU, G. M.; SOUZA, T. P. de; SILVEIRA, M. F. da. Medidas de contenção de tipo <i>lockdown</i> para prevenção e controle da COVID-19: estudo ecológico descritivo, com dados da África do Sul, Alemanha, Brasil, Espanha, Estados Unidos, Itália e Nova Zelândia, fevereiro a agosto de 2020. Epidemiol. Serv. Saúde , Brasília, DF, v. 30, n. 1, p. e2020513, 2021. DOI: 10.1590/S1679-49742021000100025. Disponível em: https://doi.org/10.1590/S1679-49742021000100025. Acesso em: 1 jul. 2021.
Fonte	https://www.scielo.br/j/ress/a/svBDXkw7M4HLDCMVDxT835R/?format=pdf⟨=pt



Título	Estratégias de enfrentamento da COVID-19 no cárcere: relato de experiência
Autor(es)	Sabrina Azevedo Wagner Benetti, Darlen Grasieli Bugs, Carolina Renz Pretto, Rafaela Andolhe, Maclovia Ammar, Eniva Miladi Fernandes Stumm, Cíntia Beatriz Goi
Resumo	Objetivo: relatar a experiência da implantação de medidas preventivas à COVID-19 em uma unidade do sistema prisional. Método: relato de experiência construído a partir da vivência de uma equipe de saúde de uma unidade prisional e de documentos institucionais, no período de março a junho de 2020. Resultados: com o intuito de evitar ou reduzir a ocorrência de infecção e de surtos graves da COVID-19 na penitenciária, foram implantadas medidas preventivas de amplo espectro: procedimentos para triagem e fluxos de atendimento para os presos ingressantes e para os detentos da unidade que apresentam sintomas; normas, orientações de prevenção e recomendações de conduta para visitas e outras pessoas autorizadas a entrar na unidade prisional; atenção ao servidor com sintomas; organização de ciclos informativos direcionados aos servidores; uso de canais de comunicação com representantes de galeria das pessoas privadas de liberdade; implantação de medidas sanitárias gerais na unidade prisional; sensibilização de presos para vacinação contra a influenza. Discussão: considerando as condições precárias que favorecem a disseminação da COVID-19 em unidades prisionais, a experiência mostrou a importância da implantação de medidas preventivas para evitar a contaminação e transmissão da doença nesse ambiente, e da implementação de ações educativas e normativas voltadas para esse segmento da população.
Referências	BENETTI, S. A. W. et al. Estratégias de enfrentamento da COVID-19 no cárcere: relato de experiência. Revista Brasielira de Saúde Ocupacional, [São Paulo], v. 46, jan. 2021. DOI: 10.1590/2317-6369000031020. Disponível em: https://doi.org/10.1590/2317-6369000031020. Acesso em: 1 jul. 2021.
Fonte	https://www.scielo.br/j/rbso/a/xktcyDpNGYgNQXKHVb4b6Ky/?format=pdf⟨=pt



Título	Atuação do Departamento Penitenciário Nacional na Pandemia da COVID-19 com Foco na Prevenção e na Atenção à Saúde no Sistema Prisional
Autor(es)	Deciane Figueiredo Mafra, Letícia Maranhão Matos, Pérolla Melo Goulart Gomes, Jairo César de Carvalho Junior, Lunna Luz Costa
Resumo	O Departamento Penitenciário Nacional (Depen), em razão de suas atribuições frente ao sistema penitenciário brasileiro passou a acompanhar a evolução do novo coronavírus e seu impacto na gestão dos estabelecimentos penais. Nesse aspecto, pretende-se relatar, a partir do surgimento da COVID-19 no Brasil, as medidas adotadas pelo Depen, especialmente pela Coordenação de Saúde em conjunto com diversos órgãos, visando postergar e minimizar os impactos da nova doença no contexto prisional. A vulnerabilidade do sistema prisional dos Estados e do Distrito Federal é fator determinante para a tomada de decisão a respeito do enfrentamento da COVID-19. Nesse sentido as ações promovidas foram orientadas a partir dos eixos de produção de normativos e orientações técnicas em apoio aos gestores de saúde dos sistemas prisionais estaduais; compra e doação de insumos; desenvolvimento de ações de educação em saúde. Todas as ações destinaram-se às pessoas presas, aos servidores penitenciários, aos familiares e às demais pessoas que interagem com o sistema prisional.
Referências	MAFRA, D. F. <i>et al.</i> Atuação do Departamento Penitenciário Nacional na Pandemia da COVID-19 com Foco na Prevenção e na Atenção à Saúde no Sistema Prisional: Coordenação de Saúde. Revista Brasileira de Execução Penal , Brasil, v. 2, n. 1, p. 109–132, 8 abr. 2021. Disponível em: http://rbepdepen.depen.gov.br/index.php/RBEP/article/view/333. Acesso em: 1 jul. 2021.
Fonte	http://rbepdepen.depen.gov.br/index.php/RBEP/article/view/333/155



Título	SARS-CoV-2 Infection Dynamics in Children and Household Contacts in a Slum in Rio de Janeiro
Autor(es)	Pâmella Lugon, Trevon Fuller, Luana Damasceno, Guilherme Calvet, Paola Cristina Resende, Aline Rocha Matos, Tulio Machado Fumian, Fábio Correia Malta, Aline Dessimoni Salgado, Fernanda Christina Morone Fernandes, Liege Maria Abreu de Carvalho, Lusiele Guaraldo, Leonardo Bastos, Oswaldo Gonçalves Cruz, James Whitworth, Chris Smith, Karin Nielsen-Saines, Marilda Siqueira, Marilia Sa Carvalho and Patricia Brasil
Resumo	OBJECTIVES: To investigate the dynamics of severe acute respiratory syndrome coronavirus 2 abstract (SARS-CoV-2) infection in a vulnerable population of children and their household contacts. METHODS: SARS-CoV-2 reverse transcription polymerase chain reaction assays and coronavirus disease 2019 (COVID-19) immunoglobulin G serology tests were performed in children and their household contacts after enrollment during primary health care clinic visits. Participants were followed prospectively with subsequent specimens collected through household visits in Manguinhos, an impoverished urban slum (a favela) in Rio de Janeiro at 1, 2, and 4 weeks and quarterly post study enrollment. RESULTS: Six hundred sixty-seven participants from 259 households were enrolled from May to September 2020. This included 323 children (0–13 years), 54 adolescents (14–19 years), and 290 adults. Forty-five (13.9%) children had positive test results for SARS-CoV-2 polymerase chain reaction. SARS-CoV-2 infection was most frequent in children aged.
Referências	LUGON, P. et al. SARS-CoV-2 Infection Dynamics in Children and Household Contacts in a Slum in Rio de Janeiro. Pediatrics , [United States], v. 148, n. 1, p. e2021050182, July 2021. DOI: 10.1542/peds.2021-050182. Disponível em: https://doi.org/10.1542/peds.2021-050182 . Acesso em: 1 jul. 2021.
Fonte	https://pediatrics.aappublications.org/mwg-internal/de5fs23hu73ds/progress?id=uPF0vo5X9qdWJTR EXm6HOpBktGa-r2YOZwwTN96o3g,&dl



	SARS-CoV-2 outbreak in a synagogue community: longevity and strength of anti-SARS-CoV-2 IgG responses
Título	
Autor(es)	Yael Gozlan, Stephen Reingold, Ravit Koren, Osnat Halpern, Gili Regev-Yochay, Carmit Cohen, Asaf Bibe3, Orit Picard, Ella Mendelson, Yaniv Lustig, Orna Mo
Resumo	SARS-CoV-2 pandemic is still ongoing along with the global vaccination efforts against it. Here we aimed to understand the longevity and strength of anti-SARS-CoV-2 IgG responses in a small community (n=283) six months following local SARS-COV-2 outbreak in March 2020. Three serological assays were compared and neutralization capability was also determined. Overall 16.6% (47/283) of the participants were seropositive and 89.4% (42/47) of the IgG positives had neutralizing antibodies. Most of the symptomatic individuals confirmed as PCR positive during the outbreak were seropositive (30/32, 93.8%) and 33.3% of the individuals who quarantined with a PCR confirmed patient had antibodies. Serological assays comparison revealed that Architect (Abbott) targeting the N protein LIASON® This is an Open Access article, distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives licence (http://creativecommons.org/licenses/by-nc-nd/4.0/), which permits non-commercial reuse, distribution, and reproduction in any medium, provided the original work is unaltered and is properly cited. The written permission of Cambridge University Press must be obtained for commercial reuse or in order to create a derivative work.
Referências	GOZLAN, Y. <i>et al.</i> SARS-CoV-2 outbreak in a synagogue community: longevity and strength of anti-SARS-CoV-2 IgG responses. Epidemiology and infection , [United Kingdom.], p. 1–14, June, 24, 2021. DOI: 10.1017/S0950268821001369. Disponível em: https://doi.org/10.1017/S0950268821001369 . Acesso em: 1 jul. 2021.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/sarscov2-outbreak-in-a-synagogue-community-longevity-and-strength-of-antisarscov2-igg-responses/E4D97EA12134BB46E3102B890F145D01



Título	Predicting asymptomatic SARS-CoV-2 infection rates of inpatients: a time series analysis
Autor(es)	Frida Rivera, Kwang Woo Ahn, L. Silvia Munoz-Price
Resumo	Asymptomatic SARS-CoV-2 infections are often difficult to identify as widespread surveillance has not been the norm. Using time-series analysis, we examined if COVID-19-rates at the county-level could predict positivity rates among asymptomatic-patients at a large Health System. Asymptomatic-positivity rates at the system-level and county-level COVID-19-rates failed to show an association.
Referências	RIVERA, F.; AHN, K. W.; MUNOZ-PRICE, L. S. Predicting asymptomatic SARS-CoV-2 infection rates of inpatients: a time series analysis. Infection control and hospital epidemiology , [United Kingdom], p. 1–11, June 24, 2021. DOI: 10.1017/ice.2021.282. Disponível em: https://doi.org/10.1017/ice.2021.282 . Acesso em: 1 jul. 2021.
Fonte	https://www.cambridge.org/core/journals/infection-control-and-hospital-epidemiology/article/predicting-asymptomatic-sarscov2-infection-rates-of-inpatients-a-time-series-analysis/BFB2A1ADB4B74989F787DD9D54D9D843



Título	Cardiac manifestations and short-term outcomes of Multisystem Inflammatory Syndrome in Middle Eastern Children during the COVID-19 pandemic: a case series
Autor(es)	Theresia E. Tannoury, Ziad R. Bulbul, Fadi F. Bitar
Resumo	We herein report on a series of 4 patients presented to our tertiary care center with features of multisystem inflammatory syndrome in children (MIS-C) and cardiac involvement. Two of our patients had recent exposure to a COVID-19 positive patient, 1 had recent documented infection, and another had no known positive contact. All patients tested positive for Severe acute respiratory syndrome coronavirus 2 Immunoglobulin G (SARS-CoV-2 IgG) antibody at the time of presentation. All of them fulfilled the diagnostic criteria according to World Health Organization Centers for Disease Control or the British guidelines for MISC (fever for ≥3 days, multisystem involvement (at least 2), elevated markers of inflammation and no other alternative diagnosis). (1, 2,3)Cardiac involvement was variable ranging from isolated ectasia of the coronary arteries to full blown pan-carditis: severe biventricular dysfunction, multi-valvar involvement, and pericardial effusion.All our patient received Intravenous immunoglobulin IVIG (2 g/kg), methylprednisolone, and aspirin and some required inotropic support and ICU admission.Remarkably, all our patients showed significant improvement in their cardiac disease within few days as evident on serial echocardiographic evaluation. However, we stress the need for long term follow up as one of our patients demonstrated mild LV myocardial scarring as evident by gadolinium late enhancement on a Cardiac MRI.
Referências	TANNOURY, T. E.; BULBUL, Z. R.; BITAR, F. F. Cardiac manifestations and short-term outcomes of Multisystem Inflammatory Syndrome in Middle Eastern Children during the COVID-19 pandemic: A case series. Cardiology in the young , [United Kingdom], , p. 1–13, undefined/ed. DOI: 10.1017/S1047951121002614. Disponível em: https://doi.org/10.1017/S1047951121002614 . Acesso em: 1 jul. 2021.
Fonte	https://www.cambridge.org/core/journals/cardiology-in-the-young/article/cardiac-manifestations-and-shortterm-outcomes-of-multisystem-inflammatory-syndrome-in-middle-eastern-children-during-the-covid19-pandemic-a-case-series/DDA8252AFD0DDCBE7F488156D4E0B3BB



Título	Factors Associated With Racial Differences in Deaths Among Nursing Home Residents With COVID-19 Infection in the US
Autor(es)	Rebecca J. Gorges, R. Tamara Konetzka
Resumo	OBJECTIVE To describe differences in the number of COVID-19 deaths by nursing home racial composition and examine the factors associated with these differences. DESIGN, SETTING, AND PARTICIPANTS This cross-sectional study of 13 312 nursing homes in the US used the Nursing Home COVID-19 Public File from the Centers for Medicare and Medicaid Services, which contains COVID-19 cases and deaths among nursing home residents as self-reported by nursing homes beginning between January 1, 2020, and May 24, 2020, and ending on September 13, 2020. Data were analyzed from July 28 to December 18, 2020. EXPOSURES Confirmed or suspected COVID-19 infection. Confirmed cases were defined as COVID-19 infection confirmed by a diagnostic laboratory test. Suspected cases were defined as signs and/or symptoms of COVID-19 infection or patient-specific transmission-based precautions for COVID-19 infection. MAIN OUTCOMES AND MEASURES Deaths associated with COVID-19 among nursing home residents. Death counts were compared by nursing home racial composition, which was measured as the proportion of White residents.RESULTS Among 13 312 nursing homes included in the study, the overall mean (SD) age of residents was 79.5 (6.7) years. A total of 51 606 COVID-19—associated deaths among residents were reported, with a mean (SD) of 3.9 (8.0) deaths per facility. The mean (SD) number of deaths in nursing homes with the lowest proportion of White residents (quintile 1) vs nursing homes with the highest proportions of White residents (quintile 5) were 5.6 (9.2) and 1.7 (4.8), respectively. Facilities in quintile 1 experienced a mean (SE) of 3.9 (0.2) more deaths than those in quintile 5) were 5.6 (9.2) and 1.7 (4.8), respectively. Facilities in quintile 1 experienced a mean (SE) of 3.9 (0.2) more deaths than those in quintile 5) were 5.6 (9.2) and 1.7 (4.8) respectively. Facilities in quintile 1 experienced a mean (SE) of 3.9 (0.2) more deaths than those in quintile 5 and the man (SE) difference between these 2 nursing home groups to 2.2 (0.2) death



Referências	GORGES, R. J.; KONETZKA, R. T. Factors Associated With Racial Differences in Deaths Among Nursing Home Residents With COVID-19 Infection in the US. JAMA network open , [United States], v. 4, n. 2, p. e2037431, Feb. 10, 2021. DOI: 10.1001/jamanetworkopen.2020.37431. Disponível em: https://doi.org/10.1001/jamanetworkopen.2020.37431 . Acesso em: 1 jul. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2776102?utm_source=TrendMD&utm_medium=cpc&utm_campaign=JAMA_N_etwork_Open_TrendMD_0



Título	Association of the COVID-19 Pandemic With Estimated Life Expectancy by Race/Ethnicity in the United States, 2020
Autor(es)	Theresa Andrasfay, Noreen Goldman
Resumo	Introduction In October 2020,we estimated the impact of COVID-19 on 2020 period life expectancy at birth in the US by race/ethnicity using observed COVID-19 deaths from February 1, 2020, to October 3, 2020, and projected COVID-19 deaths through the remainder of 2020 under 3 scenarios (low, medium, and high COVID-19 mortality).1 Under the medium scenario, we projected a decline in 2020 US life expectancy of 1.13 years for the total population, 0.68 years for the White population, 2.10 years for the Black population, and 3.05 years for the Latino population.1 This study updates these estimates with observed deaths for all of 2020 and more recent prepandemic mortality conditions.
Referências	ANDRASFAY, T.; GOLDMAN, N. Association of the COVID-19 Pandemic With Estimated Life Expectancy by Race/Ethnicity in the United States, 2020. JAMA network open , [United States], v. 4, n. 6, p. e2114520, June 24, 2021. DOI: 10.1001/jamanetworkopen.2021.14520. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.14520 . Acesso em: 1 jul. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781320



Título	US Trends in COVID-19–Associated Hospitalization and Mortality Rates Befo
Autor(es)	Sumedha Gupta, Archelle Georgiou, Soumya Sen, et al
Resumo	OBJECTIVE To investigate changes in COVID-19—related hospitalizations and mortality trends after reopening of US state conomies. DESIGN, SETTING, AND PARTICIPANTS Using an interrupted time series approach, this crosssectional study examined trends in per-capita COVID-19—related hospitalizations and deaths before and after state reopenings between April 16 and July 31, 2020. Daily state-level data from the University of Minnesota COVID-19 Hospitalization Tracking Project on COVID-19—related hospitalizations and deaths across 47 states were used in the analysis. EXPOSURES Dates that states reopened their economies. MAIN OUTCOMES AND MEASURES State-day observations of COVID-19—related hospitalizations and COVID-19—related new deaths per 100 000 people. RESULTS The study included 3686 state-day observations of hospitalizations and 3945 state-day observations of deaths. On the day of reopening, the mean number of hospitalizations per 100 000 people was 17.69 (95% CI, 12.54-22.84) and the mean number of daily new deaths per 100 000 people was 0.395 (95% CI, 0.255-0.536). Both outcomes displayed flat trends before reopening, but they started trending upward thereafter. Relative to the hospitalizations trend in the period before state eopenings, the postperiod trend was higher by 1.607 per 100 000 people (95% CI, 0.203-3.011; P = .03). This estimate implied that nationwide reopenings were associated with 5319 additional people hospitalized for COVID-19 each day. The trend in new deaths after reopening was also positive (0.0376 per 100 000 people; 95% CI, 0.0038-0.0715; P = .03), but the change in mortality trend was not significant (0.0443; 95% CI, -0.0048 to 0.0933; P = .08).CONCLUSIONS AND RELEVANCE In this cross-sectional study conducted over a 3.5-month period across 47 US states, data on the association of hospitalizations and mortality with state reopening policies may provide input to state projections of the pandemic as policy makers continue to balance public health protections with sustaining economic activit
Referências	GUPTA, S. <i>et al.</i> US Trends in COVID-19–Associated Hospitalization and Mortality Rates Before and After Reopening Economies. JAMA health forum , [United States], v. 2, n. 6, p. e211262, June 25, 2021. DOI: 10.1001/jamahealthforum.2021.1262. Disponível em: https://doi.org/10.1001/jamahealthforum.2021.1262 . Acesso em: 1 jul. 2021.
Fonte	https://jamanetwork.com/journals/jama-health-forum/fullarticle/2781505



Título	SARS-CoV-2 Transmission From People Without COVID-19 Symptoms
Autor(es)	Michael A. Johansson, Talia M. Quandelacy, Sarah Kada, Pragati Venkata Prasad, Molly Steele, John T. Brooks, Rachel B. Slayton, ; Matthew Biggerstaff, Jay C. Butler
Resumo	Importance Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the etiology of coronavirus disease 2019 (COVID-19), is readily transmitted person to person. Optimal control of COVID-19 depends on directing resources and health messaging to mitigation efforts that are most likely to prevent transmission, but the relative importance of such measures has been disputed. Objective To assess the proportion of SARS-CoV-2 transmissions in the community that likely occur from persons without symptoms. Design, Setting, and Participants This decision analytical model assessed the relative amount of transmission from presymptomatic, never symptomatic, and symptomatic individuals across a range of scenarios in which the proportion of transmission from people who never develop symptoms (ie, remain asymptomatic) and the infectious period were varied according to published best estimates. For all estimates, data from a meta-analysis was used to set the incubation period at a median of 5 days. The infectious period duration was maintained at 10 days, and peak infectiousness was varied between 3 and 7 days (-2 and +2 days relative to the median incubation period). The overall proportion of SARS-CoV-2 was varied between 0% and 70% to assess a wide range of possible proportions. Main Outcomes and Measures Level of transmission of SARS-CoV-2 from presymptomatic, never symptomatic, and symptomatic individuals. Results The baseline assumptions for the model were that peak infectiousness occurred at the median of symptom onset and that 30% of individuals with infection never develop symptoms and are 75% as infectious as those who do develop symptoms. Combined, these baseline assumptions imply that persons with infection who never develop symptoms may account for approximately 24% of all transmission. In this base case, 59% of all transmission came from asymptomatic transmission, comprising 35% from presymptomatic individuals and 24% from individuals who never develop symptoms. Under a broad range of values for each of these



	analytical model of multiple scenarios of proportions of asymptomatic individuals with COVID-19 and infectious periods, transmission from asymptomatic individuals was estimated to account for more than half of all transmissions. In addition to identification and isolation of persons with symptomatic COVID-19, effective control of spread will require reducing the risk of transmission from people with infection who do not have symptoms. These findings suggest that measures such as wearing masks, hand hygiene, social distancing, and strategic testing of people who are not ill will be foundational to slowing the spread of COVID-19 until safe and effective vaccines are available and widely used.
Referências	JOHANSSON, M. A. <i>et al.</i> SARS-CoV-2 Transmission From People Without COVID-19 Symptoms. JAMA network open , [United States], v. 4, n. 1, p. e2035057, Jan. 7, 2021. DOI: 10.1001/jamanetworkopen.2020.35057. Disponível em: https://doi.org/10.1001/jamanetworkopen.2020.35057 . Acesso em: 1 jul. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2774707



Título	Risk of hospitalisation associated with infection with SARS-CoV-2 lineage B.1.1.7 in Denmark: an observational cohort study
Autor(es)	Peter Bager, Jan Wohlfahrt, Jannik Fonager, Morten Rasmussen, Mads Albertsen, Thomas Yssing Michaelsen, Camilla Holten Møller, Steen Ethelberg, Rebecca Legarth, Mia Sarah Fischer Button, Sophie Gubbels, Marianne Voldstedlund, Kåre Mølbak, Robert Leo Skov, Anders Fomsgaard, Tyra Grove Krause, and The Danish Covid-19 Genome Consortium
Resumo	The more infectious SARS-CoV-2 lineage B.1.1.7 rapidly spread in Europe after December, 2020, and a concern that B.1.1.7 could cause more severe disease has been raised. Taking advantage of Denmark's high RT-PCR testing and whole genome sequencing capacities, we used national health register data to assess the risk of COVID-19 hospitalisation in individuals infected with B.1.1.7 compared with those with other SARS-CoV-2 lineages.
Referências	BAGER, P. et al. Risk of hospitalisation associated with infection with SARS-CoV-2 lineage B.1.1.7 in Denmark: an observational cohort study. The Lancet. Infectious diseases , [United Kingdom], June 22, 2021. DOI: 10.1016/S1473-3099(21)00290-5. Disponível em: https://doi.org/10.1016/S1473-3099(21)00290-5. Acesso em: 25 jun. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900290-5



Título	Vaccine effectiveness of the first dose of ChAdOx1 nCoV-19 and BNT162b2 against SARS-CoV-2 infection in residents of long-term care facilities in England (VIVALDI): a prospective cohort study
Autor(es)	Madhumita Shrotri, Maria Krutikov, Tom Palmer, Rebecca Giddings, Borscha Azmi, Sathyavani Subbarao, Christopher Fuller, Aidan Irwin-Singer, Daniel Davies, Gokhan Tut, Jamie Lopez Bernal, Paul Moss, Andrew Hayward, Andrew Copas, Laura Shallcross
Resumo	The effectiveness of SARS-CoV-2 vaccines in older adults living in long-term care facilities is uncertain. We investigated the protective effect of the first dose of the Oxford-AstraZeneca non-replicating viral-vectored vaccine (ChAdOx1 nCoV-19; AZD1222) and the Pfizer-BioNTech mRNA-based vaccine (BNT162b2) in residents of long-term care facilities in terms of PCR-confirmed SARS-CoV-2 infection over time since vaccination.
Referências	SHROTRI, M. <i>et al.</i> Vaccine effectiveness of the first dose of ChAdOx1 nCoV-19 and BNT162b2 against SARS-CoV-2 infection in residents of long-term care facilities in England (VIVALDI): a prospective cohort study. The Lancet. Infectious diseases , [United Kingdom], June 23, 2021. DOI: 10.1016/S1473-3099(21)00289-9. Disponível em: https://doi.org/10.1016/S1473-3099(21)00289-9. Acesso em: 25 jun. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900289-9



Título	Effectiveness of BNT162b2 and ChAdOx1 nCoV-19 COVID-19 vaccination at preventing hospitalisations in people aged at least 80 years: a test-negative, case-control study
Autor(es)	Catherine Hyams, Robin Marlow, Zandile Maseko, Jade King, Lana Ward, Kazminder Fox, Robyn Heath, Anabella Tuner, Zsolt Friedrich, Leigh Morrison, Gabriella Ruffino, Rupert Antico, David Adegbite, Zsuzsa Szasz-Benczur, Maria Garcia Gonzalez, Jennifer Oliver, Leon Danon, Adam Finn
Resumo	On Dec 8, 2020, deployment of the first SARS-CoV-2 vaccination authorised for UK use (BNT162b2 mRNA vaccine) began, followed by an adenoviral vector vaccine ChAdOx1 nCoV-19 on Jan 4, 2021. Care home residents and staff, frontline health-care workers, and adults aged 80 years and older were vaccinated first. However, few data exist regarding the effectiveness of these vaccines in older people with many comorbidities. In this postimplementation evaluation of two COVID-19 vaccines, we aimed to determine the effectiveness of one dose in reducing COVID-19-related admissions to hospital in people of advanced age.
Referências	HYAMS, C. <i>et al.</i> Effectiveness of BNT162b2 and ChAdOx1 nCoV-19 COVID-19 vaccination at preventing hospitalisations in people aged at least 80 years: a test-negative, case-control study. The Lancet. Infectious diseases , [United Kingdom], June 23, 2021. DOI: 10.1016/S1473-3099(21)00330-3. Disponível em: https://doi.org/10.1016/S1473-3099(21)00330-3. Acesso em: 25 jun. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900330-3



Título	The differential importation risks of COVID-19 from inbound travellers and the feasibility of targeted travel controls: A case study in Hong Kong
Autor(es)	Bingyi Yang , Tim K. Tsang , Jessica Y. Wong , Yinan He , Huizhi Gao , Faith Ho , Eric H.Y. Laua,, Peng Wu , Sheena G. Sullivan , Benjamin J. Cowling
Resumo	Background: Many countries/regions implemented strict border measures (e.g., 14-day quarantines) as a blanket policy to prevent COVID-19 importations, while proposed "travel bubbles" as an alternative to reduce the impact of border controls. We aim to examine the differential importation risks with departure origins and post-arrival controls. Methods: We developed a Bayesian framework to model disease progress of COVID-19 and the effectiveness of travel measures and inferred the origin-specific disease prevalence among inbound travellers, using data on passengers arriving in Hong Kong and laboratory-confirmed imported cases. We estimated the origin-specific risks of releasing infectious travellers under different control strategies and traveller volumes. We also estimated the risk of having released infectious travellers when a resurgence occurs in departure locations with no imported cases during a certain period. Findings: Under the then strict controls of 14-day quarantine and testing on day 12, the Philippines imposed the greatest importation risk among the studied countries/regions (95.8% of releasing at least one infectious traveller, 95% credible interval (Crl), 94.8-96.6%). This was higher than that from low prevalence countries/regions (e.g., 23.4%, 95% Crl, 21.6-25.3% for Taiwan) if controls relaxed (i.e., 7-day quarantine and test on day 5). Increased traveller volumes and resurgence in departure locations with low prevalence under relaxed controls did not impose a greater importation risk than high prevalence locations under stricter controls. Interpretation: Moderate relaxation of control measures for travellers arriving from low prevalence locations did not impose higher risks of community outbreaks than strict controls on travellers from high prevalence locations. Funding: Health and Medical Research Fund, Hong Kong.
Referências	BINGYI, Yang et al. The differential importation risks of COVID-19 from inbound travellers and the feasibility of targeted travel controls: A case study in Hong Kong. The Lancet regional health. Western Pacific , [United Kingdom], v. 13, June 20, 2021. DOI: 10.1016/j.lanwpc.2021.100184. Disponível em: https://doi.org/10.1016/j.lanwpc.2021.100184. Acesso em: 25 jun. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-6065%2821%2900093-6



Título	Impact of the COVID-19 pandemic and associated non-pharmaceutical interventions on other notifiable infectious diseases in Germany: An analysis of national surveillance data during week 12016 week 32 2020
Autor(es)	Alexander Ullrich , Madlen Schranz , Ute Rexroth , Osamah Hamouda , Lars Schaade , Michaela Diercke , T. Sonia Boender, Robert Koch's Infectious Disease Surveillance Group
Resumo	Background: The COVID-19 pandemic and associated non-pharmaceutical interventions (NPIs) affect healthcare seeking behaviour, access to healthcare, test strategies, disease notification and workload at public health authorities, but may also lead to a true change in transmission dynamics. We aimed to assess the impact of the pandemic and NPIs on other notifiable infectious diseases under surveillance in Germany. Methods: We included 32 nationally notifiable disease categories with case numbers >100/year in 2016–2019. We used quasi-Poisson regression analysis on a weekly aggregated time-series incorporating trend and seasonality, to compute the relative change in case numbers during week 2020–10 to 2020–32 (pandemic/NPIs), in comparison to week 2016–01 to 2020–09. Findings: During week 2020–10 to 2020–32, 216,825 COVID-19 cases, and 162,942 (-35%) cases of other diseases, were notified. Case numbers decreased across all ages and notification categories (all p<0.05), except for tick-borne encephalitis, which increased (+58%). The number of cases decreased most for respiratory diseases (from -86% for measles, to -12% for tuberculosis), gastro-intestinal diseases (from -83% for rotavirus gastroenteritis, to -7% for yersiniosis) and imported vector-borne diseases (-75% dengue fever, -73% malaria). The less affected infections were healthcare associated pathogens (from -43% infection/colonisation with carbapenem-non-susceptible <i>Acinetobacter</i> , to -28% for Methicillin-resistant <i>Staphylococcus aureus</i> invasive infection) and sexually transmitted and blood-borne diseases (from -28% for hepatitis B, to -12% for syphilis). Interpretation: During the COVID-19 pandemic a drastic decrease of notifications for most infectious diseases and pathogens was observed. Our findings suggest effects of NPIs on overall disease transmission that require further investigation. Funding: The Robert Koch Institute is the National Public Health Institute of Germany, and is an institute within the portfolio of the Federal Ministry of Health



Referências	ULLRICH, A. <i>et al.</i> Impact of the COVID-19 pandemic and associated non-pharmaceutical interventions on other notifiable infectious diseases in Germany: An analysis of national surveillance data during week 1–2016 – week 32–2020. The Lancet. regional health. Europe [United Kingdom], June 18, 2021. DOI: 10.1016/j.lanepe.2021.100103. Disponível em: https://doi.org/10.1016/j.lanepe.2021.100103. Acesso em: 25 jun. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900080-6



Título	SARS-CoV-2 infection, antibody positivity and seroconversion rates in staff and students following full reopening of secondary schools in England: A prospective cohort study, September December 2020
	Shamez N Ladhani, Georgina Ireland, Frances Baawuah, Joanne Beckmann, Ifeanyichukwu O Okikea,, Shazaad Ahmad, Joanna Garstang, Andrew J Brent, Bernadette Brent, Jemma Walker, Felicity Aiano, Zahin Amin-Chowdhury, Louise Letley, Jessica Flood, Samuel E I Jones, Meaghan Kall, Ray Borrow, Ezra
Autor(es)	Linley, Maria Zambon, John Poh, Angie Lackenby, Joanna Ellis, Gayatri Amirthalingam, Kevin E Brown, Mary E Ramsay
Resumo	Background: Older children have higher SARS-CoV-2 infection rates than younger children. We investigated SARS-CoV-2 infection, seroprevalence and seroconversion rates in staff and students following the full reopening of all secondary schools in England. Methods: Public Health England (PHE) invited secondary schools in six regions (East and West London, Hertfordshire, Derbyshire, Manchester and Birmingham) to participate in SARS-CoV-2 surveillance during the 2020/21 academic year. Participants had nasal swabs for RT-PCR and blood samples for SARS-CoV-2 antibodies at the beginning (September 2020) and end (December 2020) of the autumn term. Multivariable logistic regression was used to assess independent risk factors for seropositivity and seroconversion. Findings: Eighteen schools in six regions enrolled 2,209 participants, including 1,189 (53.8%) students and 1,020 (46.2%) staff. SARS-CoV-2 infection rates were not significantly different between students and staff in round one (5/948; [0.53%] vs. 2/876 [0.23%]; p = 0.46) or round two (10/948 [1.05%] vs. 7/886 [0.79%]; p = 0.63), and similar to national prevalence. None of four and 7/15 (47%) sequenced strains in rounds 1 and 2 were the highly transmissible SARS-CoV-2 B.1.1.7 variant. In round 1, antibody seropositivity was higher in students than staff (114/893 [12.8%] vs. 79/861 [9.2%]; p = 0.016), but similar in round 2 (117/893 [13.1%] vs.117/872 [13.3%]; p = 0.85), comparable to local community seroprevalence. Between the two rounds, 8.7% (57/652) staff and 6.6% (36/549) students seroconverted (p = 0.16). Interpretation: In secondary schools, SARS-CoV-2 infection, seropositivity and seroconversion rates were similar in staff and students, and comparable to local community rates. Ongoing surveillance will be important for monitoring the impact of new variants in educational settings.
Referências	LADHANI, S. N. <i>et al.</i> SARS-CoV-2 infection, antibody positivity and seroconversion rates in staff and students following full reopening of secondary schools in England: A prospective cohort study, September–December 2020. EClinicalMedicine , [Netherlands], June 9, 2021. DOI: 10.1016/j.eclinm.2021.100948. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100948. Acesso em: 25 jun. 2021.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900228-5



Título	Patient and Hospital Factors Associated With Differences in Mortality Rates Among Black and White US Medicare Beneficiaries Hospitalized With COVID-19 Infection
Autor(es)	Black patients hospitalized with COVID-19 may have worse outcomes than White patients because of excess individual risk or because Black patients are disproportionately cared for in hospitals with worse outcomes for all.
Resumo	David A. Asch, Nazmul Islam, Natalie E. Sheils, Yong Chen, Jalpa A. Doshi, John Buresh, Rachel M.Werner
Referências	ASCH, D. A. <i>et al.</i> Patient and Hospital Factors Associated With Differences in Mortality Rates Among Black and White US Medicare Beneficiaries Hospitalized With COVID-19 Infection. JAMA network open , [United States], v. 4, n. 6, p. e2112842, June 17, 2021. DOI: 0.1001/jamanetworkopen.2021.12842 . Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.12842 . Acesso em: 18 jun. 2021.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2781182



Título	Spread of a SARS-CoV-2 variant through Europe in the summer of 2020
Autor(es)	Emma B. Hodcroft, Moira Zuber, Sarah Nadeau, Timothy G. Vaughan, Katharine H. D. Crawford, Christian L. Althaus, Martina L. Reichmuth, John E. Bowen, Alexandra C. Walls, Davide Corti, Jesse D. Bloom, David Veesler, David Mateo, Alberto Hernando, Iñaki Comas, Fernando González Candelas, SeqCOVID-SPAIN consortium, Tanja Stadler & Richard A. Neher.
Resumo	Following its emergence in late 2019, the spread of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) ^{1,2} has been tracked via phylogenetic analysis of viral genome sequences in unprecedented detail ^{3–5} . While the virus spread globally in early 2020 before borders closed, intercontinental travel has since been greatly reduced. However, within Europe travel resumed in the summer of 2020. Here we report on a novel SARS-CoV-2 variant, 20E (EU1), that emerged in Spain in early summer, and subsequently spread across Europe. We find no evidence of increased transmissibility, but instead demonstrate how rising incidence in Spain, resumption of travel, and lack of effective screening and containment may explain the variant's success. Despite travel restrictions, we estimate 20E (EU1) was introduced hundreds of times to European countries by summertime travelers, likely undermining local efforts to keep SARS-CoV-2 cases low. Our results demonstrate how a variant can rapidly become dominant even in absence of a substantial transmission advantage in favorable epidemiological settings. Genomic surveillance is critical to understanding how travel can impact SARS-CoV-2 transmission, and thus for informing future containment strategies as travel resumes.
Referências	HODCROFT, E. B. <i>et al.</i> Spread of a SARS-CoV-2 variant through Europe in the summer of 2020. Nature , [United Kingdon], p. 1–9, 2021. DOI: 10.1038/s41586-021-03677-y. Disponível em: https://doi.org/10.1038/s41586-021-03677-y . Acesso em: 18 jun. 2021.
Fonte	https://www.nature.com/articles/s41586-021-03677-y_reference.pdf



Título	Comparisons between the Neighboring States of Amazonas and Pará in Brazil in the Second Wave of COVID-19 Outbreak and a Possible Role of Early Ambulatory Treatment
Autor(es)	Francisco G. Emmerich
Resumo	Brazil and many countries are now experiencing a second wave of the COVID-19 outbreak. The objective of this study is to compare results with statistical samples involving millions of people in the two largest neighboring states in Brazil, Amazonas and Pará, which in the first wave were similar but now show significant different results in combating COVID-19. During the first wave, in May 2020, the maximums of the 7-day average daily deaths per population of Amazonas and Pará were similar: 15.7 and 17.1 deaths per day per million people, respectively, which means a ratio 15.7/17.1 = 0.92 ≈ 1. Now, in the second wave of COVID-19 outbreak, Amazonas has entered a serious situation; meanwhile, Pará has presented a much smaller growth in the mortality. The accumulated mortality per population from 11 November 2020 to 15 March 2021 of Amazonas and Pará are 1645 and 296 deaths per million people, respectively. As 1645/296 = 5.55, Amazonas is presenting an accumulated mortality per population more than five times that of Pará. Future in-depth research can provide a grounded answer to explain this significant difference, nonetheless the explicit support of the Pará state government, after 21 May 2020, to early ambulatory treatment may have played some role on this result.
Referências	EMMERICH, F. G. Comparisons between the Neighboring States of Amazonas and Pará in Brazil in the Second Wave of COVID-19 Outbreak and a Possible Role of Early Ambulatory Treatment. Int. J.Environ. Res. Public Health, [Basel.], v. 18, n. 7, p. 3371, Mar. 24, 2021. DOI: 10.3390/ijerph18073371. Disponível em: https://doi.org/10.3390/ijerph18073371 . Acesso em: 18 jun. 2021.
Fonte	https://www.mdpi.com/1660-4601/18/7/3371



Título	COVID-19 in long-term care facilities in Brazil: serological survey in a post-outbreak setting
Autor(es)	Eliana Nogueira Castro de Barros , Adriana P. do Valle, Patricia Emilia Braga , Juliana Y. K. Viscondi , Antonio R. B. da Fonseca , Tazio Vanni , Anderson da Silva , Maria Regina Cardoso , Paulo José F. Villas Boas , Alexander Roberto Precioso
Resumo	This cross-sectional seroepidemiological survey presents the seroprevalence of SARS-CoV-2 in a population living in 15 Long-Term Care Facilities (LTCFs), after two intra-institutional outbreaks of COVID-19 in the city of Botucatu, Sao Paulo State, Brazil. Residents were invited to participate in the serological survey performed in June and July 2020. Sociodemographic and clinical characterization of the participants as well as the LTCF profile were recorded. Blood samples were collected, processed and serum samples were tested using the rapid One Step COVID-19 immunochromatography test to detect IgM and IgG anti-SARS-CoV-2. Among 209 residents, the median of age was 81 years old, 135 (64.6%) were female and 171 (81.8%) self-referred as being white. An overall seroprevalence of 11.5% (95% CI: 7.5% – 16.6%) was found. The highest seroprevalences of 100% and 76.9% were observed in LTCFs that had experienced COVID-19 outbreaks. Most residents with positive immunochromatography tests (70.8%) referred previous contact with a confirmed COVID-19 case. Although there was a relatively low seroprevalence of COVID-19 in the total number of elderly people, this population is highly vulnerable and LTCFs are environments at higher risk for COVID-19 dissemination. A well-established test for COVID-19 policies, the adequate characterization of the level of interaction between residents and the healthcare provider team and the level of complexity of care are crucial to monitor and control the transmission of SARS-CoV-2 in these institutions.
Referências	BARROS, E. N. C. de <i>et al.</i> COVID-19 in long-term care facilities in Brazil: serological survey in a post-outbreak setting. Rev. Inst. Med. Trop. São Paulo , [Brazil.], v. 63, p. e10, 2021. DOI: 10.1590/s1678-9946202163010. Disponível em: https://doi.org/10.1590/s1678-9946202163010 . Acesso em: 18 jun. 2021.
Fonte	https://www.scielo.br/j/rimtsp/a/NkywY6DyGQTccx5BqvNfK9v/?format=pdf⟨=en



Título	Deep learning-based forecasting model for COVID-19 outbreak in Saudi Arabia
Autor(es)	Ammar H.Elsheikh, Amal I.Saba, , SongfengLu, S.Shanmugan, T.Muthuramalingam, RavinderKumar, F.A.Essa, Taher A.Shehabeldeen ⁱ
Resumo	COVID-19 outbreak has become a global pandemic that affected more than 200 countries. Predictingthe epidemiological behavior of this outbreak has a vital role to prevent its spreading. In this study,long short-term memory (LSTM) network as a robust deep learning model is proposed to forecast thenumber of total confirmed cases, total recovered cases, and total deaths in Saudi Arabia. The model wastrained using the official reported data. The optimal values of the model's parameters that maximize theforecasting accuracy were determined. The forecasting accuracy of the model was assessed using sevenstatistical assessment criteria, namely, root mean square error (RMSE), coefficient of determination (R2),mean absolute error (MAE), efficiency coefficient (EC), overall index (OI), coefficient of variation (COV),and coefficient of residual mass (CRM). A reasonable forecasting accuracy was obtained. The forecastingaccuracy of the suggested model is compared with two other models. The first is a statistical based modelcalled autoregressive integrated moving average (ARIMA). The second is an artificial intelligence basedmodel called nonlinear autoregressive artificial neural networks (NARANN). Finally, the proposed LSTMmodel was applied to forecast the total number of confirmed cases as well as deaths in six different countries; Brazil, India, Saudi Arabia, South Africa, Spain, and USA. These countries have different epidemictrends as they apply different polices and have different age structure, weather, and culture. The social distancing and protection measures applied in different countries are assumed to be maintained duringthe forecasting period. The obtained results may help policymakers to control the disease and to putstrategic plans to organize Hajj and the closure periods of the schools and universities
Referências	ELSHEIKH, Ammar H. <i>et al</i> . Deep learning-based forecasting model for COVID-19 outbreak in Saudi Arabia. Process safety and environmental protection, [United Kingdom], v. 149, p. 223-233, May 202. DOI: 10.1016/j.psep.2020.10.048. Disponível em: https://www.sciencedirect.com/science/article/pii/S0957582020318516#!. Acesso em: 18 jun. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S0957582020318516#!



Título	Change in outbreak epicentre and its impact on the importation risks of COVID-19 progression: A modelling study
Autor(es)	Oyelola A.Adegboye, Adeshina I.Adekunle, AntonPak, EzraGayawan, Denis HY.Leung, Diana P.Rojas, FaizElfaki, Emma S.McBryde, Damon P.Eisen
Resumo	The outbreak of Severe Acute Respiratory Syndrome Coronavirus-2 (SARS-CoV-2) that was first detected in the city of Wuhan, China has now spread to every inhabitable continent, but now the attention has shifted from China to other epicentres. This study explored early assessment of the influence of spatial proximities and travel patterns from Italy on the further spread of SARS-CoV-2 worldwide.
Referências	ADEGBOYE, O. A. <i>et al.</i> Change in outbreak epicentre and its impact on the importation risks of COVID-19 progression: A modelling study. Travel medicine and infectious disease , [United Kingdom], v. 40, p. 101988, Mar Apr. 2021. DOI: 10.1016/j.tmaid.2021.101988. Disponível em: https://doi.org/10.1016/j.tmaid.2021.101988 . Acesso em: 18 jun. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S1477893921000296



Título	Structural dynamics of SARS-CoV-2 variants: A health monitoring strategy for anticipating Covid-19 outbreaks
Autor(es)	JacquesFantini, NouaraYahi, FodilAzzaz, HenriChahinian
Resumo	Objectives: the Covid-19 pandemic has been marked by sudden outbreaks of SARS-CoV-2 variants harboring mutations in both the N-terminal (NTD) and receptor binding (RBD) domains of the spike protein. The goal of this study was to predict the transmissibility of SARS-CoV-2 variants from genomic sequence data. Methods: we used a target-based molecular modeling strategy combined with surface potential analysis of the NTD and RBD. Results:we observed that both domains act synergistically to ensure optimal virus adhesion, which explains why most variants exhibit concomitant mutations in the RBD and in the NTD. Some mutation patterns affect the affinity of the spike protein for ACE-2. However, other patterns increase the electropositive surface of the spike, with determinant effects on the kinetics of virus adhesion to lipid raft gangliosides. Based on this new view of the structural dynamics of SARS-CoV-2 variants, we defined an index of transmissibility (T-index) calculated from kinetic and affinity parameters of coronavirus binding to host cells. The T-index is characteristic of each variant and predictive of its dissemination in animal and human populations. Conclusions: the T-index can be used as a health monitoring strategy to anticipate future Covid-19 outbreaks due to the emergence of variants of concern.
Referências	FANTINI, J. et al. Structural dynamics of SARS-CoV-2 variants: A health monitoring strategy for anticipating Covid-19 outbreaks. Journal of infection , [United Kingdom], June 3, 2021. DOI: 10.1016/j.jinf.2021.06.001. Disponível em: https://doi.org/10.1016/j.jinf.2021.06.001. Acesso em: 18 jun. 2021.
Fonte	https://www.sciencedirect.com/science/article/pii/S0163445321002814



Título	COVID-2019
Autor(es)	Escola Superior de Saúde Dr. Lopes Dias do Instituto Politécnico de Castelo Branco
	Índice:
Resumo	Artigo de opinião SARS-COV-2: comparação dos diferentes testes de diagnóstico laboratorial - uma revisão adaptada à realidade portuguesa COVID-19: valores preditos e estratégia de testagem Opinião dos docentes da esald sobre a implementação do ensino por via remota, devido à pandemia COVID-19 Caracterização dos utilizadores dos serviços de urgência da unidade local de saúde do norte alentejano, durante o estado de emergência devido à COVID-19 Da vulnerabilidade à invisibilidade. Os idosos institucionalizados durante a pandemia COVID 19 Vacinas SARS-COV-2: principais caraterísticas e perspetivas futuras – revisão da bibliografia COVID-19: uma pandemia anunciada Artigo de opinião - a comunicação em tempos de pandemia
Referências	REVITSA CIENTÍFICA HIGEIA. Portugal: IPCB, ISSN 2184-5565. Semestral Edição especial COVID-19. Disponível em: http://revistahigeia.ipcb.pt/edica especial covid19.pdf#page=67. Acesso em: 18 jun. 2021.
Fonte	http://revistahigeia.ipcb.pt/edica_especial_covid19.pdf#page=67



Título	Clinical characteristics and risk factors for death among hospitalised children and adolescents with COVID-19 in Brazil: an analysis of a nationwide database
Autor(es)	Eduardo A Oliveira, Enrico A Colosimo, Ana Cristina Simões e Silva, Robert H Mak, Daniella B Martelli, Ludmila R Silva, Hercílio Martelli-Júnior, Maria Christina L Oliveira
Resumo	COVID-19 is usually less severe and has lower case fatality in children than in adults. We aimed to characterise the clinical features of children and adolescents hospitalised with laboratory-confirmed SARS-CoV-2 infection and to evaluate the risk factors for COVID-19-related death in this population.
Referências	OLIVEIRA, E. A. <i>et al.</i> Clinical characteristics and risk factors for death among hospitalised children and adolescents with COVID-19 in Brazil: an analysis of a nationwide database. The Lancet. Child & adolescent health , [United Kingdom], p. S2352464221001346, June 10, 2021. Disponível em: https://doi.org/10.1016/S2352-4642(21)00134-6.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-4642%2821%2900134-6



Título	Inflammatory biomarkers in COVID-19-associated multisystem inflammatory syndrome in children, Kawasaki disease, and macrophage activation syndrome: a cohort study
Autor(es)	Jackeline J Rodriguez-Smith, Emely L Verweyen, Gwendolyn M Clay, Ysabella M Esteban, Sarah R de Loizaga, Elizabeth Joy Baker, Thuy Do, Sanjeev Dhakal, Sean M Lang, Alexei A Grom, David Grier, Grant S Schulert
Resumo	Multisystem inflammatory syndrome in children (MIS-C) is a potentially life-threatening hyperinflammatory syndrome that occurs after primary SARS-CoV-2 infection. The pathogenesis of MIS-C remains undefined, and whether specific inflammatory biomarker patterns can distinguish MIS-C from other hyperinflammatory syndromes, including Kawasaki disease and macrophage activation syndrome (MAS), is unknown. Therefore, we aimed to investigate whether inflammatory biomarkers could be used to distinguish between these conditions.
Referências	RODRIGUEZ-SMITH, J. J. <i>et al.</i> Inflammatory biomarkers in COVID-19-associated multisystem inflammatory syndrome in children, Kawasaki disease, and macrophage activation syndrome: a cohort study. The Lancet. Rheumatology , [United Kingdom], p. S2665991321001399, June 8, 2021. Disponível em: https://doi.org/10.1016/S2665-9913(21)00139-9.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2665-9913%2821%2900139-9



Título	Excess deaths from COVID-19 and other causes by region, neighbourhood deprivation level and place of death during the first 30 weeks of the pandemic in England and Wales: a retrospective registry study
Autor(es)	Evangelos Kontopantelis, Mamas A. Mamas, Roger T. Webb, Ana Castro, Martin K. Rutter, Chris P. Gale, Darren M. Ashcroft, Matthias Pierce, Kathryn M. Abel, Gareth Price, Corinne Faivre-Finn, Harriette G.C. Van Spall, Michelle M. Graham, Marcello Morciano, Glen P. Martin, Tim Doran
Resumo	Excess deaths during the COVID-19 pandemic compared with those expected from historical trends have been unequally distributed, both geographically and socioeconomically. Not all excess deaths have been directly related to COVID-19 infection. We investigated geographical and socioeconomic patterns in excess deaths for major groups of underlying causes during the pandemic.
Referências	KONTOPANTELIS, E. <i>et al.</i> Excess deaths from COVID-19 and other causes by region, neighbourhood deprivation level and place of death during the first 30 weeks of the pandemic in England and Wales: A retrospective registry study. The Lancet regional health. Europe , [United Kingdom], p. 100144, June 11, 2021. Disponível em: https://doi.org/10.1016/j.lanepe.2021.100144.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900121-6



Título	Associations of Race/Ethnicity and Food Insecurity With COVID-19 Infection Rates Across US Counties
Autor(es)	Mumbi E. Kimani, Mare Sarr, Yendelela Cuffee, Chang Liu, Nicole S.Webster
Resumo	IMPORTANCE Food insecurity is prevalent among racial/ethnic minority populations in the US. To date, few studies have examined the association between pre–COVID-19 experiences of food insecurity and COVID-19 infection rates through a race/ethnicity lens.
Referências	KIMANI, M. E. <i>et al.</i> Associations of Race/Ethnicity and Food Insecurity With COVID-19 Infection Rates Across US Counties. JAMA network open , [United States], v. 4, n. 6, p. e2112852, June 8, 2021. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.12852.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2780780



Título	Occupational Characteristics and Management Measures of Sporadic COVID-19 Outbreaks From June 2020 to January 2021 in China: The Importance of Tracking Down "Patient Zero "
Autor(es)	Maohui Feng, Qiong Ling, Jun Xiong, Anne Manyande, Weiguo Xu, Boqi Xiang
Resumo	There are occupational disparities in the risk of contracting COVID-19. Occupational characteristics and work addresses play key roles in tracking down "patient zero." The present descriptive analysis for occupational characteristics and management measures of sporadic COVID-19 outbreaks from June to December 2020 in China offers important new information to the international community at this stage of the pandemic. These data suggest that Chinese measures including tracking down "patient zero," launching mass COVID-19 testing in the SARS-CoV-2-positive areas, designating a new high- or medium-risk area, locking down the corresponding community or neighborhood in response to new COVID-19 cases, and basing individual methods of protection on science are effective in reducing the transmission of the highly contagious SARS-CoV-2 across China.
Referências	MAOHUI, Feng <i>et al.</i> Occupational Characteristics and Management Measures of Sporadic COVID-19 Outbreaks From June 2020 to January 2021 in China: The Importance of Tracking Down "Patient Zero". Front. public health , [Switzerland .], v. 9, p. 670669, Apr. 30, 2021. Disponível em: https://doi.org/10.3389/fpubh.2021.670669 .
Fonte	https://www.frontiersin.org/articles/10.3389/fpubh.2021.670669/full



Título	Multifaceted strategies for the control of COVID-19 outbreaks in long-term care facilities in Ontario, Canada
Autor(es)	Thomas N Vilches, Shokoofeh Nourbakhsh, Kevin Zhang, Lyndon Juden-Kelly, Lauren E Cipriano, Joanne M Langley, Pratha Sah, Alison P Galvani, Seyed M Moghadas
Resumo	The novel coronavirus disease 2019 (COVID-19) has caused severe outbreaks in Canadian long-term care facilities (LTCFs). In Canada, over 80% of COVID-19 deaths during the first pandemic wave occurred in LTCFs. We sought to evaluate the effect of mitigation measures in LTCFs including frequent testing of staff, and vaccination of staff and residents. We developed an agent-based transmission model and parameterized it with disease-specific estimates, temporal sensitivity of nasopharyngeal and saliva testing, results of vaccine efficacy trials, and data from initial COVID-19 outbreaks in LTCFs in Ontario, Canada. Characteristics of staff and residents, including contact patterns, were integrated into the model with age-dependent risk of hospitalization and death. Estimates of infection and outcomes were obtained and 95% credible intervals were generated using a bias-corrected and accelerated bootstrap method. Weekly routine testing of staff with 2-day turnaround time reduced infections among residents by at least 25.9% (95% Crl: 23.3%-28.3%), compared to baseline measures of mask-wearing, symptom screening, and staff cohorting alone. A similar reduction of hospitalizations and deaths was achieved in residents. Vaccination averted 2-4 times more infections in both staff and residents as compared to routine testing, and markedly reduced hospitalizations and deaths among residents by 95.9% (95% Crl: 95.4%-96.3%) and 95.8% (95% Crl: 95.5%-96.1%), respectively, over 200 days from the start of vaccination. Vaccination could have a substantial impact on mitigating disease burden among residents, but may not eliminate the need for other measures before population-level control of COVID-19 is achieved.
Referências	VILCHES, T. N. <i>et al.</i> Multifaceted strategies for the control of COVID-19 outbreaks in long-term care facilities in Ontario, Canada. Preventive medicine , [Netherlands], v. 148, p. 106564, Apr. 18, 2021. Disponível em: https://doi.org/10.1016/j.ypmed.2021.106564.
Fonte	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8053216/



Título	Incidence of Multisystem Inflammatory Syndrome in Children Among US Persons Infected With SARS-CoV-2
Autor(es)	Amanda B. Payne, Zunera Gilani, Shana Godfred-Cato, Ermias D. Belay, Leora R. Feldstein, Manish M. Patel, Adrienne G. Randolph, Margaret Newhams, Deepam Thomas, Reed Magleby, Katherine Hsu, Meagan Burns, Elizabeth Dufort, Angie Maxted, Michael Pietrowski, Allison Longenberger, Sally Bidol, Justin Henderson, Lynn Sosa, Alexandra Edmundson, Melissa Tobin-D'Angelo, Laura Edison, Sabrina Heidemann, Aalok R. Singh, John S. Giuliano Jr, Lawrence C. Kleinman, KeikoM. Tarquinio, Rowan F.Walsh, Julie C. Fitzgerald, Katharine N. Clouser, Shira J. Gertz, RyanW. Carroll, Christopher L. Carroll, Brooke E. Hoots, Carrie Reed, F. Scott Dahlgren, Matthew E. Oster, Timmy J. Pierce, Aaron T. Curns, Gayle E. Langley, Angela P. Campbell and the MIS-C Incidence Authorship Group.
Resumo	Importance Multisystem inflammatory syndrome in children (MIS-C) is associated with recent or current SARS-CoV-2 infection. Information on MIS-C incidence is limited.
Referências	PAYNE, A. B. <i>et al.</i> Incidence of Multisystem Inflammatory Syndrome in Children Among US Persons Infected With SARS-CoV-2. JAMA network open , [United State.], v. 4, n. 6, p. e2116420, June 10, 2021. Disponível em: https://doi.org/10.1001/jamanetworkopen.2021.16420.
Fonte	https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2780861



Título	Practices and Activities Among Healthcare Personnel with SARS-CoV-2 Infection Working in Different Healthcare Settings—10 Emerging Infections Program Sites, April— November 2020
Autor(es)	Nora Chea, Taniece Eure, Austin R. Penna, Cedric J Brown, Joelle Nadle, Deborah Godine, Linda Frank, Christopher A Czaja, Helen Johnston, Devra Barter, Betsy Feighner Miller, Katie Angell, Kristen Marshall, James Meek, Monica Brackney, Stacy Carswell, Stepy Thomas, Lucy E. Wilson, Rebecca Perlmutter, Kaytlynn Marceaux-Galli, Ashley Fell, Sarah Lim, Ruth Lynfield, Sarah Shrum Davis, Erin C. Phipps, Marla Sievers, Ghinwa Dumyati, Cathleen Concannon, Kathryn McCullough, Amy Woods, Sandhya Seshadri, Christopher Myers, Rebecca Pierce, Valerie L. S. Ocampo, Judith A. Guzman-Cottrill, Gabriela Escutia, Monika Samper, Sandra A. Pena, Cullen Adre, Matthew Groenewold, Nicola D. Thompson, Shelley S. Magill
Resumo	Healthcare personnel with SARS-CoV-2 infection were interviewed to describe activities and practices in and outside the workplace. Among 2,625 healthcare personnel, workplace-related factors that may increase infection risk were more common among nursing home personnel than hospital personnel, whereas selected factors outside the workplace were more common among hospital personnel.
Referências	CHEA, N. et al. Practices and Activities Among Healthcare Personnel with SARS-CoV-2 Infection Working in Different Healthcare Settings—10 Emerging Infections Program Sites, April—November 2020. Infection control and hospital epidemiology, [United Kingdom.], p. 1–17, Jun. 2, 2021. Disponível em: https://doi.org/10.1017/ice.2021.262.
Fonte	https://www.cambridge.org/core/services/aop-cambridge- core/content/view/95B4D614412CE1020D4F28761A4C3428/S0899823X21002622a.pdf/practices and activities among healthcare personnel with sarscov2 infection working in different healthcare settings10 emerging infections program sites aprilnovember 2020.pdf



Título	Seroprevalence of SARS-CoV-2 antibodies in the poorest region of Brazil: results from a population-based study
Autor(es)	Adriano Antunes de Souza Araújo, Lucindo José Quintans-Júnior,, Luana Heimfarth, Dulce Marta Schimieguel, Cristiane Bani Corrêa, Tatiana Rodrigues de Moura, Rafael Ciro Marques Cavalcante, Rangel Rodrigues Bomfim, Renata Grespan, Lorranny Santana Rodrigues, Danillo Menezes dos Santos, Ayane de Sá Resende, Nathanielly de Lima Silva, Anna Clara Ramos da Silva Santos, Jéssica Maria Dantas Araújo, Mércia Feitosa de Souza, Marco Aurélio de Oliveira Góes, Victor Santana Santos, Paulo Ricardo Martins-Filho.
Resumo	Population-based seroprevalence studies on coronavirus disease 2019 (COVID-19) in low- and middle-income countries are lacking. We investigated the seroprevalence of severe acute respiratory syndrome-coronavirus-2 (SARS-CoV-2) antibodies in Sergipe state, Northeast Brazil, using rapid IgM-IgG antibody test and fluorescence immunoassay. The seroprevalence was 9.3% (95% CI 8.5 –10.1), 10.2% (95% CI 9.2 –11.3) for women and 7.9% (IC 95% 6.8 – 9.1) for men (P = 0.004). We found a decline in the prevalence of SARS-CoV-2 antibodies according to age, but the differences were not statistically significant: 0 –19 years (9.9% ; 95% CI 7.8 –12.5), 20 –59 years (9.3% ; 95% CI 8.4 –10.3) and 260 years (9.0% ; 95% CI 7.5 –10.8) (P = 0.517). The metropolitan area had a higher seroprevalence (11.7% , 95% CI 10.3 – 13.2) than outside municipalities (8.0% , 95% CI 7.2 – 8.9) (P < 0.001). These findings highlight the importance of serosurveillance to estimate the real impact of the COVID-19 outbreak and thereby provide data to better understand the spread of the virus, as well as providing information to guide stay-at-home measures and other policies. In addition, these results may be useful as basic data to follow the progress of COVID-19 outbreak as social restriction initiatives start to be relaxed in Brazil.
Referências	ARAÚJO, A. A. de S. <i>et al.</i> Seroprevalence of SARS-CoV-2 antibodies in the poorest region of Brazil: results from a population-based study. Epidemiology and infection , [United Kingdom], v. 149, May 18, 2021. Disponível em: https://doi.org/10.1017/S0950268821001163.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/seroprevalence-of-sarscov2-antibodies-in-the-poorest-region-of-brazil-results-from-a-populationbased-study/E805D955561E3D1F342BBAF613B0C3F6



Título	Simulation-based evaluation of school reopening strategies during COVID-19: A case study of São Paulo, Brazil
Autor(es)	E. H. M. Cruz, J. M. Maciel, C. L. Clozato, M. S. Serpa, P. O. A. Navaux, E. Meneses, M. Abdalah, M. Diener
Resumo	During the coronavirus disease 2019 (COVID-19) pandemic, many countries opted for strict public health measures, including closing schools. After some time, they have started relaxing some of those restrictions. To avoid overwhelming health systems, predictions for the number of new COVID-19 cases need to be considered when choosing a school reopening strategy. Using a computer simulation based on a stochastic compartmental model that includes a heterogeneous and dynamic network, we analyse different strategies to reopen schools in the São Paulo Metropolitan Area, including one similar to the official reopening plan. Our model allows us to describe different types of relations between people, each type with a different infectiousness. Based on our simulations and model assumptions, our results indicate that reopening schools with all students at once has a big impact on the number of new COVID-19 cases, which could cause a collapse of the health system. On the other hand, our results also show that a controlled school reopening could possibly avoid the collapse of the health system, depending on how people follow sanitary measures. We estimate that postponing the schools' return date for after a vaccine becomes available may save tens of thousands of lives just in the São Paulo Metropolitan Area compared to a controlled reopening considering a worst-case scenario. We also discuss our model constraints and the uncertainty of its parameters.
Referências	CRUZ, E. H. M. <i>et al.</i> Simulation-based evaluation of school reopening strategies during COVID-19: A case study of São Paulo, Brazil. Epidemiology and infection , [United Kingdom], v. 149, apr. 30, 2021. Disponível em: https://doi.org/10.1017/S0950268821001059.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/simulationbased-evaluation-of-school-reopening-strategies-during-covid19-a-case-study-of-sao-paulo-brazil/E529BF7967E18BA0687EC4E1001096D2



Título	SARS-CoV-2 mutations: the biological trackway towards viral fitness
Autor(es)	Parinita Majumdar , Sougata Niyogi
Resumo	The outbreak of pneumonia-like respiratory disorder at China and its rapid transmission world-wide resulted in public health emergency, which brought lineage B betacoronaviridae SARS-CoV-2 (severe acute respiratory syndrome coronavirus 2) into spotlight. The fairly high mutation rate, frequent recombination and interspecies transmission in betacoronaviridae are largely responsible for their temporal changes in infectivity and virulence. Investigation of global SARS-CoV-2 genotypes revealed considerable mutations in structural, non-structural, accessory proteins as well as untranslated regions. Among the various types of mutations, single-nucleotide substitutions are the predominant ones. In addition, insertion, deletion and frame-shift mutations are also reported, albeit at a lower frequency. Among the structural proteins, spike glycoprotein and nucleocapsid phosphoprotein accumulated a larger number of mutations whereas envelope and membrane proteins are mostly conserved. Spike protein and RNA-dependent RNA polymerase variants, D614G and P323L in combination became dominant world-wide. Divergent genetic variants created serious challenge towards the development of therapeutics and vaccines. This review will consolidate mutations in different SARS-CoV-2 proteins and their implications on viral fitness.
Referências	MAJUMDAR, P.; NIYOGI, S. SARS-CoV-2 mutations: the biological trackway towards viral fitness. Epidemiology and infection , [United Kingdom], v. 149, Apr. 30, 2021. Disponível em: https://doi.org/10.1017/S0950268821001060.
Fonte	https://www.cambridge.org/core/journals/epidemiology-and-infection/article/sarscov2-mutations-the-biological-trackway-towards-viral-fitness/4BD21DD25CB61BC7C1DB80A30FA8A03E



Título	A nationwide analysis of population group differences in the COVID-19 epidemic in Israel, February 2020–February 2021
Autor(es)	Khitam Muhsena, Wasef Na'aminha , Yelena Lapidota , Sophy Gorena , Yonatan Amira , Saritte Perlmana , Manfred S. Greenb , Gabriel Chodicka,c , Dani Cohena
Resumo	Social inequalities affect the COVID-19 burden and vaccine uptake. The aim of this study was to explore inequalities in the incidence and mortality rate of SARS-CoV-2 infection and vaccine uptake in various sociodemographic and population group strata in Israel.
Referências	MUHSEN, K. <i>et al.</i> A nationwide analysis of population group differences in the COVID-19 epidemic in Israel, February 2020– February 2021. The Lancet. regional health. Europe , [United Kingdom], v. 7, p. 100130, June 4, 2021. Disponível em: https://doi.org/10.1016/j.lanepe.2021.100130.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900107-1



Título	Co-infections, secondary infections, and antimicrobial use in patients hospitalised with COVID-19 during the first pandemic wave from the ISARIC WHO CCP-UK study: a multicentre, prospective cohort study
Autor(es)	Clark D Russell, Cameron J Fairfield, Thomas M Drake, Lance Turtle, R Andrew Seaton, Dan G Wootton, Louise Sigfrid, Ewen M Harrison, Annemarie B Docherty, Thushan I de Silva, Conor Egan, Riinu Pius, Hayley E Hardwick, Laura Merson, Michelle Girvan, Jake Dunning, Jonathan S Nguyen-Van-Tam, Peter J M Openshaw, J Kenneth Baillie, Malcolm G Semple†, Antonia Ho, on behalf of the ISARIC4C investigators
Resumo	Microbiological characterisation of co-infections and secondary infections in patients with COVID-19 is lacking, and antimicrobial use is high. We aimed to describe microbiologically confirmed co-infections and secondary infections, and antimicrobial use, in patients admitted to hospital with COVID-19.
Referências	RUSSELL, C. D. <i>et al.</i> Co-infections, secondary infections, and antimicrobial use in patients hospitalised with COVID-19 during the first pandemic wave from the ISARIC WHO CCP-UK study: a multicentre, prospective cohort study. The Lancet microbe , [United Kingdom], p. S2666524721000902, June 2, 2021. Disponível em: https://doi.org/10.1016/S2666-5247(21)00090-2
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2821%2900090-2



Título	Incidence of SARS-CoV-2 infection according to baseline antibody status in staff and residents of 100 long-term care facilities (VIVALDI): a prospective cohort study
Autor(es)	Maria Krutikov, Tom Palmer, Gokhan Tut, Chris Fuller, Madhumita Shrotri, Haydn Williams, Daniel Davies, Aidan Irwin-Singer, James Robson, Andrew Hayward, Paul Moss, Andrew Copas, Laura Shallcross
Resumo	SARS-CoV-2 infection represents a major challenge for long-term care facilities (LTCFs) and many residents and staff are seropositive following persistent outbreaks. We aimed to investigate the association between the SARS-CoV-2 antibody status at baseline and subsequent infection in this population.
Referências	KRUTIKOV, M. <i>et al.</i> Incidence of SARS-CoV-2 infection according to baseline antibody status in staff and residents of 100 long-term care facilities (VIVALDI): a prospective cohort study. The Lancet. Healthy longevity , [United Kingdom], v. 2, n. 6, p. e362–e370, June 2021. Disponível em: https://doi.org/10.1016/S2666-7568(21)00093-3.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7568%2821%2900093-3



Título	Disseminação da COVID-19 nas faixas de fronteira terrestre e litorânea do Brasil
Autor(es)	Liria Nagamine, Gustavo Ferreira, Caroline Krüger, Rosa Moura
Resumo	Atualmente, o Sars-COV-2 se encontra disseminado por uma vasta área geográfica no mundo. A trajetória da pandemia após cruzar as fronteiras do território brasileiro (terrestre e litorânea), acompanhada de uma avaliação das medidas adotadas para sua contenção e os principais conflitos observados e apresentados no presente estudo, cumpre o objetivo de apontar questões atuais e futuras de políticas públicas para o enfrentamento da pandemia nas fronteiras brasileiras. Os resultados das análises realizadas demonstram que as áreas de maior concentração e adensamento populacional urbanos foram as mais afetadas pela contaminação do vírus. No entanto, a Covid-19 não poupou municípios menores, o que se observa pelo seu alastramento no território seguindo os caminhos da mobilidade rodoviária, fluvial e aérea no interior do Brasil. Sobre seu reflexo na área de fronteira, observa-se tanto um conflito interfederativo, com um quadro de descompasso entre medidas do governo federal e unidades subnacionais, quanto a inexistência de diálogos e acordos com os países vizinhos. Como sugestões, apontam-se a criação de instrumentos, protocolos, medidas e mecanismos para o enfrentamento da crise da pandemia da Covid-19 em áreas de fronteira terrestre e litorânea do Brasil.
Referências	NAGAMINE, L. <i>et al.</i> DISSEMINAÇÃO DA COVID-19 NAS FAIXAS DE FRONTEIRAS TERRESTRE E LITORÂNEA DO BRASIL. Revista Tempo do Mundo , [Brasília, DF.], n. 23, p. 203–234, 12 dez. 2020. Disponível em: https://doi.org/10.38116/rtm23art8.
Fonte	https://www.ipea.gov.br/revistas/index.php/rtm/article/view/194



Título	Comportamentos de proteção contra COVID-19 entre adultos e idosos brasileiros que vivem com multimorbidade: iniciativa elsi-COVID-19
Autor(es)	Sandro Rodrigues Batista, Ana Sara Semeão de Souza, Januse Nogueira, Fabíola Bof de Andrade, Elaine Thumé, Doralice Severo da Cruz Teixeira, Maria Fernanda Lima-Costa, Luiz Augusto Facchini, Bruno Pereira Nunes
Resumo	Objetivou-se medir a ocorrência de comportamentos de proteção contra a COVID-19 e fatores sociodemográficos segundo a ocorrência de multimorbidade na população brasileira com 50 anos ou mais de idade. Foram utilizados dados de inquérito telefônico entre participantes do ELSI-Brasil (Estudo Longitudinal da Saúde dos Idosos Brasileiros), conduzido entre maio e junho de 2020. Avaliou-se o uso de medidas de prevenção não farmacológica para COVID-19, motivos para sair de casa segundo a presença de multimorbidade e variáveis sociodemográficas. Participaram do estudo 6.149 pessoas. Multimorbidade foi mais frequente no sexo feminino, em casados, na faixa etária 50-59 anos de idade e em moradores da zona urbana. A maior parte da população saiu de casa entre uma e duas vezes na última semana, percentual que aumentou segundo o número de morbidades (22,3% sem morbidades e 38% com multimorbidade). Sair de casa todos os dias teve menor ocorrência entre indivíduos com multimorbidade (10,3%), e 9,3% saíram de casa na última semana para obter atendimento de saúde. Higienização de mãos (> 98%) e sempre usar máscara ao sair de casa (> 96%) foram hábitos quase universais. Observou-se maior adesão ao isolamento social entre as mulheres com multimorbidade quando comparadas com os homens (RP = 1,49; IC95%: 1,23-1,79); esta adesão aumentou proporcionalmente com a idade e inversamente ao nível de escolaridade. O comportamento de proteção em pessoas com multimorbidade parece ser maior em relação aos demais, embora questões relacionadas ao isolamento social e cuidado em saúde mereçam ser destacadas. Esses achados podem ser úteis na customização de estratégias de enfrentamento atual da pandemia.
Referências	BATISTA, S. R. <i>et al.</i> Comportamentos de proteção contra COVID-19 entre adultos e idosos brasileiros que vivem com multimorbidade: iniciativa ELSI-COVID-19. Cadernos de Saúde Pública , [Rio de Janeiro.], v. 36, p. e00196120, nov. 2020. Disponível em: https://doi.org/10.1590/0102-311x00196120.
Fonte	https://www.scielo.br/j/csp/a/pHQ5RV87Hjwzmdr64hxVzwP/?lang=en



Título	Same-day SARS-CoV-2 antigen test screening in an indoor mass-gathering live music event: a randomised controlled tria
Autor(es)	Boris Revollo, Ignacio Blanco, Pablo Soler, Jessica Toro, Nuria Izquierdo-Useros, Jordi Puig, Xavier Puig, Valentí Navarro-Pérez, Cristina Casañ, Lidia Ruiz, Daniel Perez-Zsolt, Sebastià Videla, Bonaventura Clotet, Josep M Llibre
Resumo	The banning of mass-gathering indoor events to prevent SARS-CoV-2 spread has had an important effect on local economies. Despite growing evidence on the suitability of antigen-detecting rapid diagnostic tests (Ag-RDT) for mass screening at the event entry, this strategy has not been assessed under controlled conditions. We aimed to assess the effectiveness of a prevention strategy during a live indoor concert.
Referências	REVOLLO, B. <i>et al.</i> Same-day SARS-CoV-2 antigen test screening in an indoor mass-gathering live music event: a randomised controlled trial. Lancet. Infectious diseases , [Netherlands], p. S1473309921002681, May 2021. Disponível em: https://doi.org/10.1016/S1473-3099(21)00268-1.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900268-1



Título	Prospective Observational COVID-19 Screening and Monitoring of Asymptomatic Cancer Center Health-Care Workers with a Rapid Serological Test
Autor(es)	Angelo Virgilio Paradiso, Simona De Summa, Nicola Silvestris, Stefania Tommasi, Antonio Tufaro, Angela Maria Vittoria Larocca, Vincenzo D'Addabbo, Donata Raffaele, Vito Cafagna, Vito Michele Garrisi, Giuseppe De Palma
Resumo	Health-care workers (HCW) are at high risk for SARS-CoV-2 infection and, if asymptomatic, for transmitting the virus to fragile cancer patients. We monitored all asymptomatic HCWs of a cancer institute (94% of all employees agreed to enter the study) with the rapid serological test, VivaDiag TM , identifying SARS-CoV-2 associated-IgM/IgG. The tests were performed at time 0 ($n = 606$) and after 14 days ($n = 393$). Overall, the VivaDiag TM results of nine HCWs (1.5%) were positive, with one confirmed to be SARS-CoV-2-positive after oropharyngeal swab testing by RT-PCR. At time 0, all nine cases showed IgM expression while IgG was detected in only one. After 14 days, IgM persisted in all the cases, while IgG became evident in four. A chemiluminescence immunoassay (CLIA) confirmed IgM positivity in 5/13 VivaDiag TM positive cases and IgG positivity in 4/5 VivaDiag TM positive cases. Our study suggests that the VivaDiag TM test can be of help in identifying SARS-CoV-2 infected people in cohorts of subjects with a high prevalence.
Referências	PARADISO, A. V. <i>et al.</i> Prospective Observational COVID-19 Screening and Monitoring of Asymptomatic Cancer Center Health-Care Workers with a Rapid Serological Test. Diagnostics , [Switzerland], v. 11, n. 6, p. 975, May 28, 2021. Disponível em: https://doi.org/10.3390/diagnostics11060975.
Fonte	https://www.mdpi.com/2075-4418/11/6/975/htm



Título	COVID-19 Infection during Pregnancy: Risk of Vertical Transmission, Fetal, and Neonatal Outcomes
Autor(es)	Marwa Saadaoui, Manoj Kumar and Souhaila Al Khodor
Resumo	The COVID-19 pandemic is a worldwide, critical public health challenge and is considered one of the most communicable diseases that the world had faced so far. Response and symptoms associated with COVID-19 vary between the different cases recorded, but it is amply described that symptoms become more aggressive in subjects with a weaker immune system. This includes older subjects, patients with chronic diseases, patients with immunosuppression treatment, and pregnant women. Pregnant women are receiving more attention not only because of their altered physiological and immunological function but also for the potential risk of viral vertical transmission to the fetus or infant. However, very limited data about the impact of maternal infection during pregnancy, such as the possibility of vertical transmission in utero, during birth, or via breastfeeding, is available. Moreover, the impact of infection on the newborn in the short and long term remains poorly understood. Therefore, it is vital to collect and analyze data from pregnant women infected with COVID-19 to understand the viral pathophysiology during pregnancy and its effects on the offspring. In this article, we review the current knowledge about pre-and post-natal COVID-19 infection, and we discuss whether vertical transmission takes place in pregnant women infected with the virus and what are the current recommendations that pregnant women should follow in order to be protected from the virus.
Referências	SAADAOUI, M.; KUMAR, M.; AL KHODOR, S. COVID-19 Infection during Pregnancy: Risk of Vertical Transmission, Fetal, and Neonatal Outcomes. J. Pers. Med. [Switzerland.], v. 11, n. 6, p. 483, May 28, 2021. Disponível em: https://doi.org/10.3390/jpm11060483.
Fonte	https://www.mdpi.com/2075-4426/11/6/483/htm



Título	The COVID-19 puzzle: deciphering pathophysiology and phenotypes of a new disease entity
Autor(es)	Marcin F Osuchowski, Martin S Winkler, Tomasz Skirecki, Sara Cajander, Manu Shankar-Hari, Gunnar Lachmann, Guillaume Monneret, Fabienne Venet, Michael Bauer, Frank M Brunkhorst, Sebastian Weis, Alberto Garcia-Salido, Matthijs Kox, Jean-Marc Cavaillon, Florian Uhle, Markus A Weigand, Stefanie B Flohé, W Joost Wiersinga, Raquel Almansa, Amanda de la Fuente, Ignacio Martin-Loeches, Christian Meisel, Thibaud Spinetti, Joerg C Schefold, Catia Cilloniz, Antoni Torres, Evangelos J Giamarellos-Bourboulis, Ricard Ferrer, Massimo Girardis, Andrea Cossarizza, Mihai G Netea, Tom van der Poll, Jesús F Bermejo-Martín, Ignacio Rubio
Resumo	The zoonotic SARS-CoV-2 virus that causes COVID-19 continues to spread worldwide, with devastating consequences. While the medical community has gained insight into the epidemiology of COVID-19, important questions remain about the clinical complexities and underlying mechanisms of disease phenotypes. Severe COVID-19 most commonly involves respiratory manifestations, although other systems are also affected, and acute disease is often followed by protracted complications. Such complex manifestations suggest that SARS-CoV-2 dysregulates the host response, triggering wide-ranging immuno-inflammatory, thrombotic, and parenchymal derangements. We review the intricacies of COVID-19 pathophysiology, its various phenotypes, and the anti-SARS-CoV-2 host response at the humoral and cellular levels. Some similarities exist between COVID-19 and respiratory failure of other origins, but evidence for many distinctive mechanistic features indicates that COVID-19 constitutes a new disease entity, with emerging data suggesting involvement of an endotheliopathy-centred pathophysiology. Further research, combining basic and clinical studies, is needed to advance understanding of pathophysiological mechanisms and to characterise immuno-inflammatory derangements across the range of phenotypes to enable optimum care for patients with COVID-19.
Referências	OSUCHOWSKI, M. F. et al. The COVID-19 puzzle: deciphering pathophysiology and phenotypes of a new disease entity. The Lancet. Respiratory medicine , [Netherlands.], p. S2213260021002186, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(21)00218-6.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900218-6



Título	Increased COVID-19 Lockdown Burden in Italian Adults with Gastrointestinal Diseases
Autor(es)	Monica Ruotolo, Mario Gagliardi, Carolina Ciacci, Fabiana Zingone, Corina de Santis Ciacc, Antonella Santonicola, giovanna D'Arcangelo, Monica Siniscalchi
Resumo	Coronavirus disease 2019 (COVID-19) causes not only severe illness but also detrimental effects associated with the lockdown measures. The present study aimed to evaluate reported lifestyle changes in a cohort of adults in Italy, including physical exercise, food choices, and psychological wellbeing, after two months of lockdown. Methods: A web survey on social media (Facebook and LinkedIn) of 32 multiple-choice questions aiming to evaluate the impact of the national COVID-19 lockdown in a sample of Italian adults. Results: We received 1378 complete responses (women 68.3%, mean age 39.5 ± 12.5 years). The percentage of participants reporting regular exercise decreased during lockdown (52 vs. 56.5%). The vast majority of people continued to consume the three traditional meals per day, but the consumption of meat, fish, and eggs significantly decreased. Women reported more frequent anxiety, sadness, fear, and feelings of insecurity than men. The factors predicting the worst outcome during the lockdown were being a woman, low education and income, gastrointestinal diseases. Conclusion: The lockdown has had a limited impact on food choices and physical exercise in Italian adults of our series, since most of them made an effort to improve their lifestyle. However, women with gastrointestinal diseases reported more frequent negative feelings and poor adaptation to the lockdown.
Referências	RUOTOLO, M. et al. Increased COVID-19 Lockdown Burden in Italian Adults with Gastrointestinal Diseases. Nutrients , [Switzerland], v. 13, n. 6, p. 1820, May 27, 2021. Disponível em: https://doi.org/10.3390/nu13061820.
Fonte	https://www.mdpi.com/2072-6643/13/6/1820/htm



Título	Preprints- Assessing the Risk of Cascading COVID-19 Outbreaks from Prison-to-Prison Transfers
Autor(es)	Todd L. Parsons, Lee Worden
Resumo	COVID-19 transmission has been widespread across the California prison system, and at least two of these outbreaks were caused by transfer of infected individuals between prisons. Risks of individual prison outbreaks due to introduction of the virus and of widespread transmission within prisons due to poor conditions have been documented. We examine the additional risk potentially posed by transfer between prisons that can lead to large-scale spread of outbreaks across the prison system if the rate of transfer is sufficiently high. We estimated the threshold number of individuals transferred per prison per month to generate supercritical transmission between prisons, a condition that could lead to large-scale spread across the prison system. We obtained numerical estimates from a range of representative quantitative assumptions, and derived the percentage of transfers that must be performed with effective quarantine measures to prevent supercritical transmission given known rates of transfers occurring between California prisons. Our mean estimate of the critical threshold rate of transfers was 14.38 individuals transferred per prison per month in the absence of quarantine measures. Available data documents transfers occurring at a rate of 60 transfers per prison per month. At that rate, estimates of the threshold rate of adherence to quarantine precautions had mean 76.03%. While the impact of vaccination and possible decarceration measures is unclear, we include estimates of the above quantities given reductions in the probability and extent of outbreaks. We conclude that the risk of supercritical transmission between California prisons has been substantial, requiring quarantine protocols to be followed rigorously to manage this risk. The rate of outbreaks occurring in California prisons suggests that supercritical transmission may have occurred. We stress that the thresholds we estimate here do not define a safe level of transfers, even if supercritical transmission between prisons is avoided, since even low
Referências	PARSONS, T. L.; WORDEN, L. Assessing the Risk of Cascading COVID-19 Outbreaks from Prison-to-Prison Transfers. MedRxiv: the preprint for health ciences. Apr. 24, 2021. Disponível em: https://doi.org/10.1101/2021.04.12.21255363.
Fonte	https://www.medrxiv.org/content/10.1101/2021.04.12.21255363v2.full.pdf



Título	Nursing facilities, food manufacturing plants and COVID-19 cases and deaths
Autor(es)	Twisha Asher, Partha Deb, Anjelica Gangaram
Resumo	News outlets pointed to meatpacking plants and nursing homes as viral hotspots during the first wave of the COVID-19 pandemic in the US. In contrast to news reports, we find that retirement communities and assisted living facilities were associated with fewer cases and deaths and that skilled nursing facilities were associated with fewer cases. We find that meatpacking plants were associated with more cases and deaths as were bakeries. In contrast dairy plants were associated with fewer cases and deaths. Proactive implementation of policy measures in nursing homes and retirement facilities were beneficial. Analogous guidance was lacking for food manufacturing establishments, potentially exacerbating the spread of the virus.
Referências	ASHER, T.; DEB, P.; GANGARAM, A. Nursing facilities, food manufacturing plants and COVID-19 cases and deaths. Economics Letters , [Netherlands], v. 201, p. 109800, Apr. 2021. Disponível em: https://doi.org/10.1016/j.econlet.2021.109800.
Fonte	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7906540/



Título	Preprints- Outbreaks of Covid-19 Variants in Prisons: a Mathematical Modeling Analysis of Vaccination and Re-Opening Policies
Autor(es)	Theresa Ryckman, Elizabeth T. Chin, Lea Prince, David Leidner, Elizabeth Long, David M. Studdert, , Joshua A. Salomon, Fernando Alarid-Escudero, Jason R. Andrews, Jeremy D. GoldhaberFiebert
Resumo	Residents of correctional facilities have experienced disproportionately higher rates of SARS-CoV-2 infection and Covid-19-related mortality. To protect against outbreaks, many prisons and jails imposed heavy restrictions on in-person activities, which are now beginning to lift. Uncertainty surrounds the safety of these moves. Methods and Findings: We obtained system-wide resident-day level data for the California state prison system, the nation9s third largest. We used the data to develop a transmission-dynamic stochastic microsimulation model that projects the impact of various policy scenarios on risks of SARS-CoV-2 infections and related hospitalization among residents after an initial infection is introduced to a prison. The policy scenarios vary according to levels of vaccine coverage, baseline immunity, resumption of activities, and use of non-pharmaceutical interventions (e.g., masking, physical distancing). The analyses were conducted across 5 types of prisons that differed in their residential layouts, security levels, and resident demographics. If a viral variant is introduced into a prison that has resumed pre-2020 contact levels, has moderate vaccine coverage, and has no baseline immunity, 23-74% of residents are expected to be infected over 200 days. High vaccination coverage coupled with use of non-pharmaceutical measures reduces cumulative infections to 2-54% of residents. In prisons consisting mostly of dormitory housing, even with high vaccine coverage and non-pharmaceutical interventions, resumption of in-person activities is associated with substantial risk, unless there is high baseline immunity (e.g., ≥50%) from prior outbreaks. In prisons consisting mostly of cell housing, <10% of residents are expected to become infected, even with no baseline immunity. However, hospitalization risks are substantial in prisons that house medically vulnerable populations, even for prisons consisting mostly of



	cells. Risks of large outbreaks are substantially higher if there is continued introduction of infections into a prison. Some findings may not be transportable to other carceral settings, and our assumptions regarding viral variants will not be accurate for all variants. Conclusions: Balancing the benefits of resuming normal in-person activities against the risks of Covid-19 outbreaks is a difficult challenge for correctional systems. The policy choices are not strictly binary. To protect against viral variants, prisons should focus on achieving both high vaccine coverage and maintaining widespread use of non-pharmaceutical interventions. With both in place, some prisons, especially those with lower room occupancy that have already had large outbreaks, could safely resume in-person activities, while continuing testing and measures to protect the medically-vulnerable.
Referências	RYCKMAN, T. et al. Outbreaks of Covid-19 Variants in Prisons: A Mathematical Modeling Analysis of Vaccination and Re-Opening Policies. MedRxiv: the preprint for health ciences. May 5, 2021. Disponível em: https://doi.org/10.1101/2021.05.03.21256525.
Fonte	https://www.medrxiv.org/content/10.1101/2021.05.03.21256525v1.full.pdf+html



Título	Preprints-Evaluating the impact of keeping indoor dining closed on COVID-19 rates among large US cities: a quasi-experimental design
Autor(es)	Alina S. Schnake-Mahl, Gabriella O'Leary, Pricila H. Mullachery, Vaishnavi Vaidya, Gabrielle Connor, Heather Rollins, Jennifer Kolker, Ana V. Diez Roux, Usama Bilal
Resumo	Objective: Indoor dining is one of the potential key drivers of COVID-19 transmission. We leverage the heterogeneity in state government preemption of city indoor dining closures, to estimate the impact of keeping indoor dining closed on COVID-19 incidence. Methods: We obtained case rates and city/state reopening dates from March to October 2020 in 11 U.S. cities. We categorized cities as (treatment) cities that were allowed by the state to reopen but kept indoor dining closed; and (comparison) cities that would have kept indoor dining closed but were preempted by their state and had to reopen indoor dining. Results: Keeping indoor dining closed was associated with a 43% (IRR=0.57, 95% CI 0.46 to 0.69) decline in COVID-19 incidence over 4-weeks compared with cities that reopened indoor dining. These results were consistent after testing alternative modeling strategies. Conclusions: Keeping indoor dining closed contributes to reductions in COVID-19 spread.
Referências	SCHNAKE-MAHL, A. S. et al. Evaluating the impact of keeping indoor dining closed on COVID-19 rates among large US cities: a quasi-experimental design. MedRxiv: the preprint for health ciences, 2021. Disponível em: https://doi.org/10.1101/2021.04.12.21251656.
Fonte	https://www.medrxiv.org/content/10.1101/2021.04.12.21251656v1.full.pdf



Título	Patient care and clinical outcomes for patients with COVID-19 infection admitted to African high-care or intensive care units (ACCCOS): a multicentre, prospective, observational cohort study
Autor(es)	The African COVID-19 Critical Care Outcomes Study (ACCCOS) Investigators
Resumo	There have been insufficient data for African patients with COVID-19 who are critically ill. The African COVID-19 Critical Care Outcomes Study (ACCCOS) aimed to determine which resources, comorbidities, and critical care interventions are associated with mortality in this patient population.
Referências	BICCARD, B. M. <i>et al.</i> Patient care and clinical outcomes for patients with COVID-19 infection admitted to African high-care or intensive care units (ACCCOS): a multicentre, prospective, observational cohort study. Lancet , [Netherlands.], v. 397, n. 10288, p. 1885–1894, May 22, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00441-4.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900441-4



Título	O sistema prisional brasileiro frente à pandemia do novo coronavírus
Autor(es)	Bárbara Arbex Barbosa, Letícia Gamonal Marinho, Marcela Braga Costa
Resumo	Este trabalho tem como objetivo analisar a realidade das penitenciárias brasileiras frente à pandemia que se instaurou diante do surgimento do novo coronavírus. Além de mostrar o surgimento do vírus, há de se apresentar os danos por ele causados nos presídios e as consequências geradas no sistema prisional, ou seja, o que foi feito pelas autoridades em relação aos detentos. Para tal, foram realizadas pesquisas bibliográfica e documental, além de apresentar exemplos que demonstrem a atual situação do sistema prisional brasileiro. A partir do estudo, conclui-se que a precariedade já existente nas penitenciárias, podendo ressaltar como alguns dos grandes problemas, a superlotação e a falta de medidas de higiene, contribuiu para o agravamento da situação nos presídios. Ressalta-se que dessa forma, medidas de prevenção contra o vírus, como o distanciamento social, não puderam ser plenamente efetivadas. Além disso, fica claro que os poderes competentes mostram-se extremamente despreparados no que tange a medidas resolutivas, além de demonstrarem grande negligência em relação à garantia dos direitos humanos com os detentos no Brasil. Por fim, constata-se que o processo ressocializador é de suma importância para os ex-presidiários, não só no contexto pandêmico.
Referências	BARBOSA, B. A.; MARINHO, L. G.; COSTA, M. B. O sistema prisional brasileiro frente à pandemia do novo coronavírus. Jornal Eletrônico Faculdade Vianna Júnior , [Brasil], v. 13, n. 1, p. 22–22, jan. –jun. 2021. Disponível em: https://jefvj.emnuvens.com.br/jefvj/article/view/790.
Fonte	https://jefvj.emnuvens.com.br/jefvj/article/view/790/754



Título	A novel strategy for SARS-CoV-2 mass screening with quantitative antigen testing of saliva: a diagnostic accuracy study
Autor(es)	Isao Yokota, Peter Y Shane, Kazufumi Okada, Yoko Unoki, Yichi Yang, Sumio Iwasaki, Shinichi Fujisawa, Mutsumi Nishida, Takanori Teshima
Resumo	Quantitative RT-PCR (RT-qPCR) of nasopharyngeal swab (NPS) samples for SARS-CoV-2 detection requires medical personnel and is time consuming, and thus is poorly suited to mass screening. In June, 2020, a chemiluminescent enzyme immunoassay (CLEIA; Lumipulse G SARS-CoV-2 Ag kit, Fujirebio, Tokyo, Japan) was developed that can detect SARS-CoV-2 nucleoproteins in NPS or saliva samples within 35 min. In this study, we assessed the utility of CLEIA in mass SARS-CoV-2 screening.(YOKOTA et al., 2021)
Referências	ISAO, Yokota <i>et al.</i> A novel strategy for SARS-CoV-2 mass screening with quantitative antigen testing of saliva: a diagnostic accuracy study. The Lancet microbe , [United Kingdom], p. S2666524721000926, May 19, 2021. Disponível em: https://doi.org/10.1016/S2666-5247(21)00092-6.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2821%2900092-6



Título	Day by day symptoms following positive and negative PCR tests for SARS-CoV-2 in non-hospitalised health-care workers: a 90-day follow-up study
Autor(es)	Kent J. Nielsen, Jesper Medom Vestergaard, Vivi Schlünssen, Jens Peter Bonde, Kathrine Agergård Kaspersen, Karin Biering, Ole Carstensen, Thomas Greve, Karoline Kærgaard Hansen, Annett Dalboge, Esben Meulengracht Flachs, Sanne Jespersen, Mette Lausten Hansen, Susan Mikkelsen, Marianne Kragh Thomsen, Jacob Dvinge Redder, Else Toft Würtz, Lars Ostergaard, Christian Erikstrup, and Henrik Albert Kolstad.
Resumo	Objective:We aimed to compare symptoms day by day for non-hospitalised individuals tested positive and negative for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Methods:We followed 210 test-positive and 630 test-negative health-care workers of the Central Denmark Region up to 90 days after the test, April-June 2020. They daily reported COVID-19 related symptoms that were compared graphically and by logistic regression.Results:Thirty % of test-positive and close to zero of test-negative participants reported reduced sense of taste and smell during all 90 days (adjusted odds ratio [aOR] 86.07, 95% CI 22.86-323). Dyspnoea was reported by an initial 20% of test-positive declining to 5% after 30 days without ever reaching the level of the test-negative participants (aOR 6.88, 95% CI 2.41-19.63). Cough, headache, sore throat, muscle pain, and fever were temporarily more prevalent among the test positive participants; after 30 days, no increases were seen. Women and older participants were more susceptible to COVID-19 symptoms. Conclusion:Prevalence of long-lasting reduced sense of taste and smell is highly increased in mild COVID-19 patients. This pattern is also seen for dyspnoea at a low level but not for cough, sore throat, headache, muscle pain, or fever.
Referências	NIELSEN, K. J. et al. Day by day symptoms following positive and negative PCR tests for SARS-CoV-2 in non-hospitalised health-care workers: a 90-day follow-up study. International journal of infectious diseases, [Netherlands], May 20, 2021. Disponível em: https://doi.org/10.1016/j.ijid.2021.05.032.
Fonte	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8133825/pdf/main.pdf



Título	Nota técnica: o Papel das estruturas territoriais na propagação da Covid-19 na fronteira amazônica
Autor(es)	Maria Nunes
Resumo	Este texto evidencia o papel das infraestruturas de conexão dos territórios na introdução, transmissão e impulsionamento das "ondas" de contaminação pela Covid-19 na rede de cidades amazônicas, bem como analisa se as barreiras sanitárias impostas como medida para o enfrentamento da emergência de saúde tiveram destaque nas estratégias de contenção da doença na tríplice fronteira. Para tanto, definiu-se como recorte temporal o período de março de 2020 a janeiro de 2021.
Referências	NUNES, M. Nota técnica: o Papel das estruturas territoriais na propagação da Covid-19 na fronteira amazônica. Brasília, DF: IPEA, 2021. (Diretoria de Estudos e Políticas Regionais, Urbanas e Ambientais, n. 25). Disponível em: http://repositorio.ipea.gov.br/handle/11058/10597.
Fonte	http://repositorio.ipea.gov.br/bitstream/11058/10597/1/NT_25_Dirur_OPapel.pdf



Título	Universal screening for SARS-CoV-2 infection: a rapid review
Autor(es)	Viswanathan M, Kahwati L, Jahn B, Giger K, Dobrescu AI, Hill C, Klerings I, Meixner J, Persad E, Teufer B, Gartlehner G
Resumo	Coronavirus disease 2019 (COVID-19) is caused by the novel betacoronavirus, severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2). Most people infected with SARS-CoV-2 have mild disease with unspecific symptoms, but about 5% become critically ill with respiratory failure, septic shock and multiple organ failure. An unknown proportion of infected individuals never experience COVID-19 symptoms although they are infectious, that is, they remain asymptomatic. Those who develop the disease, go through a presymptomatic period during which they are infectious. Universal screening for SARS-CoV-2 infections to detect individuals who are infected before they present clinically, could therefore be an important measure to contain the spread of the disease.
Referências	VISWANATHAN, M. <i>et al.</i> Universal screening for SARS-CoV-2 infection: a rapid review. Cochrane library, [United Kingdom], n. 9, 2020. Disponível em: https://doi.org/10.1002/14651858.CD013718.
Fonte	https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013718/epdf/full



Título	Os desafios dos hospitais perante a COVID-19 e a gripe sazonal durante o outono-inverno de 2020/2021
Autor(es)	Luís Campos, Kamal Mansinho, Paulo Telles de Freitas, Victor Ramos, Constantino Sakellarides
Resumo	A possibilidade da coexistência de uma segunda vaga da pandemia de COVID-19, com uma epidemia simultânea de gripe e de cocirculação de outros vírus respiratórios sazonais cria o cenário para uma tempestade perfeita. A preparação do Outono-Inverno de 2020/2021 é complexa, exige orientações centralizadas mas soluções locais e regionais, com forte liderança e elevado nível de coordenação. É essencial actuar a montante dos hospitais para diminuir o afluxo às urgências, minimizando o risco de transmissão que aí ocorre e a sobrecarga das equipas, a jusante para garantir capacidade de internamento e no próprio hospital para optimizar os recursos e a organização. A falência deste plano originará uma pressão insuportável nos cuidados hospitalares. Os autores enunciam os desafios que os hospitais enfrentam e as principais medidas que deverão fazer parte desse plano para preparar o Outono-Inverno de 2020/2021, em Portugal.
Referências	CAMPOS, L. <i>et al.</i> Os Desafios dos hospitais perante a COVID-19 e a gripe sazonal durante o outono-inverno de 2020/2021. Acta médica portuguesa , [Portugal], v. 33, n. 11, p. 716, nov. 2020. Disponível em: https://doi.org/10.20344/amp.14818.
Fonte	https://run.unl.pt/bitstream/10362/105369/1/14818_59729_1_PB.pdf



Título	Da vulnerabilidade à invisibilidade: os idosos institucionalizados durante a pandemia COVID 19
Autor(es)	Ângela simões
Resumo	O "timbre ético" de uma sociedade não é determinado pela forma como trata os seus membros mais fortes, poderosos e ricos, mas pela forma como trata os mais frágeis, mais necessitados e mais vulneráveis, onde se incluem os idosos, especialmente os que residem em instituições. O que será que o nosso cuidado e preocupação (ou descuidado e despreocupação), em particular durante a pandemia COVID19, dirá sobre nós e sobre o "timbre ético" da sociedade contemporânea?(SIMÕES, 2021)
Referências	SIMÕES, Â. Da vulnerabilidade à invisibilidade: os idosos institucionalizados durante a pandemia covid 19. HIGEIA - Revista Científica da Escola Superior de Saúde Dr. Lopes Dias , [Brasil], p. 45–56, mar. 2021.
Fonte	https://repositorio.ipcb.pt/bitstream/10400.11/7517/1/06 Da Vulnerabilidade a invisibilidade os%20idosos institucionalizados durante a pandemia covid 19.pdf



Título	Principais fatores associados à COVID-19 que impactam na saúde e educação de crianças e adolescentes em situação de vulnerabilidade socioeconômica / main factors associated with covid-19 that impact the health and education of children and adolescents in a situation of socioeconomic vulnerability
Autor(es)	Pedro Henrique Melo Alves, Ana Paula Rosa, Jean Marcos Oliveira de Lima, Mariana Firmino, Maria Laína Silva, Thereza Raquel Macêdo Lucena, Milena Roberta Freire da Silva, Karolayne Silva Souza
Resumo	Introdução: A pandemia da COVID-19 ocasionou em medidas de isolamento social dos quais, crianças e adolescentes com vulnerabilidade socioeconômica têm sido os menos favorecidos, visto que, a situação o acesso a saúde e escolas foi limitada. O principal objetivo é conhecer as principais consequências ocasionada pela COVID-19, com respeito à saúde e educação de crianças e adolescentes pertencentes as famílias com vulnerabilidade socioeconômica. Métodos: Trata-se de uma revisão integrativa, dos quais, buscou-se estudos em bases de dados: Scopus, SciELO, PUBMED, BVS e Web of Science, utilizando os descritores: adolescentes, saúde, pandemia, pobreza e educação. Foram encontrados um total de 664 artigos para análise. Resultados: Uma totalidade de 7 estudos foram incluídos nesta revisão após a adoção de critérios de elegibilidade, sendo obtidos um total de 5 estudos com abordagem em educação e saúde, e 2 estudos com abordagem em educação. Discussões: A COVID-19 evidenciou a desigualdade global aos serviços de saúde e educação, dos quais, este fenômeno gerou trauma coletivo em variados núcleos familiares, além do índice de morbi-mortalidade elevado. Considerações Finais: A precariedade social e econômica de famílias com vulnerabilidade socioeconômica tem impactado o físico, cognitivo, emocional e ocupacional, sendo efeitos prejudiciais que se reproduzirão para futuras gerações.
Referências	ALVES, P. H. M. <i>et al.</i> Principais fatores associados à Covid-19 que impactam na saúde e educação de crianças e adolescentes em situação de vulnerabilidade socioeconômica / Main factors associated with Covid-19 that impact the health and education of children and adolescents in a situation of socioeconomic vulnerability. Braz. J. Dev ., [Brasil.], v. 7, n. 3, p. 32815–32826, 31 mar. 2021. Disponível em: https://doi.org/10.34117/bjdv7n3-822.
Fonte	https://www.brazilianjournals.com/index.php/BRJD/article/view/27379/21676



Título	Principais aspectos do novo coronavírus SARS-CoV-2: uma ampla revisão
Autor(es)	André Luiz Araújo Pereira, Kleber Augusto Tomé da Cruz, Patrícia de Sousa Lima
Resumo	O novo coronavírus (SARS-CoV-2), comumente conhecido como COVID-19, é o agente causador da síndrome respiratória aguda grave, e também o responsável pela pandemia mundial instalada em dezembro de 2019. A rápida dispersão do vírus e o risco de severas complicações na área da saúde internacional motivaram a realização de diversos estudos em busca de maneiras plausíveis para solucionar o problema. Ainda não há alternativa terapêutica eficaz estabelecida, muito embora haja registro de vacinas e medicamentos antivirais em fase de teste. Desta maneira, explorar e aglutinar o maior volume possível de informações sobre o novo coronavírus pode contribuir para promover importantes descobertas, favorecendo a formulação de estratégias de controle do patógeno. Assim, neste trabalho foram compilados os dados mais recentes e relevantes sobre a COVID-19, com ênfase para os aspectos gerais da biologia do vírus incluindo os mecanismos moleculares associados à sua multiplicação na célula hospedeira.(PEREIRA; CRUZ; LIMA, 2021)
Referências	PEREIRA, A.; CRUZ, K. A. T. da; LIMA, P. S. Principais aspectos do novo coronavírus SARS-CoV-2: uma ampla revisão. Arquivos do Mudi , [Brasil], v. 25, n. 1, p. 73–90, 2021. Disponível em: https://doi.org/10.4025/arqmudi.v25i1.55455.
Fonte	https://periodicos.uem.br/ojs/index.php/ArqMudi/article/view/55455/751375151925



Título	Recomendações de prevenção e controle da covid-19 nas instituições penais: revisão integrativa
Autor(es)	Karine Zenatti Ely, Náthalie Costa, Janine Koepp, Andréia Rosane de Moura Valim, Lia Gonçalves Possuelo
Resumo	Introdução: a Pandemia de COVID-19 representa um grande desafio para saúde pública, especialmente nas instituições penais, onde há dificuldades em cumprir orientações referentes a higiene e ao distanciamento social. Objetivo: identificar medidas de prevenção e controle da COVID-19 nas instituições penais. Método: revisão integrativa de literatura, realizado em agosto de 2020, nas bases de dados PubMed e LILACS, utilizando os descritores "Infecção por coronavírus", "prisões" e "prisioneiros" e seus equivalentes na língua inglesa. Documentos oficiais também foram incluídos. Resultados: foram identificados oito artigos e dois documentos oficiais que respondem à pergunta da pesquisa. A maioria das publicações concordam quanto as recomendações de prevenção e controle da COVID-19, com exceção da liberdade antecipada ou prisão domiciliar para presos que estão em instituições superlotadas, que é um tema polêmico e não há consenso. Considerações finais: a Pandemia do Covid-19 mostrou a necessidade de reorganizar os processos de trabalho e o cuidado em saúde de forma imediata. As pesquisas ainda não são conclusivas e as instituições estão em processo de adaptação a fim de mitigar o contágio e evitar mortes.
Referências	PEREIRA, A.; CRUZ, K. A. T. da; LIMA, P. S. PRINCIPAIS ASPECTOS DO NOVO CORONAVÍRUS SARS-CoV-2: UMA AMPLA REVISÃO. Arquivos do Mudi , [s. l.], v. 25, n. 1, p. 73–90, 2021. Disponível em: https://doi.org/10.4025/arqmudi.v25i1.55455
Fonte	https://doi.org/10.17058/rips.v3i1.16269



Título	Changes in in-hospital mortality in the first wave of COVID-19: a multicentre prospective observational cohort study using the WHO Clinical Characterisation Protocol UK
Autor(es)	Annemarie B Docherty, Rachel H Mulholland, Nazir I Lone, Christopher P Cheyne, Daniela De Angelis, Karla Diaz-Ordaz, Cara Donegan, Thomas M Drake, Jake Dunning, Sebastian Funk, Marta García-Fiñana, Michelle Girvan, Hayley E Hardwick, Janet Harrison, Antonia Ho, David M Hughes, Ruth H Keogh, Peter D Kirwan, Gary Leeming, Jonathan S Nguyen Van-Tam, Riinu Pius, Clark D Russell, Rebecca G Spencer, Brian DM Tom, Lance Turtle, Peter JM Openshaw, J Kenneth Baillie, Ewen M Harrison†, Malcolm G Semple, on behalf of the ISARIC4C Investigators
Resumo	Mortality rates in hospitalised patients with COVID-19 in the UK appeared to decline during the first wave of the pandemic. We aimed to quantify potential drivers of this change and identify groups of patients who remain at high risk of dying in hospital.
Referências	DOCHERTY, A. B. <i>et al.</i> Changes in in-hospital mortality in the first wave of COVID-19: a multicentre prospective observational cohort study using the WHO Clinical Characterisation Protocol UK. The Lancet. Respiratory medicine , [Netherlands], p. S2213260021001752, May 14, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(21)00175-2.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900175-2



Título	O trabalho na indústria avícola brasileira: do normal-terrível aos novos riscos em meio pandemia de COVID-19
Autor(es)	Allan Rodrigo de Campos Silva
Resumo	Este artigo procura refletir criticamente sobre as relações de trabalho no interior da circuitos de produção da indústria avícola, com ênfase no caso brasileiro, colocado em perspectiva a partir da situação de outros países. Em meio a pandemia de COVID-19, o setor de produção e processamento de carnes, entendido como atividade essencial, é alvo de uma série de denúncias a respeito de práticas abusivas que colocam a saúde dos trabalhadores em risco. Em diversas pequenas cidades do país, os frigoríficos já atuam como focos de contágio da pandemia. A partir de uma breve caracterização das condições que deram origem ao setor avícola no Brasil apresentamos uma síntese das suas contradições, seja uso intensivo de tecnologia, nos fortes impactos ambientais, na interconexão com capitais financeiros ou no tratamento aviltante dos trabalhadores e riscos inerentes à saúde pública em diversas escalas da sua operação.(SILVA, 2020)
Referências	SILVA, A. R. de C. O TRABALHO NA INDÚSTRIA AVÍCOLA BRASILEIRA: DO NORMAL-TERRÍVEL AOS NOVOS RISCOS EM MEIO PANDEMIA DE COVID-19. Revista Pegada Eletrônica, [Brasil], v. 21, n. 2, p. 438–462, maio-out. 2020. Disponível em: https://doi.org/10.33026/peg.v21i2.7749.
Fonte	https://revista.fct.unesp.br/index.php/pegada/article/view/7749



Título	Região dos Vales - RS: observando a dispersão territorial da pandemia da Covid-19
Autor(es)	Rosmari Terezinha Cazarotto, Rogerio Leandro Lima da Silveira, Carolina Rezende Faccin, Helena de Moura Vogt
Resumo	Aborda-se neste artigo o padrão espacial da dinâmica de dispersão territorial da Covid-19 na região dos Vales-RS. De abordagem qualitativa, com o uso de dados secundários coletados junto a órgãos oficiais, no período de 20 de março a 17 de julho de 2020, relativos à dispersão da pandemia da Covid-19 na região, busca-se identificar possíveis relações dessa dinâmica com a estrutura e funcionamento da rede urbana regional, com a estrutura econômica e a divisão territorial do trabalho regional. Ademais, foram consideradas as interações espaciais intrarregionais comandadas pelos principais centros econômicos e de serviços da região dos Vales, as cidades médias de Lajeado e de Santa Cruz do Sul. Observou-se que a dinâmica de dispersão territorial da Covid-19 na região dos Vales-RS apresenta características semelhantes ao verificado em outras regiões e cidades no Brasil e no exterior, mas também revela particularidades entre as sub-regiões que lhe constituem, relacionadas aos usos do território.(CAZAROTTO et al., 2021)
Referências	CAZAROTTO, R. T. <i>et al.</i> REGIÃO DOS VALES - RS: observando a dispersão territorial da pandemia da COVID-19. Gestão e Desenvolvimento, revista do Instituto de Ciências Sociais Aplicadas, [Novo Hamburgo], v. 18, n. 2, p. 56–71, maio-ago. 2021. Disponível em: https://doi.org/10.25112/rgd.v18i2.2484.
Fonte	https://periodicos.feevale.br/seer/index.php/revistagestaoedesenvolvimento/article/view/2484/2863



Título	Pandemia entre muros: o cuidado às pessoas privadas de liberdade no contexto do novo Coronavírus
Autor(es)	Hanna Carolina Padilha de Siqueira, Henrique Figueiredo Carneiro
Resumo	O Brasil tem 748.009 pessoas cumprindo pena em todos os regimes. Quanto ao regime fechado, 362.547 são privadas de liberdade, ficando sob custódia do Estado. Os privados de liberdade, ficam sob o cuidado das Equipes de Atenção Básica da Unidade Prisional. O presente trabalho tem como objetivo discutir os cuidados a saúde que têm sido ofertados a essa determinada população. Realizamos uma revisão bibliográfica utilizando as bases de dados: SciELO, LILACS e Google Acadêmico. Em todos os estudos apresentados foram discutidas Leis e Decretos estaduais e nacionais com orientações para a prevenção do Covid-19 nos presídios do país. É inegável que existe a tentativa legal do "cuidado". Cabe a toda sociedade, refletir sobre o direito a saúde e a ausência deste em ambientes de grande aglomeração, como o sistema prisional brasileiro. As PPL cometeram crime, perdendo seu direito à liberdade. Porém, não se pode negar o direito a humanidade e dignidade dessas pessoas.
Referências	SIQUEIRA, H. C. P. de; CARNEIRO, H. F. Pandemia entre muros: o cuidado às pessoas privadas de liberdade no contexto do novo Coronavírus. HOLOS , [Natal, Brasil], v. 5, n. 0, p. 1–13, 20 jan. 2021. Disponível em: https://doi.org/10.15628/holos.2020.10853.
Fonte	http://www2.ifrn.edu.br/ojs/index.php/HOLOS/article/view/10853/pdf



Título	Ethnic Disparities in COVID-19 among Older Adults Presenting to the Geriatric Emergency Department
Autor(es)	Aladdin H. Shadyab , Edward M. Castillo , Jesse J. Brennan, Theodore C. Chan, Vaishal M. Tolia
Resumo	There is a dearth of epidemiological data on ethnic disparities among older COVID-19 patients.
Referências	SHADYAB, A. H. <i>et al.</i> Ethnic Disparities in COVID-19 among Older Adults Presenting to the Geriatric Emergency Department. The Journal of emergency medicine , [United Sates], p. S0736467921003930, May 9, 2021. Disponível em: https://doi.org/10.1016/j.jemermed.2021.04.019.
Fonte	https://www.jem-journal.com/action/showPdf?pii=S0736-4679%2821%2900393-0



Título	Phylogenomic tracing of asymptomatic transmission in a COVID-19 outbreak
Autor(es)	Ju Zhang, Nan Ding, Yangzi Song, Rui Song, Yang Pan, Linghang Wang, Shuo Yan, Qi Wang, Shanfang Ma, Lirong Wei, Fengting Yu, Lianhe Lu, Fujie Zhang, Chen Chen, Hui Zeng
Resumo	SARS-CoV-2 has caused over 100 million deaths and continues to spread rapidly around the world. Asymptomatic transmission of SARS-CoV-2 is the Achilles' heel of COVID-19 public health control measures. Phylogenomic data on SARS-CoV-2 could provide more direct information about asymptomatic transmission. In this study, using a novel MINERVA sequencing technology, we traced asymptomatic transmission of COVID-19 patients in Beijing, China. One hundred and seventy-eight close contacts were quarantined, and 14 COVID-19 patients were laboratory confirmed by RT-PCR. We provide direct phylogenomic evidence of asymptomatic transmission by constructing the median joining network in the cluster. These data could help us to determine whether the current symptom-based screening should cover asymptomatic persons.
Referências	JU et al. Phylogenomic tracing of asymptomatic transmission in a COVID-19 outbreak. The Innovation , [New York], v. 2, n. 2, p. 100099, Mar. 22, 2021. Disponível em: https://doi.org/10.1016/j.xinn.2021.100099.
Fonte	https://www.cell.com/action/showPdf?pii=S2666-6758%2821%2900024-2



Título	Effect of environmental and socio-economic factors on the spreading of COVID-19 at 70 cities/provinces
Autor(es)	Jishan Ahmed, Md. Hasnat Jaman, Goutam Saha, Pratyya Ghosh
Resumo	The main goal of this article is to demonstrate the impact of environmental and socio-economic factors on the spreading of COVID-19. In this research, data has been collected from 70 cities/provinces of different countries around the world that are affected by COVID-19. In this research, environmental data such as temperatures, humidity, air quality and population density and socio-economic data such as GDP (PPP) per capita, per capita health expenditure, life expectancy and total test in each of these cities/provinces are considered. This data has been analyzed using statistical models such as Poisson and negative binomial models. It is found that a negative binomial regression model is the best fit for our data. Our results reveal higher population density to be an important factor for the quick spread of COVID-19 as maintenance of social distancing requirements are more difficult in urban areas. Moreover, GDP (PPP) and PM _{2.5} are linked with fewer cases of COVID-19 whereas PM ₁₀ , and total number of tests are strongly associated with the increase of COVID-19 case counts.
Referências	AHMED, J. et al. Effect of environmental and socio-economic factors on the spreading of COVID-19 at 70 cities/provinces. Heliyon , [United Kingdom], v. 7, n. 5, p. e06979, May 5, 2021. Disponível em: https://doi.org/10.1016/j.heliyon.2021.e06979.
Fonte	https://www.cell.com/action/showPdf?pii=S2405-8440%2821%2901082-3



Título	Prevalence of SARS-CoV-2 in urban and rural Ethiopia: Randomized household serosurveys reveal level of spread during the first wave of the pandemic
Autor(es)	Saro Abdella , Samuel Rioub, Masresha Tessema , Ashenafi Assefa , Albab Seifu , Anna Blachman , Adugna Abera , Nicolas Moreno , Fernando Irarrazaval , Getachew Tollera , David Browning , Geremew Tasew
Resumo	The spread of SARS-CoV-2 in Sub-Saharan Africa is poorly understood and to date has generally been characterised by a lower number of declared cases and deaths as compared to other regions of the world. Paucity of reliable information, with insights largely derived from limited RT-PCR testing in high-risk and urban populations, has been one of the biggest barriers to understanding the course of the pandemic and informed policy-making. Here we estimate seroprevalence of anti-SARS-CoV-2 antibodies in Ethiopia during the first wave of the pandemic. Methods: We undertook a population-based household seroprevalence serosurvey based on 1856 participants in Ethiopia, in the capital city Addis Ababa, and in Jimma, a middle-sized town in the Oromia region, and its rural surroundings (districts of Seka and Mana), between 22 July and 02 September 2020. We tested one random participant per household for anti-SARS-CoV-2 antibodies using a high specificity rapid diagnostic tests (RDTs) and evaluated population seroprevalence using a Bayesian logistic regression model taking into account test performance as well as age and sex of the participants. Findings: In total, 2304 random households were visited, with 1856 individuals consenting to participate. This produced a sample of 956 participants in Addis Ababa and 900 participants in Jimma. IgG prevalence was estimated at 1.9% (95% CI 0.4 3.7%), and combined IgM/IgG prevalence at 3.5% (95% CI 1.7 5.4%) for Addis Ababa in early August 2020, with higher prevalence in central sub-cities. Prevalence in Jimma town was lower at 0.5% (95% CI 0 1.8%) for IgG and 1.6% (95%CI 0 4.1%) for IgM/IgG, while in rural Jimma IgG prevalence was 0.2% and IgM/IgG 0.4% in early September. Interpretation: More than four months after the first cases were detected in Ethiopia, Addis Ababa displayed a prevalence of 0.2%. A 2% seroprevalence figure for the capital translated to a number of cases at least five times larger than those reported for the country as a whole. At the same time, it contrasts with



Referências	ABDELLA, S. <i>et al.</i> Prevalence of SARS-CoV-2 in urban and rural Ethiopia: Randomized household serosurveys reveal level of spread during the first wave of the pandemic. EClinicalMedicine , [Netherlands], p. 100880, May 7, 2021. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100880.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900160-7



Título	Vaccine bBreakthrough infections with SARS-CoV-2 variants
Autor(es)	Ezgi Hacisuleyman, Caryn Hale, Yuhki Saito, Nathalie E. Blachere, Marissa Bergh, B.S.N., Erin G. Conlon, Dennis J. Schaefer-Babajew, Justin DaSilva, Frauke Muecksch, Christian Gaebler, Richard Lifton, Michel C. Nussenzweig, Theodora Hatziioannou, Paul D. Bieniasz, Robert B. Darnell
Resumo	Emerging variants of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) are of clinical concern. In a cohort of 417 persons who had received the second dose of BNT162b2 (Pfizer–BioNTech) or mRNA-1273 (Moderna) vaccine at least 2 weeks previously, we identified 2 women with vaccine breakthrough infection. Despite evidence of vaccine efficacy in both women, symptoms of coronavirus disease 2019 developed, and they tested positive for SARS-CoV-2 by polymerase-chain-reaction testing. Viral sequencing revealed variants of likely clinical importance, including E484K in 1 woman and three mutations (T95I, del142–144, and D614G) in both. These observations indicate a potential risk of illness after successful vaccination and subsequent infection with variant virus, and they provide support for continued efforts to prevent and diagnose infection and to characterize variants in vaccinated persons. (Funded by the National Institutes of Health and others.)
Referências	HACISULEYMAN, E. <i>et al.</i> Vaccine Breakthrough Infections with SARS-CoV-2 Variants. New England Journal of medicine , [United States], p. NEJMoa2105000I, Apr. 21, 2021. Disponível em: https://doi.org/10.1056/NEJMoa2105000.
Fonte	https://www.nejm.org/doi/pdf/10.1056/NEJMoa2105000?articleTools=true



Título	Os impactos sociais da Covid-19 no Brasil: populações vulnerabilizadas e respostas à pandemia
Autor(es)	Daniel Granada , Marcia Grisotti , Priscila Pavan Detoni , Rosmari Cazarotto e Maria Conceição de Oliveira
Resumo	Com base na relação saúde e migrações, o artigo analisa as condições sociais e de saúde de imigrantes que trabalham nos frigoríficos de carnes e derivados, nos municípios do interior do Rio Grande do Sul e de Santa Catarina, no contexto da pandemia de Covid-19. As dificuldades de acesso à saúde e aos direitos básicos (como a biossegurança), a discriminação racial, a xenofobia e as vulnerabilidades socioeconômicas são fatores que marcam as condições de trabalho desses migrantes nos frigoríficos do Sul do país. As conclusões apontam a necessidade de implementar políticas públicas de saúde que incorporem novas formas de interdependência entre os sistemas produtivos e os indivíduos e grupos sociais, oriundos de processos migratórios, e a mitigação das vulnerabilidades sociais e iniquidades em saúde às quais esses trabalhadores estão expostos para o enfrentamento à pandemia.
Referências	MATTA, G. C. <i>et al.</i> (org.). Os impactos sociais da Covid-19 no Brasil: populações vulnerabilizadas e respostas à pandemia. [Brasil]: Fiocruz, 2021. Série Informação para ação na Covid-19. Disponível em: https://doi.org/10.7476/9786557080320.
Fonte	https://journals.openedition.org/horizontes/5094



Título	Ethnic differences in SARS-CoV-2 infection and COVID-19- related hospitalisation, intensive care unit admission, and death in 17 million adults in England: an observational cohort study using the OpenSAFELY platform
Autor(es)	Rohini Mathur, Christopher T Rentsch, Caroline E Morton, William J Hulme, Anna Schultze, Brian MacKenna, Rosalind M Eggo, Krishnan Bhaskaran, Angel Y S Wong, Elizabeth J Williamson, Harriet Forbes, Kevin Wing, Helen I McDonald, Chris Bates, Seb Bacon, Alex J Walker, David Evans, Peter Inglesby, Amir Mehrkar, Helen J Curtis, Nicholas J DeVito, Richard Croker, Henry Drysdale, Jonathan Cockburn, John Parry, Frank Hester, Sam Harper, Ian J Douglas, Laurie Tomlinson, Stephen J W Evans, Richard Grieve, David Harrison, Kathy Rowan, Kamlesh Khunti, Nishi Chaturvedi, Liam Smeeth, Ben Goldacre, for the OpenSAFELY Collaborative
Resumo	COVID-19 has disproportionately affected minority ethnic populations in the UK. Our aim was to quantify ethnic differences in SARS-CoV-2 infection and COVID-19 outcomes during the first and second waves of the COVID-19 pandemic in England.
Referências	MATHUR, R. <i>et al.</i> Ethnic differences in SARS-CoV-2 infection and COVID-19-related hospitalisation, intensive care unit admission, and death in 17 million adults in England: an observational cohort study using the OpenSAFELY platform. Lancet , [Netherlands], v. 0, n. 0, Apr. 30, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00634-6.
Fonte	https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)00634-6/fulltext



Título	As Boas Práticas de Fabricação no contexto da pandemia
Autor(es)	Ricardo Moreira do Amaral, Janaína de Arruda Santos, Simone Alves, Denise R. Perdomo Azeredo
Resumo	Em dezembro de 2019, surgiu na China um novo coronavírus denominado SARS-CoV2, agente etiológico da COVID-19, que causa infecções do trato respiratório. Posteriormente, em 11 de março de 2020 a OMS declarou o estado de pandemia. Diante desse novo cenário de incertezas, a indústria de alimentos deve prosseguir as suas atividades produtivas, enfrentando o desafio de garantir a segurança e saúde do trabalhador, com o respaldo dos órgãos regulamentadores. O presente estudo teve por objetivo relacionar as medidas de controle adicionais às Boas Práticas de Fabricação, de forma a mitigar os riscos ocupacionais. Observou-se a necessidade de implementação de um plano de contingência focado no controle das barreiras físicas, higiene pessoal, testagem frequente e afastamento imediato dos colaboradores sintomáticos. As práticas relativas à higienização dos ambientes, superfícies, equipamentos e utensílios devem ser minuciosas, por serem efetivas na inativação do vírus. A escolha do sanitizante químico adequado também é de suma importância. Até o momento não há nenhuma evidência científica da transmissão do novo coronavírus ao homem por meio de alimentos, entretanto, os órgãos reguladores e instituições de pesquisas devem se preocupar em promover o conhecimento em bases científicas para o adequado planejamento e consequente tomada de decisões para o enfrentamento da COVID-19 na indústria de alimentos.
Referências	AMARAL, R. M. do <i>et al</i> . As Boas Práticas de Fabricação no contexto da pandemia. Alimentos: Ciência, Tecnologia e Meio Ambiente , Rio de Janeiro, v. 1, n. 11, p. 1–13, 2021. Disponível em: https://revistascientificas.ifrj.edu.br/revista/index.php/alimentos/article/view/1749/1064.
Fonte	https://revistascientificas.ifrj.edu.br/revista/index.php/alimentos/article/view/1749/1064



Título	Propensity for COVID-19 severe epidemic among the populations of the neighborhoods of Fortaleza, Brazil, in 2020
Autor(es)	Jose Ueleres Braga, Alberto Novaes Ramos Jr, Anderson Fuentes Ferreira, Victor Macêdo Lacerda, Renan Monteiro Carioca Freire, Bruno Vieira Bertoncini
Resumo	The state of Ceará (Northeast Brazil) has shown a high incidence of coronavirus disease (COVID-19), and most of the cases that were diagnosed during the epidemic originated from the capital Fortaleza. Monitoring the dynamics of the COVID-19 epidemic is of strategic importance and requires the use of sensitive tools for epidemiological surveillance, including consistent analyses that allow the recognition of areas with a greater propensity for increased severity throughout the cycle of the epidemic. This study aims to classify neighborhoods in the city of Fortaleza according to their propensity for a severe epidemic of COVID-19 in 2020.
Referências	BRAGA, J. U. <i>et al.</i> Propensity for COVID-19 severe epidemic among the populations of the neighborhoods of Fortaleza, Brazil, in 2020. BMC public health , [United Kingdom], v. 20, n. 1, p. 1486, 2020. Disponível em: https://doi.org/10.1186/s12889-020-09558-9.
Fonte	https://www.arca.fiocruz.br/bitstream/icict/43991/2/PropensityCOVID19.pdf



Título	Respiratory syncytial virus seasonality and prevention strategy planning for passive immunisation of infants in low-income and middle-income countries: a modelling study
Autor(es)	You Li, David Hodgson, Xin Wang, Katherine E Atkins, Daniel R Feikin, Harish Nair
Resumo	Respiratory syncytial virus (RSV) represents a substantial burden of disease in young infants in low-income and middle-income countries (LMICs). Because RSV passive immunisations, including maternal vaccination and monoclonal antibodies, can only grant a temporary period of protection, their effectiveness and efficiency will be determined by the timing of the immunisation relative to the underlying RSV seasonality. We aimed to assess the potential effect of different approaches for passive RSV immunisation of infants in LMICs.(LI et al., 2021)
Referências	YOU, LI, et al. Respiratory syncytial virus seasonality and prevention strategy planning for passive immunisation of infants in low-income and middle-income countries: a modelling study. Lancet, Infectious diseases , [United Kingdom], p. S1473309920307039, May 6, 2021. Disponível em: https://doi.org/10.1016/S1473-3099(20)30703-9.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930703-9



Título	As Instituições de Longa Permanência para a Pessoa Idosa (ILPIs) da cidade de Hortolândia, SP, diante dos cuidados ao(à) idoso(a) em período de quarentena frente à Covid-19
Autor(es)	Maria José dos Santos, Ana Paula Mota de Freitas Pequeno, Evany Bettine de Almeida, Thais Bento Lima da Silva
Resumo	Trata-se de um estudo teórico-reflexivo, que tem por objetivo apresentar as Instituições de Longa Permanência da cidade de Hortolândia, estado de São Paulo, Brasil, trazendo à reflexão, a importância dos cuidados com o(a) idoso(a) institucionalizado(a), em tempos de pandemia em casas de repouso (ILPIs). Apresenta-se, nesse sentido, a importância da educação nos currículos mínimos para a compreensão do Envelhecimento, buscando-se a compreensão sobre os acolhimentos nas ILPIs, cujas estruturas ainda não colaboram para uma moradia com os padrões adotados pela vigilância sanitária. Evidencia-se a importância do profissional do Serviço Social ligado à Gerontologia, para um melhor acolhimento dentro das instituições de longa permanência. A falta da priorização das Políticas Públicas para o público idoso chega ao entendimento de que nosso país tem um sistema que não vem colaborando adequadamente com a educação e a orientação da população para o desenvolvimento humano. A Lei 10.743 de 2003 postula que o processo do envelhecimento é direito de todos. No entanto, os próprios governantes fazem da Constituição cidadã de 1988 um marco de desigualdades sociais e do descumprimento das Leis, deflagrando, assim, um desmonte das Políticas Públicas. As casas de repouso são alternativas de moradia para muitos que não conseguem mais se manter no seio familiar ou não têm condições de manter seu próprio sustento. Estas são situações que precisam de profissionais qualificados na área do Envelhecimento Humano para a compreensão da história de vida de cada pessoa idosa, no sentido de atuarem de modo competente e humano.
Referências	SANTOS, M. J. dos <i>et al.</i> As Instituições de Longa Permanência para a Pessoa Idosa (ILPIs) da cidade de Hortolândia, SP, diante dos cuidados ao(à) idoso(a) em período de quarentena frente à Covid-19. Revista Kairós , São Paulo, v. 24, p. 259–279, 11 abr. 2021. Disponível em: https://doi.org/10.23925/2176-901X.2021v24i0p259-279.
Fonte	https://revistas.pucsp.br/index.php/kairos/article/view/53820/34982



Título	Interim findings from first-dose mass COVID-19 vaccination roll-out and COVID-19 hospital admissions in Scotland: a national prospective cohort study
Autor(es)	Eleftheria Vasileiou, Colin R Simpson, Ting Shi, Steven Kerr, Utkarsh Agrawal, Ashley Akbari, Stuart Bedston, Jillian Beggs, Declan Bradley, Antony Chuter, Simon de Lusignan, Annemarie B Docherty, David Ford, F D Richard Hobbs, Mark Joy, Srinivasa Vittal Katikireddi, James Marple, Colin McCowan, Dylan McGagh, Jim McMenamin, Emily Moore, Josephine L K Murray, Jiafeng Pan, Lewis Ritchie, Syed Ahmar Shah, Sarah Stock, Fatemeh Torabi, Ruby S M Tsang, Rachael Wood, Mark Woolhouse, Chris Robertson, Aziz Sheikh
Resumo	The BNT162b2 mRNA (Pfizer–BioNTech) and ChAdOx1 nCoV-19 (Oxford–AstraZeneca) COVID-19 vaccines have shown high efficacy against disease in phase 3 clinical trials and are now being used in national vaccination programmes in the UK and several other countries. Studying the real-world effects of these vaccines is an urgent requirement. The aim of our study was to investigate the association between the mass roll-out of the first doses of these COVID-19 vaccines and hospital admissions for COVID-19.
Referências	VASILEIOU, E. <i>et al.</i> Interim findings from first-dose mass COVID-19 vaccination roll-out and COVID-19 hospital admissions in Scotland: a national prospective cohort study. Lancet , [Netherland.], v. 397, n. 10285, p. 1646–1657, Apr. 23, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00677-2.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900677-2



Título	A COVID-19 e seus impactos no sistema prisional em Sergipe
Autor(es)	Paulo Roberto Felix dos Santos, Izy Rebeka Gomes Lima, Maria Suelen Santos
Resumo	Diante da situação de crise sanitária, ocasionada pela pandemia da Covid-19, nos marcos da crise do capital, torna-se necessário explicitar como esse cenário impacta a dinâmica prisional, com ênfase na realidade sergipana. O presente artigo tem como objetivo principal proporcionar um processo reflexivo-crítico acerca da configuração do sistema prisional em Sergipe em tempos de pandemia, com uma revisão bibliográfica e pesquisa documental, a partir do materialismo histórico dialético, como método de análise. Identificamos como as condições precarizadas do sistema prisional propiciam a expansão da pandemia, expondo seus(uas) internos(as) às mais variadas violações de direitos e situações de matabilidade. Tais impactos revelam-se mais contundentes perante à juventude negra e pobre, que compõe a maior parte da população prisional, processo que escancara as particularidades da dimensão do racismo estrutural, e do projeto de controle sócio-racial. Ademais, demonstramos algumas das medidas utilizadas para mitigar os efeitos da pandemia nesse espaço que, apesar de importantes, revelam-se limitadas, diante de todo o cenário caótico do cárcere sergipano. Como poderemos perceber, tais elementos explicitam os fundamentos das medidas de aprisionamento e das formas de controle capitalista mobilizadas em face do excedente de força de trabalho, e que no contexto de pandemia tem essa condição agravada nas prisões.
Referências	SANTOS, P. R. F. dos; LIMA, I. R. G.; SANTOS, M. S. A COVID-19 E seus impactos no sistema prisional em Sergipe. Serviço Social em Perspectiva , Brasil, v. 5, n. 1, p. 65–86, 16 jan. 2021. Disponível em: https://doi.org/10.46551/rssp.202104.
Fonte	https://www.periodicos.unimontes.br/index.php/sesoperspectiva/article/view/3429



Título	Fatores de risco que influenciaram na evolução da epidemia de covid-19 na região de Itaquera / Risk factors that influenced the evolution of covid-19 epidemic in the region of Itaquera
Autor(es)	Sheila Regina Sarra, Roberta Consentino Kronka Mülfarth
Resumo	This article shows the results of an integrative evaluation of the risk factors found in the Itaquera region (São Paulo City) and their repercussions on the COVID-19 epidemics. We wanted to build a holistic vision, identifying a number of risk factors by analyzing data from multiple sources: administrative, epidemiologic, demographic, work, habitational, mobility and healthcare services. The study showed the importance of socio-economic and urban factors in the new coronavirus epidemic. At the end of the study, we noted the possible interventions to prevent future vulnerability to new epidemics.
Referências	SARRA, S. R.; MÜLFARTH, R. C. K. Fatores de risco que influenciaram na evolução da epidemia de covid-19 na região de Itaquera / Risk factors that influenced the evolution of covid-19 epidemic in the region of Itaquera. Brazilian Journal of Development , [Brasil], v. 7, n. 4, p. 35455–35475, 6 abr. 2021. Disponível em: https://doi.org/10.34117/bjdv7n4-148.
Fonte	https://www.brazilianjournals.com/index.php/BRJD/article/view/27774/21976



Título	Mortalidade por Covid-19 no Brasil: perfil sociodemográfico das primeiras semanas / Mortality due to Covid-19 in Brazil: sociodemographic profile of the first weeks
Autor(es)	Elias Ferreira Porto, Alessandro Leipnitz Domingues, Anselmo Cordeiro de Souza, Monica Karla Vojta Miranda, Morenilza Bezerra da Conceição Froes, Sérgio Rosa Vieira Pasqualinoto
Resumo	Em 26 de fevereiro de 2020, o Ministério da Saúde confirmou o primeiro caso de óbito por Covid-19 no Brasil. Este estudo objetivou-se identificar a mortalidade pela doença no Brasil nas 6 primeiras semanas após a confirmação do primeiro caso de óbito e traçar o perfil desses indivíduos. Trata-se de um estudo transversal descritivo retrospectivo, que utilizou dados dos boletins diários do Ministério da Saúde. Foram analisados todos os casos de óbitos ocorrido no Brasil por Covid-19, do dia 17 de março até a data de 26 de abril 2020. Foram incluídos dados de todos os estados da federação e caracterizados por sexo, idade, cor da pele e presença de comorbidade associada. Dentre as mortes, 72% foram de pessoas com mais de 60 anos, embora cerca de 80% dos infectados não pertencessem a essa faixa etária. Ainda, 60% eram do sexo masculino, mesmo com média de apenas 51,4% dos infectados do sexo masculino. A frequência de óbitos foi significantemente maior entre os indivíduos de cor branca em relação aos de cor parda e negra (p<0,0001). A taxa de mortalidade foi de 6,92%, sendo maior entre os indivíduos do sexo masculino, os mais idosos – principalmente entre aqueles que tinham morbidades associadas – e os de cor branca da pele.
Referências	PORTO, E. <i>et al.</i> Mortality due to Covid-19 in Brazil: sociodemographic profile of the first weeks. Research Society and Development , [Brazil], v. 10, n. 1, p. e34210111588, Apr. 14, 2021. Disponível em: https://doi.org/10.33448/rsd-v10i1.11588.
Fonte	https://rsdjournal.org/index.php/rsd/article/view/11588



Título	Covid-19: Aspectos da origem, fisiopatologia, imunologia e tratamento - uma revisão narrativa
Autor(es)	Cayo Cesar da Silva, Camilla Marcelle Ozorio de Carvalho, Denis Costa de Lima, Emmanuela Santos Costa, Victória Maria Beltrão de Andrade, Bruno Mendes Tenorio, Diana Babini Lapa de Albuquerque Britto, Fernanda Chagas Angelo Mendes Tenorio
Resumo	Objetivo: descrever as principais informações descritas na literatura acerca das informações referentes a infecção pelo coronavírus e aspectos sobre o surgimento da doença, fisiopatologia, imunologia e tratamento. Revisão bibliográfica: A Covid-19, por meio do vírus SARS-CoV-2, apesar de ser de uma família viral conhecida até mesmo de outra pandemia no passado, possui mecanismos que precisam ser estudados para compreender com detalhes informações acerca da sua etiologia, mecanismos de infecção e tratamentos eficazes no combate da infecção. Análises microscópicas de amostras teciduais além do entendimento da imunologia aplicada à defesa viral podem ser a solução para o desenvolvimento de vacinas que consigam realizar uma proteção eficaz contra o vírus e suas mutações já conhecidas. O tratamento e as vacinas, em sua maioria, ainda se encontram em fase final de testes e sua distribuição para a população a partir da aprovação da eficácia, pode levar um bom tempo, e até lá, muitas pessoas poderão perder a vida. Considerações finais: Estudos voltados a fisiopatologia e principalmente, imunologia da SARS-CoV2 podem facilitar o desenvolvimento de terapêuticas mais eficazes e de vacinas contra a infecção do coronavírus, diminuindo o número de mortos e infectados por todo o mundo e ajudando o reestabelecimento da economia pós normalidade.
Referências	SILVA, C. C. da <i>et al.</i> Covid-19: Aspectos da origem, fisiopatologia, imunologia e tratamento - uma revisão narrativa. Revista Eletrônica Acervo Saúde , [Brasil], v. 13, n. 3, p. e6542–e6542, 27 mar. 2021. Disponível em: https://doi.org/10.25248/reas.e6542.2021.
Fonte	https://acervomais.com.br/index.php/saude/article/view/6542/4310



Título	Reduced inflammatory responses to SARS-CoV-2 infection in children presenting to hospital with COVID-19 in China
Autor(es)	Guoqing Qian, Yong Zhang, Yang Xu, Weihua Hu, Ian P. Hall , Jiang Yue , Hongyun Lu , Liemin Ruan, Maoqing Ye, Jin Mei
Resumo	Infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) in children is associated with better outcomes than in adults. The inflammatory response to COVID-19 infection in children remains poorly characterised.
Referências	GUOQING Q. <i>et al.</i> Reduced inflammatory responses to SARS-CoV-2 infection in children presenting to hospital with COVID-19 in China. EClinicalMedicine , [Netherlands.], p. 100831, Apr. 15, 2021. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100831.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900111-5



Título	Genomic characteristics and clinical effect of the emergent SARS-CoV-2 B.1.1.7 lineage in London, UK: a whole-genome sequencing and hospital-based cohort study
Autor(es)	Dan Frampton, Tommy Rampling, Aidan Cross, Heather Bailey, Judith Heaney, Matthew Byott, Rebecca Scott, Rebecca Sconza, Joseph Price, Marios Margaritis, Malin Bergstrom, Moira J Spyer, Patricia B Miralhes, Paul Grant, Stuart Kirk, Chris Valerio, Zaheer Mangera, Thaventhran Prabhahar, Jeronimo Moreno-Cuesta, Nish Arulkumaran, Mervyn Singer, Gee Yen Shin, Emilie Sanchez, Stavroula M Paraskevopoulou, Deenan Pillay, Rachel A McKendry, Mariyam Mirfenderesky, Catherine F Houlihan, Eleni Nastouli
Resumo	Emergence of variants with specific mutations in key epitopes in the spike protein of SARS-CoV-2 raises concerns pertinent to mass vaccination campaigns and use of monoclonal antibodies. We aimed to describe the emergence of the B.1.1.7 variant of concern (VOC), including virological characteristics and clinical severity in contemporaneous patients with and without the variant.
Referências	FRAMPTON, D. <i>et al.</i> Genomic characteristics and clinical effect of the emergent SARS-CoV-2 B.1.1.7 lineage in London, UK: a whole-genome sequencing and hospital-based cohort study. Lancet Infect Dis , [United Kingdom], p. S1473309921001705, Apr. 12, 2021. Disponível em: https://doi.org/10.1016/S1473-3099(21)00170-5.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900170-5



Título	Elevated COVID19 mortality risk in Detroit area hospitals among patients from census tracts with extreme socioeconomic vulnerability
Autor(es)	Avnish Sandhu, Steven J. Korzeniewski, Jordan Polistico, Harshita Pinnamaneni , Sushmitha Nanja Reddy , Ahmed Oudeif , Jessica Meyers , Nikki Sidhu , Phillip Levy , Lobelia Samavati , M.Safwan Badr , Jack D. Sobel , Robert Sherwin , Teena Chopra
Resumo	The incidence of novel coronavirus disease (COVID19) is elevated in areas with heightened socioeconomic vulnerability. Early reports from US hospitals also implicated social disadvantage and chronic disease history as COVID19 mortality risk factors. However, the relationship between race and COVID19 mortality remains unclear.
Referências	SANDHU, A. <i>et al.</i> Elevated COVID19 mortality risk in detroit area hospitals among patients from census tracts with extreme socioeconomic vulnerability. EClinicalMedicine , [Netherlands], v. 34, p. 100814, Apr. 6, 2021. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100814.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900094-8



Título	Procedimentos adotados pelo estado do Espírito Santo para o enfrentamento da Covid-19 nos presídios capixabas
Autor(es)	Clemildo de Souza Lima
Resumo	Este trabalho tem como objetivo explicitar as providências adotadas pelo Estado do Espírito Santo, a partir do agravamento da pandemia do Covid-19 no território capixaba. No entanto, esta pesquisa teve como foco as ações implementadas no âmbito do sistema prisional. Neste contexto, o governo formulou protocolos de prevenção e tratamento, com finalidade de evitar a propagação do vírus entre a população carcerária, servido-res e demais profissionais que mantêm contato com os reclusos. Para realizar esta pesquisa, adotou-se o método descritivo, que evidenciou os regulamentos elaborados pela Secretaria de Estado e da Justiça e Secretaria Estadual de Saúde. Ao final deste estudo, concluiu-se que as ações adotadas pelo governo capixabano decorrer do ano de 2020 alcançaram êxito, posto que, houve baixo número de óbitos entre reclusos e servidores do sistema prisional.
Referências	LIMA, C. de S. Procedimentos adotados pelo estado do espírito Santo para o enfrentamento da Covid-19 nos presídios capixabas. Revista Brasileira de Execução Penal , Brasília, DF, v. 2, n. 1, p. 239–254, jan./jun. 2021.
Fonte	http://rbepdepen.depen.gov.br/index.php/RBEP/article/view/275/169



Título	Favelas e a pandemia de COVID-19, uma tragédia anunciada?
Autor(es)	Elisa de Carvalho
Resumo	Grotão, ocupação, vila, alagado, invasão, comunidade Falar de favelas é um tema complexo que acende muitas discussões sobre políticas de urbanização, infraestrutura e identidade. Resultado de um crescimento urbano descontrolável, de uma urbanização excludente e de uma industrialização altamente exploradora, sulcadas na paisagem, elas já são parte do cenário urbano em boa parte das metrópoles mundiais. Estudos estimam que, até 2030, uma em cada 4 pessoas morará em assentamentos chamados de informais: áreas construídas com grupos de unidades habitacionais dos quais os ocupantes não têm direito legal ou os ocupam ilegalmente; assentamentos não planejados e áreas onde as habitações não estão em conformidade com os regulamentos atuais de planejamento e construção (habitação não autorizada) (OECD, 2001). A história da moradia no Brasil se confunde com o surgimento das favelas, repleta de estereótipos e historicamente criminalizada. Em 2020, a história se repete ou se inverte, estigmatizado reduto das epidemias e doenças, as comunidades cariocas lutam para que a COVID-19 não "suba o morro", pois, ironicamente, a pandemia está no asfalto.
Referências	CARVALHO, E. de. Favelas e a pandemia de COVID-19, uma tragédia anunciada? Pensar Acadêmico , Manhuaçu , v. 19, n. 2, p. 407–432, 5 fev. 2021. Disponível em: https://doi.org/10.21576/pa.2021v19i2.1938.
Fonte	http://www.pensaracademico.unifacig.edu.br/index.php/pensaracademico/article/view/1938/1987



Título	Institutionalized elderly: vulnerabilities and strategies to cope with Covid-19 in Brazil
Autor(es)	Pricila Oliveira de Araújo, Maria Yaná Guimarães Silva Freitas, Evanilda Souza de Santana Carvalho, Thaís Moreira Peixoto, Maria Lúcia Silva Servo, Laiane da Silva Santana, Juliana Macêdo dos Santos Silva, Jenny Caroline Vieira Moura
Resumo	This article presents a systematized reflection and discussion around two guiding axes: the first discusses aging and vulnerabilities to biological, physical, cognitive, social and affective losses that require specific attention, as well as vulnerabilities to COVID-19 to which institutionalized elderly people are exposed; the second, we reflect on the adoption of restrictive and protective measures to prevent the spread of the virus, aiming to keep the elder health and mitigate the effects of the pandemic. The conclusion is that the pandemic has increased the many vulnerabilities to which institutionalized older people were already exposed, adding vulnerability to a new disease, such as COVID-19, due to its high lethality and comorbidity, aggravated by precariousness of long-term Brazilian institutions due to the negligence of public authorities, civil society, the management of the institution and the families of the patients. The post-pandemic scenario will require collective efforts to protect and ensure the survival of the elderly living in those residences.
Referências	ARAÚJO, P. O. de <i>et al.</i> Institutionalized elderly: vulnerabilities and strategies to cope with Covid-19 in Brazil. Investigación y Educación en Enfermería , [Colombia], v. 39, n. 1, 4 mar. 2021. Disponível em: https://doi.org/10.17533/udea.iee.v39n1e07.
Fonte	https://revistas.udea.edu.co/index.php/iee/article/view/345522



Título	Estimates of infection and mortality from Covid-19 in care homes for older people in Brazil
Autor(es)	Patrick Alexander Wachholz , Virgilio Garcia Moreira, Déborah Oliveira, Helena Akemi Wada Watanabe , Paulo José Fortes Villas Boas
Resumo	OBJECTIVE: To describe infection and mortality rates associated with COVID-19 in older people living in Brazilian care homes. METHODS: A descriptive cross-sectional study was conducted using primary and secondary data sources. Nationwide care home administrators were invited to report, via an online questionnaire, the occurrence of infection and mortality associated with COVID-19 from April to August 2020. State Public Prosecutor Offices, State Health Departments, and the Unified Social Security System were also contacted for information. Data were analyzed using descriptive statistics. RESULTS: Data were collected from 2154 care homes located in 14 states, covering 59878 older residents. The incidence rate of COVID-19 was 6.57%, and 883 deaths were recorded in the period, with a case-fatality rate of 22.44%. CONCLUSIONS: The incidence and mortality rates observed in this study were lower than those observed in other (high-income) countries. Data sources related to COVID-19 outbreaks in Brazilian care homes are currently limited to self-report. Structuring and systematizing data recording and reporting in these settings is essential to better understand the spread of the virus and to protect care home residents in Brazil
Referências	WACHHOLZ, P. A. <i>et al.</i> Estimates of infection and mortality from COVID-19 in care homes for older people in Brazil. Geriatr Gerontol Aging , [Brazil], v. 14, n. 4, p. 290–293, 2020. Disponível em: https://doi.org/10.5327/Z2447-212320202000127.
Fonte	https://cdn.publisher.gn1.link/ggaging.com/pdf/v14n4a11.pdf



	Habitat loss and the risk of disease outbreak
Título	(Perda de habit e risco dr surto de doença)
Autor(es)	Edward B.Barbier
Resumo	Evidence suggests that emerging infectious diseases, such as COVID-19, originate from wildlife species, and that land-use change is an important pathway for pathogen transmission to humans. We first focus on zoonotic disease spillover and the rate at which primary human cases appear, demonstrating that a potential outbreak is directly related to the area of wildlife habitat. We then develop a model of the costs and benefits of land conversion that includes the effect of habitat size on the risk of disease outbreak. Our model and numerical simulations show that incorporating this risk requires more wildlife habitat conservation in the long run, and how much more should be conserved will depend on the initial habitat size. If the area is too small, then no conversion should take place. Any policy to control habitat loss, such as a tax imposed on the rents from converted land, should also vary with habitat area.
Referências	BARBIER, E. B. Habitat loss and the risk of disease outbreak. Journal of environmental economics and management , [United States], p. 102451, Apr. 13, 2021. Disponível em: https://doi.org/10.1016/j.jeem.2021.102451.
Fonte	https://doi.org/10.1016/j.jeem.2021.102451



	SARS-CoV-2 seropositivity and subsequent infection risk in healthy young adults: a prospective cohort study
Título	(soropositividade para SARS-CoV-2 e subsequente risco de infecção em adultos jovens saudáveis: um estudo de coorte prospectivo)
Autor(es)	Andrew G Letizia, Yongchao Ge, Sindhu Vangeti, Carl Goforth, Dawn L Weir, Natalia A Kuzmina, Corey A Balinsky, Hua Wei Chen, Dan Ewing, Alessandra Soares-Schanoski, Mary-Catherine George, William D Graham, Franca Jones, Preeti Bharaj, Rhonda A Lizewski, Stephen E Lizewski, Jan Marayag, Nada Marjanovic, Clare M Miller, Sagie Mofsowitz, Venugopalan D Nair, Edgar Nunez, Danielle M Parent, Chad K Porter, Ernesto Santa Ana, Megan Schilling, Daniel Stadlbauer, Victor A Sugiharto, Michael Termini, Peifang Sun, Russell P Tracy, Florian Krammer, Alexander Bukreyev, Irene Ramos, Stuart C Sealfon
Resumo	Whether young adults who are infected with SARS-CoV-2 are at risk of subsequent infection is uncertain. We investigated the risk of subsequent SARS-CoV-2 infection among young adults seropositive for a previous infection.
Referências	LETIZIA, A. G. <i>et al.</i> SARS-CoV-2 seropositivity and subsequent infection risk in healthy young adults: a prospective cohort study. The Lancet. Respiratory medicine , [Netherlands.], v. 0, n. 0, Apr. 6, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(21)00158-2.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900158-2



	Longitudinal assessment of symptoms and risk of SARS-CoV-2 infection in healthcare workers across 5 hospitals to understand ethnic differences in infection risk.
Título	
	(Avaliação longitudinal dos sintomas e do risco de infecção pelo SRA-CoV-2 em trabalhadores da saúde em 5 hospitais para compreender as diferenças étnicas no risco de infecção)
Autor(es)	Ana M Valdes, Professor, James C Moon, Professor, Amrita Vijay, Research Fellow, Nish Chaturvedi, Professor, Alan Norrish, Senior Research Fellow, Adeel Ikram, Registrar, Simon Craxford, Research Fellow, Lola M.L. Cusin, PhD Student, Jessica Nightingale, Clinical Research Manager, Amanda Semper, Principal scientist, Timothy Brooks, Clinical Services Director, Aine McKnight, Professor, Hibba
	Kurdi, Research Fellow, Cristina Menni, Lecturer, Patrick Tighe, Associate Professor, Mahdad Noursadeghi, Professor, Guruprasad Aithal, Professor, Thomas A Treibel, Associate Professor, Benjamin J Ollivere, Professor, Charlotte Manisty, Associate Professor
Resumo	Healthcare workers (HCWs) have increased rates of SARS-CoV-2 infection compared with the general population. We aimed to understand ethnic differences in SARS-CoV-2 seropositivity among hospital healthcare workers depending on their hospital role, socioeconomic status, Covid-19 symptoms and basic demographics.
Referências	VALDES, A. M. <i>et al.</i> Longitudinal assessment of symptoms and risk of SARS-CoV-2 infection in healthcare workers across 5 hospitals to understand ethnic differences in infection risk. EClinicalMedicine , [Netherlands], p. 100835, Apr. 15, 2021. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100835.
Fonte	https://www.sciencedirect.com/science/article/pii/S2589537021001152



Título	Can ketone bodies inactivate coronavirus spike protein? The potential of biocidal agents against SARS-CoV-2 (Os corpos cetônicos podem inativar a proteína do pico do coronavírus? O potencial de agentes biocidas contra SARS - CoV - 2)
Autor(es)	Alaa Shaheen
Resumo	Biocidal agents such as formaldehyde and glutaraldehyde are able to inactivate several coronaviruses including SARS-CoV-2. In this article, an insight into one mechanism for the inactivation of these viruses by those two agents is presented, based on analysis of previous observations during electron microscopic examination of several members of the orthocoronavirinae subfamily, including the new virus SARS-CoV-2. This inactivation is proposed to occur through Schiff base reaction-induced conformational changes in the spike glycoprotein leading to its disruption or breakage, which can prevent binding of the virus to cellular receptors. Also, a new prophylactic and therapeutic measure against SARS-CoV-2 using acetoacetate is proposed, suggesting that it could similarly break the viral spike through Schiff base reaction with lysines of the spike protein. This measure needs to be confirmed experimentally before consideration. In addition, a new line of research is proposed to help find a broad-spectrum antivirus against several members of this subfamily.
Referências	SHAHEEN, A. Can ketone bodies inactivate coronavirus spike protein? The potential of biocidal agents against SARS-CoV-2. BioEssays , [United States], p. 2000312, Apr. 15, 2021. Disponível em: https://doi.org/10.1002/bies.202000312.
Fonte	https://onlinelibrary.wiley.com/doi/epdf/10.1002/bies.202000312



Título	Recurrent COVID-19 including evidence of reinfection and enhanced severity in thirty Brazilian healthcare workers
	(COVID-19 recorrente incluindo provas de reinfecção e maior severidade em trinta profissionais de saúde brasileiros)
Autor(es)	Letícia Adrielle dos Santos, Pedro Germano de Góis Filho, Ana Maria Fantini Silva, João Victor Gomes Santos, Douglas Siqueira Santos, Marília Marques Aquino, Rafaela Mota de Jesus, Maria Luiza Dória Almeida, João Santana da Silva, Daniel M. Altmannd, Rosemary J. Boyton, Cliomar Alves dos Santos, Camilla Natália Oliveira Santos, Juliana Cardoso Alves, Ianaline Lima Santos, Lucas Sousa Magalhães, Emilia M.M.A. Belitardo, Danilo J.P.G. Rocha, João P.P. Almeida, Luis G.C. Pacheco, Eric R.G.R. Aguiar, Gubio Soares Campos, Silvia Inês Sardi, Rejane Hughes Carvalho, Amélia Ribeiro de Jesus, Karla Freire Rezende, Roque Pacheco de Almeida
Resumo	There is growing concern about individuals reported to suffer repeat COVID-19 disease episodes, these in a small number of cases characterised as de novo infections with distinct sequences, indicative of insufficient protective immunity even in the short term. Methods: Observational case series and case-control studies reporting 33 cases of recurrent, symptomatic, qRTPCR positive COVID-19. Recurrent disease was defined as symptomatic recurrence after symptom-free clinical recovery, with release from isolation >14 days from the beginning of symptoms confirmed by qRT-PCR. The case control study-design compared this group of patients with a control group of 62 patients randomly selected from the same COVID-19 database. Results: Of 33 recurrent COVID-19 patients, 26 were female and 30 were HCW. Mean time to recurrence was 50.5 days which was associated with being a HCW (OR 36.4 (p <0.0001)), and blood type A (OR 4.8 (p = 0.002)). SARS-CoV-2 antibodies were significantly lower in recurrent patients after initial COVID-19 (2.4 ±0.610; p<0.0001) and after recurrence (6.4 ±11.34; p = 0.007). Virus genome sequencing identified reinfection by a different isolate in one patient. Conclusions: This is the first detailed case series showing COVID-19 recurrence with qRT-PCR positivity. For one individual detection of phylogenetically distinct genomic sequences in the first and second episodes confirmed bona fide renfection, but in most cases the data do not formally distinguish between reinfection and re-emergence of a chronic infection reservoir. These episodes were significantly associated with reduced Ab response during initial disease and argue the need for ongoing vigilance without an assumption of protection after a first episode.
Referências	ADRIELLE DOS SANTOS, L. <i>et al.</i> Recurrent COVID-19 including evidence of reinfection and enhanced severity in thirty Brazilian healthcare workers. Journal of Infection , [United Kingdom], v. 82, n. 3, p. 399–406, 2021. Disponível em: https://doi.org/10.1016/j.jinf.2021.01.020.
Fonte	https://www.arca.fiocruz.br/handle/icict/46266



Título	Estimativas de impacto da COVID-19 na mortalidade de idosos institucionalizados no Brasil
Autor(es)	Carla Jorge Machado, Claudia Cristina de Aguiar Pereira, Bernardo de Mattos Viana, Graziella Lage Oliveira, Daniel Carvalho Melo, Jáder Freitas Maciel Garcia de Carvalho, Flávia Lanna de Moraes, Edgar Nunes de Moraes
Resumo	O presente estudo tem como objetivo estimar o impacto da COVID-19 na mortalidade de idosos institucionalizados no Brasil. Foram estimados números de óbitos pela doença para o País, Unidades da Federação e Regiões, com base nas estimativas calculadas e efetuadas neste trabalho do percentual de óbitos de idosos que ocorreriam em instituições de longa permanência de acordo com os totais. Essa estimativa foi baseada em informações disponíveis para uma série de países. O percentual ponderado foi de 44,7%. Estimaram-se 107.538 óbitos de idosos nestas instituições no Brasil em 2020, por COVID-19. São previstos maiores números de óbitos na Região Sudeste (48.779 óbitos), seguida da Região Nordeste (28.451 óbitos); São Paulo é a Unidade da Federação que na estimativa será mais afetada (24.500 óbitos). Fica claro o forte impacto da COVID-19 na população idosa residente em instituições de longa permanência para idosos. As estimativas ultrapassam para o país 100 mil idosos, potencialmente os mais frágeis e vulneráveis, e são baseadas em número de óbitos totais conservador, tendo em vista outras estimativas e a situação alarmante de crescimento dos números de óbitos no Brasil.
Referências	MACHADO, C. J. <i>et al.</i> Estimativas de impacto da COVID-19 na mortalidade de idosos institucionalizados no Brasil. Ciênc. Saúde Colet. [Rio de Janeiro], n. 9, v. 25, p. 3437–3444, set. 2020. Disponível em: https://doi.org/10.1590/1413-81232020259.14552020.
Fonte	https://doi.org/10.1590/1413-81232020259.14552020



Título	População negra e Covid-19: reflexões sobre racismo e saúde
Autor(es)	Márcia Pereira Alves dos Santos, Joilda Silva Nery, Emanuelle Freitas Goes, Alexandre Da Silva, Andreia Beatriz Silva dos Santos, Luís Eduardo Batista, Edna Maria de Araújo
Resumo	Este artigo tem por objetivo contribuir para a reflexão no tocante aos impactos da pandemia Covid-19 na população negra, tendo como marco disparador a necessidade premente de analisar as assimetrias que essa emergência sanitária global produz, particularmente em contextos de desigualdade social, como é o caso do Brasil, em que a população em situação de vulnerabilidade social pode ser representada majoritariamente pela população negra, em seus diferentes grupos específicos, tipificados por gênero, por restrições de acesso a educação, proteção social, moradia adequada, serviços de saneamento básico, internet, bem como por ocupação/desocupação, por espaço geográfico, por privação de liberdade, ainda que paradoxalmente, quantitativamente equivalha a maioria da população brasileira, que acumula os piores indicadores.
Referências	SANTOS, M. P. A. D. <i>et al.</i> População negra e Covid-19: reflexões sobre racismo e saúde. Estud. Avançados. ,São Paulo, v. 34, n. 99, p. 225–244, 10 jul., maio/ago. 2020. Disponível em: https://doi.org/10.1590/s0103-4014.2020.3499.014.
Fonte	https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-40142020000200225&tlng=pt



Título	COVID-19: origem, patogênese, transmissão, aspectos clínicos e atuais estratégias terapêuticas
Autor(es)	Lidiane Pereira de Albuquerque, Raniella Borges da Silva, Regina Maria Sousa de Araújo
Resumo	Introdução o surgimento da doença provocada pelo novo coronavírus 2019 (COVID-19), na cidade de Wuhan, China, em dezembro de 2019, causou um surto global e é um grande problema de saúde pública. Em 30 de janeiro de 2020, a Organização Mundial de Saúde declarou que este surto constituiu uma Emergência de Saúde Pública de Importância Internacional. Este presente trabalho traz informações sobre COVID-19, destacando o histórico desta doença, organização genômica do novo coronavírus, patogênese, diagnóstico, manifestações clínicas e transmissão, bem como controle, prevenção e atuais estratégias terapêuticas. Delineamento: refere-se a uma revisão narrativa de literatura, na qual foram realizadas buscas nas bases de dados PubMed e Science Direct voltadas para a publicação de artigos científicos de âmbitos nacional e internacional. Resultados: COVID-19 trata-se de uma infecção viral altamente transmissível e patogênica e nenhum tratamento antiviral específico ou vacina está atualmente disponível. Diante desses fatos, inúmeros países adotaram uma variedade de medidas extensivas de controle para reduzir a transmissão da doença de pessoa para pessoa. Implicações: há várias pesquisas em andamento no intuito de identificar potenciais tratamentos para esta enfermidade. Atualmente, a intervenção eficaz nas medidas de controle da infecção é a melhor maneira de impedir a disseminação do novo coronavírus.
Referências	ALBUQUERQUE, L. P. de; SILVA, R. B. da; ARAÚJO, R. M. S. de. COVID-19: origem, patogênese, transmissão, aspectos clínicos e atuais estratégias terapêuticas. Revista Prevenção de Infecção e Saúde , [Brasil], v. 6, Ahead of print, 2020. Disponível em: https://doi.org/10.26694/repis.v6i0.10432.
Fonte	https://revistas.ufpi.br/index.php/nupcis/article/view/10432/pdf



Título	Monitoring the proportion of the population infected by SARS-CoV-2 using age-stratified hospitalisation and serological data: a modelling study
	(Monitorando a proporção da população infectada pelo SARS-CoV-2 usando hospitalização estratificada por idade e dados sorológicos: um estudo de modelagem)
Autor(es)	Nathanaël Hozé, Juliette Paireau, Nathanaël Lapidus, Cécile Tran Kiem, Henrik Salje, Gianluca Severi, Mathilde Touvier, Marie Zins, Xavier de Lamballerie, Daniel Lévy-Bruhl, Fabrice Carrat, Simon Cauchemez
Resumo	Regional monitoring of the proportion of the population who have been infected by SARS-CoV-2 is important to guide local management of the epidemic, but is difficult in the absence of regular nationwide serosurveys. We aimed to estimate in near real time the proportion of adults who have been infected by SARS-CoV-2.
Referências	HOZÉ, N. <i>et al.</i> Monitoring the proportion of the population infected by SARS-CoV-2 using age-stratified hospitalisation and serological data: a modelling study. The Lancet. Public health , [United Kingdom], p. S2468266721000645, Apr. 8, 2021. Disponível em: https://doi.org/10.1016/S2468-2667(21)00064-5.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2468-2667%2821%2900064-5



Título	COVID-19 e a reabertura das escolas: uma revisão sistemática dos riscos de saúde e uma análise dos custos educacionais e econômicos.
Autor(es)	Marcio Sommer Bittencourt, Driele Peixoto Bittencourt, Giuliano Generoso, Jandrei Markus, Catherine Moura, João Cossi
Resumo	Sumário executivo [] foi realizada uma revisão sistemática sobre os riscos de transmissão da COVID-19 no ambiente escolar, a potencial ameaça de interação das crianças e de adolescentes até 18 anos com os familiares nos domicílios, o perfil de perigo de complicações entre os alunos e profissionais da educação, além da avaliação do impacto sobre os estudantes no fechamento das escolas e em comparação às diferentes estratégias usadas internacionalmente. Dada a falta de estudos revisados por pares na região da América Latina e do Caribe, a grande maioria dos estudos citados aqui são de outras regiões, o que pode ser considerado uma limitação pois nessas situações os contextos locais são relevantes. []
Referências	Bittencourt, M. S. et al. COVID-19 e a reabertura das escolas: uma revisão sistemática dos riscos de saúde e uma análise dos custos educacionais e econômicos. [S.l.]: Banco Interamericano de Desenvolvimento, fev. 2021. 56 p. Divisão para educação: Textos para debate nº IDB-DP-00842. Disponível em: https://publications.iadb.org/publications/portuguese/document/COVID-19-e-a-reabertura-das-escolas-uma-revisao-sistematica-dos-riscos-de-saude-e-uma-analise-dos-custos-educacionais-e-economicospdf.
Fonte	https://publications.iadb.org/pt/covid-19-e-reabertura-das-escolas-uma-revisao-sistematica-dos-riscos-de-saude-e-uma-analise-dos



	SARS-CoV-2 infection rates of antibody-positive compared with antibody-negative health-care workers in England: a large, multicentre, prospective cohort study (SIREN)
Título	
	(Taxas de infecção por SRA-CoV-2 de anticorpos positivos em comparação com os trabalhadores de cuidados de saúde com
	anticorpos negativos em Inglaterra: um grande estudo de coorte prospectivo, multicêntrico (SIREN))
	Victoria Jane Hall, Sarah Foulkes, Andre Charlett, Ana Atti, Edward J Monk, Ruth Simmons, Edgar Wellington, Michelle J Cole,
Autor(es)	Ayoub Saei, Blanche Oguti, Katie Munro, Sarah Wallace, Peter D Kirwan, Madhumita Shrotri, Amoolya Vusirikala, Sakib Rokadiya,
	Meaghan Kall, Maria Zambon, Mary Ramsay, Tim Brooks, Colin S Brown, Meera A Chand, Susan Hopkins, and the SIREN Study
	Group
	Increased understanding of whether individuals who have recovered from COVID-19 are protected from future SARS-CoV-2
Resumo	infection is an urgent requirement. We aimed to investigate whether antibodies against SARS-CoV-2 were associated with a
	decreased risk of symptomatic and asymptomatic reinfection.
Referências	FFPH, V. J. H. SARS-CoV-2 infection rates of antibody-positive compared with antibody-negative health-care workers in England: a large, multicentre, prospective cohort study (SIREN). Lancet , [Netherlands], p. 11, Apr. 9, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00675-9.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900675-9



	A cross-sectional and prospective cohort study of the role of schools in the SARS-CoV-2 second wave in Italy
Título	(Um estudo de coorte transversal e prospectivo sobre o papel das escolas na segunda vaga da SRA-CoV-2 em Itália)
Autor(es)	Sara Gandinia, Maurizio Rainisio, Maria Luisa Iannuzzo, Federica Bellerba, Francesco Cecconi, Luca Scorrano
Resumo	During COVID-19 pandemic, school closure has been mandated in analogy to its effect against influenza, but it is unclear whether schools are early COVID-19 amplifiers.
Referências	GANDINI, S. <i>et al.</i> A cross-sectional and prospective cohort study of the role of schools in the SARS-CoV-2 second wave in Italy. The Lancet regional Health – Europe , [United Kingdom], v. 5, Mar. 26, 2021. Disponível em: https://doi.org/10.1016/j.lanepe.2021.100092.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900069-7



Infection in Danish Mask Wearers: A Randomized Controlled Trial. Ann Intern Med. , [United States], v. 174, n. 3, p. 335–343, Mar. 2021. Disponível em: https://doi.org/10.7326/M20-6817.
BUNDGAARD, H. et al. Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2
Observational evidence suggests that mask wearing mitigates transmission of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). It is uncertain if this observed association arises through protection of uninfected wearers (protective effect), via reduced transmission from infected mask wearers (source control), or both.
Henning Bundgaard, Johan Skov Bundgaard, Daniel Emil Tadeusz Raaschou-Pedersen, Christian von Buchwald, Tobias Todsen, Jakob Boesgaard Norsk, Mia M Pries-Heje, Christoffer Rasmus Vissing, Pernille B Nielsen, Ulrik C Winsløw, Kamille Fogh, Rasmus Hasselbalch, Jonas H Kristensen, Anna Ringgaard, Mikkel Porsborg Andersen, Nicole Bakkegård Goecke, Ramona Trebbien, Kerstin Skovgaard, Thomas Benfield, Henrik Ullum, Christian Torp-Pedersen, Kasper Iversen
Effectiveness of Adding a Mask Recommendation to Other Public Health Measures to Prevent SARS-CoV-2 Infection in Danish Mask Wearers: A Randomized Controlled Trial (Eficácia da adição de uma recomendação de máscara a outras medidas de saúde pública para prevenir a infecção por SARS-CoV-2 em usuários de máscaras dinamarquesas: um ensaio aleatório controlado)



Título	Diagnosis of COVID-19 for controlling the pandemic: A review of the state-of-the-art
	(Diagnóstico da COVID-19 para controlar a pandemia: uma revisão do estado da arte)
Autor(es)	Nastaran Taleghani , Fariborz Taghipour
Resumo	To date, health organizations and countries around the world are struggling to completely control the spread of the coronavirus disease 2019 (COVID-19). Scientists and researchers are developing tests for the rapid detection of individuals who may carry the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), while striving to find a suitable vaccine to immunize healthy individuals. As there are clinically reported cases of asymptomatic carriers of SARS-CoV-2, fast and accurate diagnosis plays an important role in the control and further prevention of this disease. Herein, we present recent technologies and techniques that have been implemented for the diagnosis of COVID-19. We summarize the methods created by different research institutes as well as the commercial devices and kits developed by companies for the detection of SARS-CoV-2. The description of the existing methods is followed by highlighting their advantages and challenges. Finally, we propose some promising techniques that could potentially be applied to the detection of SARS-CoV-2, and tracing the asymptomatic carriers of COVID-19 rapidly and accurately in the early stages of infection, based on reviewing the research studies on the detection of similar infectious viruses, especially severe acute respiratory syndrome (SARS) coronavirus, and Middle East respiratory syndrome (MERS) coronavirus.
Referências	TALEGHANI, N.; TAGHIPOUR, F. Diagnosis of COVID-19 for controlling the pandemic: A review of the state-of-the-art. Biosens Bioelectron. , [United Kingdom], v. 174, p. 112830, Feb. 15, 2021. Disponível em: https://doi.org/10.1016/j.bios.2020.112830.
Fonte	https://www.sciencedirect.com/science/article/pii/S0956566320308162?via%3Dihub



Título	Performance of intensive care unit severity scoring systems across different ethnicities in the USA: a retrospective observational study
Titalo	(Desempenho dos sistemas de pontuação de gravidade da unidade de cuidados intensivos em diferentes etnias nos EUA: um estudo observacional retrospectivo)
Autor(es)	Rahuldeb Sarkar, Christopher Martin, Heather Mattie, Judy Wawira Gichoya, David J Stone, Leo Anthony Celi
Resumo	Despite wide use of severity scoring systems for case-mix determination and benchmarking in the intensive care unit (ICU), the possibility of scoring bias across ethnicities has not been examined. Guidelines on the use of illness severity scores to inform triage decisions for allocation of scarce resources, such as mechanical ventilation, during the current COVID-19 pandemic warrant examination for possible bias in these models. We investigated the performance of the severity scoring systems Acute Physiology and Chronic Health Evaluation IVa (APACHE IVa), Oxford Acute Severity of Illness Score (OASIS), and Sequential Organ Failure Assessment (SOFA) across four ethnicities in two large ICU databases to identify possible ethnicity-based bias.
Referências	SARKAR, R. <i>et al.</i> Performance of intensive care unit severity scoring systems across different ethnicities in the USA: a retrospective observational study. The Lancet. Digital Health , [United Kingdom], v. 3, n. 4, p. e241–e249, 2021. Disponível em: https://doi.org/10.1016/S2589-7500(21)00022-4.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900022-4



	COVID-19 outcomes in patients with inflammatory rheumatic and musculoskeletal diseases treated with rituximab: a cohort study
Título	(Resultados da COVID-19 em doentes com doenças reumáticas e musculoesqueléticas inflamatórias tratados com rituximab: um estudo de coorte)
Autor(es)	Jérôme Avouac, Elodie Drumez, Eric Hachulla, Raphaèle Seror, Sophie Georgin-Lavialle, Soumaya El Mahou, Edouard Pertuiset, Thao Pham, Hubert Marotte, Amélie Servettaz, Fanny Domont, Pascal Chazerain, Mathilde Devaux, Pascal Claudepierre, Vincent Langlois, Arsène Mekinian, Alexandre Thibault Jacques Maria, Béatrice Banneville, Bruno Fautrel, Jacques Pouchot, Thierry Thomas, René-Marc Flipo, Christophe Richez, on behalf ofthe FAI2 R/SFR/SNFMI/SOFREMIP/CRI/IMIDIATE consortium and contributors
Resumo	Various observations have suggested that the course of COVID-19 might be less favourable in patients with inflammatory rheumatic and musculoskeletal diseases receiving rituximab compared with those not receiving rituximab. We aimed to investigate whether treatment with rituximab is associated with severe COVID-19 outcomes in patients with inflammatory rheumatic and musculoskeletal diseases.
Referências	AVOUAC, J. et al. COVID-19 outcomes in patients with inflammatory rheumatic and musculoskeletal diseases treated with rituximab: a cohort study. The Lancet. Rheumatology , [United Kingdom], p. S266599132100059X, Mar. 25, 2021. Disponível em: https://doi.org/10.1016/S2665-9913(21)00059-X
Fonte	https://www.thelancet.com/action/showPdf?pii=S2665-9913%2821%2900059-X



	The first and second waves of the COVID-19 pandemic in Africa: a cross-sectional study
Título	(A primeira e segunda vaga da pandemia da COVID-19 em África: um estudo transversal)
Autor(es)	Stephanie J Salyer, Justin Maeda, Senga Sembuche, Yenew Kebede, Akhona Tshangela, Mohamed Moussif, Chikwe Ihekweazu, Natalie Mayet, Ebba Abate, Ahmed Ogwell Ouma, John Nkengasong
Resumo	Although the first wave of the COVID-19 pandemic progressed more slowly in Africa than the rest of the world, by December, 2020, the second wave appeared to be much more aggressive with many more cases. To date, the pandemic situation in all 55 African Union (AU) Member States has not been comprehensively reviewed. We aimed to evaluate reported COVID-19 epidemiology data to better understand the pandemic's progression in Africa.
Referências	SALYER, S. J. et al. The first and second waves of the COVID-19 pandemic in Africa: a cross-sectional study. Lancet, [Netherlands], p. S0140673621006322, Mar. 24, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00632-2.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900632-2



Título	Multisystem Inflammatory Syndrome in U.S. Children and Adolescents
	(Síndrome Inflamatória Multissistémica nas Crianças e Adolescentes dos EUA)
Autor(es)	L.R. Feldstein, E.B. Rose, S.M. Horwitz, J.P. Collins, M.M. Newhams, M.B.F. Son, J.W. Newburger, L.C. Kleinman, S.M. Heidemann, A.A. Martin, A.R. Singh, S. Li, K.M. Tarquinio, P. Jaggi, M.E. Oster, S.P. Zackai, J. Gillen, A.J. Ratner, R.F. Walsh, J.C. Fitzgerald, M.A. Keenaghan, H. Alharash, S. Doymaz, K.N. Clouser, J.S. Giuliano, Jr., A. Gupta, R.M. Parker, A.B. Maddux, V. Havalad, S. Ramsingh, H. Bukulmez, T.T. Bradford, L.S. Smith, M.W. Tenforde, C.L. Carroll, B.J. Riggs, S.J. Gertz, A. Daube, A. Lansell, A. Coronado Munoz, C.V. Hobbs, K.L. Marohn, N.B. Halasa, M.M. Patel, and A.G. Randolph, for the Overcoming COVID-19 Investigators and the CDC COVID-19 Response Team
Resumo	Understanding the epidemiology and clinical course of multisystem inflammatory syndrome in children (MIS-C) and its temporal association with coronavirus disease 2019 (Covid-19) is important, given the clinical and public health implications of the syndrome.
Referências	FELDSTEIN, L. R. <i>et al.</i> Multisystem Inflammatory Syndrome in U.S. Children and Adolescents. N Engl J Med , [United States], v. 383, n. 4, p. 334–346, Jul. 23, 2020. Disponível em: https://doi.org/10.1056/NEJMoa2021680.
Fonte	https://www.nejm.org/doi/pdf/10.1056/NEJMoa2021680?articleTools=true



	Antibody Status and Incidence of SARS-CoV-2 Infection in Health Care Workers
Título	(Estatuto dos Anticorpos e Incidência da Infecção por SRA-CoV-2 nos Trabalhadores de Cuidados de Saúde)
Autor(es)	S.F. Lumley, D. O'Donnell, N.E. Stoesser, P.C. Matthews, A. Howarth, S.B. Hatch, B.D. Marsden, S. Cox, T. James, F. Warren, L.J. Peck, T.G. Ritter, Z. de Toledo, L. Warren, D. Axten, R.J. Cornall, E.Y. Jones, D.I. Stuart, G. Screaton, D. Ebner, S. Hoosdally, M. Chand, D.W. Crook, AM. O'Donnell, C.P. Conlon, K.B. Pouwels, A.S. Walker, T.E.A. Peto, S. Hopkins, T.M. Walker, K. Jeffery, and D.W. Eyre, for the Oxford University Hospitals Staff Testing Group.
Resumo	The relationship between the presence of antibodies to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) and the risk of subsequent reinfection remains unclear.
Referências	LUMLEY, S. F. et al. Antibody Status and Incidence of SARS-CoV-2 Infection in Health Care Workers. N Engl J Med , [United States], v. 384, n. 6, p. 533–540, Feb. 11, 2021. Disponível em: https://doi.org/10.1056/NEJMoa2034545.
Fonte	https://www.nejm.org/doi/pdf/10.1056/NEJMoa2034545?articleTools=true



	Estimated transmissibility and impact of SARS-CoV-2 lineage B.1.1.7 in England
Título	(Estimativa da transmissibilidade e impacto da SRA-CoV-2 linhagem B.1.1.7 em Inglaterra)
Autor(es)	Nicholas G. Davies, Sam Abbott, Rosanna C. Barnard, Christopher I. Jarvis, Adam J. Kucharski, James D. Munday, Carl A. B. Pearson, Timothy W. Russell, Damien C. Tully, Alex D. Washburne, Tom Wenseleers, Amy Gimma, William Waites, Kerry L. M. Wong, Kevin van Zandvoort, Justin D. Silverman, CMMID COVID-19 Working Group, COVID-19 Genomics UK (COG-UK) Consortium, Karla Diaz-Ordaz, Ruth Keogh, Rosalind M. Eggo, Sebastian Funk, Mark Jit, Katherine E. Atkins, W. John Edmunds
Resumo	A novel SARS-CoV-2 variant, VOC 202012/01 (lineage B.1.1.7), emerged in southeast England in November 2020 and is rapidly spreading toward fixation. Using a variety of statistical and dynamic modelling approaches, we estimate that this variant has a 43–90% (range of 95% credible intervals 38–130%) higher reproduction number than preexisting variants. A fitted two-strain dynamic transmission model shows that VOC 202012/01 will lead to large resurgences of COVID-19 cases. Without stringent control measures, including limited closure of educational institutions and a greatly accelerated vaccine roll-out, COVID-19 hospitalisations and deaths across England in 2021 will exceed those in 2020. Concerningly, VOC 202012/01 has spread globally and exhibits a similar transmission increase (59–74%) in Denmark, Switzerland, and the United States.
Referências	DAVIES, N. G. <i>et al.</i> Estimated transmissibility and impact of SARS-CoV-2 lineage B.1.1.7 in England. Science , [New York], p. eabg3055, Mar. 3, 2021. Disponível em: https://doi.org/10.1126/science.abg3055.
Fonte	https://science.sciencemag.org/content/sci/early/2021/03/03/science.abg3055.full.pdf



Título	Boletim Diário: COVID-19 No Sistema Prisional
Autor(es)	Rio Grande do Sul. Secretaria da Administração Penitenciária
Resumo	As informações referentes aos casos de Covid-19 no sistema prisional do Estado do Rio Grande do Sul, publicadas diariamente.
Referências	RIO GRANDE DO SUL, Secretaria da Administração Penitenciária. Boletim diário: COVID-19 no sistema prisional. <i>In:</i> Portal do Estado do Rio Grande do Sul. Porto Alegre, 2021. Disponível em: https://www.seapen.rs.gov.br/boletins-diarios
Fonte	https://www.seapen.rs.gov.br/boletins-diarios



Título	Impacto e tendência da COVID-19 no sistema penitenciário do Brasil: um estudo ecológico
Autor(es)	Juliane de Almeida Crispim, Antônio Carlos Vieira Ramos, Thaís Zamboni Berra, Márcio Souza dos Santos, Felipe Lima dos Santos, Luana Seles Alves, Fernanda Bruzadelli, Paulino da Costa, Ricardo Alexandre Arcêncio
Resumo	Tendo em vista a rápida disseminação do novo coronavírus no sistema prisional, o presente trabalho teve como objetivos identificar aglomerados espaciais para ocorrência da COVID-19 na população privada de liberdade (PPL) e analisar a tendência temporal dos casos confirmados no sistema penitenciário do Brasil. Estudo ecológico que considerou como unidades de análise as cinco macrorregiões do Brasil, seus 26 estados e o Distrito Federal. A população foi composta por todos os casos de COVID-19 confirmados, no período de 14 de abril a 31 de agosto de 2020. A fonte de dados utilizada foi o Painel de Monitoramento dos casos de COVID-19 nos sistemas prisionais do Departamento Penitenciário Nacional. Realizou-se análise descritiva, estatística de varredura e análise da tendência temporal. Foram notificados 18.767 casos de COVID-19 na PPL, dos quais 4.724 ocorreram no estado de São Paulo. A estatística de varredura possibilitou a identificação de 14 clusters espaciais de risco para COVID-19 na PPL, sendo o aglomerado de maior risco formado pelo Distrito Federal. Embora o país finalize a série com um comportamento decrescente, observa-se que no período de investigação a tendência apresentou um comportamento maioritariamente crescente. Evidencia-se a necessidade de testagem em massa, monitoramento e registro contínuo dos casos de COVID-19 na PPL do país.
Referências	CRISPIM, Juliane de Almeida <i>et al.</i> Impacto e tendência da COVID-19 no sistema penitenciário do Brasil: um estudo ecológico. Ciênc. Saúde Colet., Rio de Janeiro, v. 26, n.1, p. 169-178, jan. 2021. Disponível em: https://www.scielo.br/pdf/csc/v26n1/1413-8123-csc-26-01-169.pdf.
Fonte	https://www.scielosp.org/article/csc/2021.v26n1/169-178/pt/



Título	SARS-CoV-2 outbreak investigation in a German meat processing plant
	(Investigação de surtos de SRA-CoV-2 numa fábrica alemã de transformação de carne)
Autor(es)	Thomas Günther, Manja Czech-Sioli, Daniela Indenbirken, Alexis Robitaille, Peter Tenhaken, Martin Exner, Matthias Ottinger, Nicole Fischer, Adam Grundhoff, Melanie M Brinkmann
Resumo	We describe a multifactorial investigation of a SARS-CoV-2 outbreak in a large meat processing complex in Germany. Infection event timing, spatial, climate and ventilation conditions in the processing plant, sharing of living quarters and transport, and viral genome sequences were analyzed. Our results suggest that a single index case transmitted SARS-CoV-2 to co-workers over distances of more than 8 m, within a confined work area in which air is constantly recirculated and cooled. Viral genome sequencing shows that all cases share a set of mutations representing a novel sub-branch in the SARS-CoV-2 C20 clade. We identified the same set of mutations in samples collected in the time period between this initial infection cluster and a subsequent outbreak within the same factory, with the largest number of confirmed SARS-CoV-2 cases in a German meat processing facility reported so far. Our results indicate climate conditions, fresh air exchange rates, and airflow as factors that can promote efficient spread of SARS-CoV-2 via long distances and provide insights into possible requirements for pandemic mitigation strategies in industrial workplace settings.
Referências	GÜNTER, Thomas <i>et al.</i> SARS-CoV-2 outbreak investigation in a German meat processing plant. EMBO molecular medicine , [United Kingdom], v. 12, n. 12, p. e13296, Dec. 7, 2020. Disponível em: https://doi.org/10.15252/emmm.202013296.
Fonte	https://www.embopress.org/doi/full/10.15252/emmm.202013296



Título	A Hospital Partnership with a Nursing Home Experiencing a COVID-19 Outbreak: Description of a Multiphase Emergency Response in Toronto, Canada
Autor(es)	Nathan M. Stall, Carolyn Farquharson, Chris Fan-Lun, Lesley Wiesenfeld, Carla A. Loftus, Dylan Kain, Jennie Johnstone, Liz McCreight, Russel D. Goldman, Ramona Mahtani
Resumo	Nursing homes have become "ground zero" for the coronavirus disease 2019 (COVID-19) epidemic in North America, with homes experiencing widespread outbreaks, resulting in severe morbidity and mortality among their residents. This article describes a 371-bed acute-care hospital's emergency response to a 126-bed nursing home experiencing a COVID-19 outbreak in Toronto, Canada. Like other healthcare system responses to COVID-19 outbreaks in nursing homes, this hospital–nursing home partnership can be characterized in several phases: (1) engagement, relationship, and trust building; (2) environmental scan, team building, and immediate response; (3) early-phase response; and (4) stabilization and transition period.
Referências	STALL, Nathan M. A hospital partnership with a nursing home experience a COVID-19 Outbreak: Description of a multiphase emergency response in Toronto, Canada. Journal of the American Geriatrics Society , [United States], v. 68, n. 7, p. 1376-1381, May 22, 2020. Disponível em: https://doi.org/10.1111/jgs.16625.
Fonte	https://agsjournals.onlinelibrary.wiley.com/doi/10.1111/jgs.16625



Título	High impact of COVID-19 outbreak in a nursing home in the Nouvelle-Aquitaine region, France, March to April 2020
Autor(es)	A. Bernadou, S. Bouges, M. Catroux, J. C. Rigaux, C. Laland, N. Levêque, U. Noury, S. Larrieu, S. Acef, D. Habold, F. Cazenave-Roblot & L. Filleul
Resumo	Elderly people in nursing homes are particularly vulnerable to COVID-19 due to their age, the presence of comorbidities, and community living. On March 14, 2020, at the beginning of the first epidemic wave of COVID-19 in France, a cluster was reported in a nursing home in the Nouvelle-Aquitaine region. We monitored the outbreak as well as the infection prevention and control (IPC) measures implemented.
Referências	BERNADOU, A. <i>et al</i> . High impact of COVID-19 outbreak in a nursing home in the Nouvelle-Aquitaine region, France, March to April 2020. BMC infect. dis. , [United Kingdom], v. 21, n. 198. Feb. 22, 2021. Disponível em: https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-021-05890-6.
Fonte	https://bmcinfectdis.biomedcentral.com/articles/10.1186/s12879-021-05890-6



Título	COVID-19 Outbreak in a Large Penitentiary Complex, April–June 2020, Brazil (COVID-19 Surto num Grande Complexo Penitenciário, Abril-Junho de 2020, Brasil)
Autor(es)	Fernando A. Gouvea-Reis, Patrícia D. Oliveira, Danniely C.S. Silva, Lairton S. Borja, Jadher Percio, Fábio S. Souza, Cássio Peterka, Claudia Feres, Janaína de Oliveira, Giselle Sodré, Wallace dos Santos, and Camile de Moraes
Resumo	An outbreak of coronavirus disease began in a large penitentiary complex in Brazil on April 1, 2020. By June 12, there were 1,057 confirmed cases among inmates and staff. Nine patients were hospitalized, and 3 died. Mean serial interval was ≈2.5 days; reproduction number range was 1.0−2.3.
Referências	GOUVEA-REIS, F. A. <i>et al.</i> COVID-19 Outbreak in a Large Penitentiary Complex, April—June 2020, Brazil. Emerging infectious diseases , [United States], v. 27, n. 3, Mar. 2021. Disponível em: https://doi.org/10.3201/eid2703.204079.
Fonte	https://wwwnc.cdc.gov/eid/article/27/3/20-4079_article



	Isolamento social vertical X Isolamento social horizontal: os dilemas sanitários e sociais no enfrentamento da pandemia de COVID-19 / Vertical social isolation
Título	X Horizontal social isolation: health and social dilemas in copping with the COVID-19 pandemic
Autor(es)	Alexandra Zanella Schuchmann, Bruna Luiza Schnorrenberger, Maria Eduarda Chiquetti, Raiane Suzana Gaiki, Bruno Wensing Raimann, Marcos Aurélio Maeyama
Resumo	A descoberta de um novo coronavírus na China no final de 2019, reconhecida como pandemia pela Organização Mundial da Saúde já no início de 2020, modificou a estrutura econômica e social mundial em dimensões até então jamais vistas na humanidade. Devido a sua acentuada taxa de transmissão e à inexistência de vacinas e tratamentos efetivos, os primeiros países afetados, diante do avanço rápido da epidemia, se viram obrigados a tomar medidas de isolamento social. Tais medidas tiveram amplitudes diferentes, com resultados e consequências bastante distintos, abrindo uma grande discussão entre as possíveis modalidades de isolamento social. A experiência dos países mais afetados mostrou que as medidas de isolamento horizontal representam a forma mais efetiva de evitar o colapso do sistema hospitalar, o que, em última instância, determina uma menor mortalidade em números absolutos. Ainda que as atuais evidências apontem para o isolamento social horizontal, o tensionamento do setor econômico põe em dúvida tal decisão com argumentos de cenários futuros catastróficos sob o ponto de vista econômico e social, o que geraria grande miséria e mortalidade. O fato é que as projeções apontam para uma grande crise econômica independente de adoção de medidas de isolamento, sejam elas amplas, reduzidas ou mesmo a ausência delas. O que diferencia tais medidas é a diminuição da mortalidade pela pandemia, possível por meio do isolamento social horizontal. Desta forma, conclui-se que os governos devem adotar medidas amplas de isolamento social aliadas a medidas de recuperação econômica e proteção social ampla para a população como um todo, no período trans e póspandemia, como forma de minimizar os efeitos secundários desta.
Referências	SCHUCHMANN, A. Z. <i>et al.</i> Isolamento social vertical X Isolamento social horizontal: os dilemas sanitários e sociais no enfrentamento da pandemia de COVID-19 / Vertical social isolation X Horizontal social isolation: health and social dilemas in copping with the COVID-19 pandemic. Braz. J. Hea. Rev. , Curitiba, v. 3, n. 2, p. 3556–3576, mar./abr. 2020. Disponível em: https://doi.org/10.34119/bjhrv3n2-185.
Fonte	https://www.brazilianjournals.com/index.php/BJHR/article/view/9128/7738



Título	A COVID-19 e o capitalismo na carne
Autor(es)	Jean Segata, Luísa Muccillo, Luiza Beck
Resumo	Crescentes taxas de infecção com o novo coronavírus, registradas entre trabalhadores da indústria da carne, seus familiares e comunidade, resultou na suspensão de atividades de diversos estabelecimentos do setor no sul do Brasil. Se frigoríficos e abatedouros não podem ser considerados exatamente seguros, por que os riscos contra a saúde, a moralidade e a civilidade costumam ser representados pela carne não regulamentada de mercados úmidos considerados exóticos? Neste trabalho, queremos mostrar que estas criações intensivas e sua indústria de processamento tece uma miríade de encontros íntimos entre humanos, animais resíduos químicos e orgânicos altamente tóxicos em relações de trabalho precarizado. Convivência, afeto, risco e morte estão o tempo todo implicados. Em nosso argumento, a supervalorização de narrativas exóticas sobre o consumo de animais silvestres oblitera o modo como o capitalismo da carne processada em alta escala molda relações nocivas entre humanos, animais e ambientes.
Referências	SEGATA, J.; MUCCILLO, L.; BECK, L. A COVID-19 E O CAPITALISMO NA CARNE. Tessituras , [Pelotas], v. 8, n. 1, p. 354–373, 2020. Disponível em: https://doi.org/10.15210/tes.v8i1.19730.
Fonte	https://doi.org/10.15210/tes.v8i1.19730



Título	Espacialização da Covid-19 no Sul do Brasil: a interiorização da doença e o caso da Mesorregião Grande Fronteira do MERCOSUL
Autor(es)	Ederson Nascimento, Larissa Hermes Thomas Tombini, Fabiane Ripplinger
Resumo	O presente ensaio apresenta um mapeamento da distribuição espaço-temporal dos casos de Covid-19 nos municípios da região Sul do Brasil, e aborda as condicionantes de difusão da doença em um recorte territorial do interior dessa região, a chamada Mesorregião Grande Fronteira do Mercosul (MGFM). Observa-se um processo de interiorização da transmissão viral, que na MGFM teve forte correlação com o trabalho em agroindústrias de carne. A disseminação e avanço da Covid-19 na região, atingindo municípios de menor porte, são motivos de preocupação, uma vez que podem comprometer a já frágil estrutura do setor da saúde e agravar as consequências da pandemia local.
Referências	NASCIMENTO, E.; TOMBINI, L. H. T.; RIPPLINGER, F. Espacialização da Covid-19 no Sul do Brasil: a interiorização da doença e o caso da Mesorregião Grande Fronteira do MERCOSUL. Finisterra , [Portugal], v. 55, n. 115, p. 27–35, 2020. Disponível em: https://doi.org/10.18055/Finis20367.
Fonte	https://doi.org/10.18055/Finis20367



Título	Epidemiology and clinical features of COVID-19 outbreaks in aged care facilities: A systematic review and meta-analysis (Epidemiologia e características clínicas dos surtos de COVID-19 em instalações de cuidados de idosos: Uma revisão sistemática e uma meta-análise)
Autor(es)	Mohammad Rashidul Hashan, Nicolas Smoll , Catherine King, Hannah Ockenden-Muldoon, Jacina Walker, Andre Wattiaux, Julieanne Graham , Robert Booy, Gulam Khandaker
Resumo	COVID-19 outbreaks in aged care facilities (ACFs) often have devastating consequences. However, epidemiologically these outbreaks are not well defined. We aimed to define such outbreaks in ACFs by systematically reviewing literature published during the current COVID-19 pandemic.
Referências	HASHAN, M. R. et al. Epidemiology and clinical features of COVID-19 outbreaks in aged care facilities: A systematic review and meta-analysis. EClinicalMedicine , [Netherlands], p. 100771, 2021. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100771.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900051-1



Título	Prevalence, management, and outcomes of SARS-CoV-2 infections in older people and those with dementia in mental health wards in London, UK: a retrospective observational study
	(Prevalência, gestão e resultados da SRA-CoV-2 infecções em pessoas idosas e com demência em enfermarias de saúde mental em Londres, Reino Unido: uma retrospectivaestudo observacional)
Autor(es)	Gill Livingston, Hossein Rostamipour, Paul Gallagher, Chris Kalafatis, Abhishek Shastri, Lauren Huzzey, Kathy Liu, Andrew Sommerlad, Louise Marston
Resumo	People living in group situations or with dementia are more vulnerable to infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Older people and those with multimorbidity have higher mortality if they become infected than the general population. However, no systematic study exists of COVID-19-related outcomes in older inpatients in psychiatric units, who comprise people from these high-risk groups. We aimed to describe the period prevalence, demographics, symptoms (and asymptomatic cases), management, and survival outcomes of COVID-19 in the older inpatient psychiatric population and people with young-onset dementia in five National Health Service Trusts in London, UK, from March 1 to April 30, 2020.
Referências	LIVINGSTON, G. <i>et al.</i> Prevalence, management, and outcomes of SARS-CoV-2 infections in older people and those with dementia in mental health wards in London, UK: a retrospective observational study. The Lancet. Psychiatry , [United Kingdom.], v. 7, n. 12, p. 1054–1063, Oct. 5, 2020. Disponível em: https://doi.org/10.1016/S2215-0366(20)30434-X.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2215-0366%2820%2930434-X



Título	A pandemia no cárcere: intervenções no superisolamento
Autor(es)	Sérgio Garófalo de Carvalho, Andreia Beatriz Silva dos Santos, Ivete Maria Santos
Resumo	Saúde prisional é, em sua essência, saúde pública. A pandemia de COVID-19 representa uma grande ameaça para o mundo e tem demonstrado que prevenir a escalada da doença em prisões faz parte do combate ao novo coronavírus na sociedade em geral. Sabe-se, até o momento, que a mais efetiva medida de contenção ao avanço da doença é o isolamento social. No entanto, em instituições penais, muitas vezes superlotadas, tal medida torna-se de difícil implementação e, quando acontece, leva a população privada de liberdade a um superisolamento, tendo consequências em sua saúde mental. Além disso, indivíduos presos sofrem com ambientes sem ventilação, falta de materiais de higiene pessoal, condições sanitárias básicas precárias e dificuldade de acesso a serviços de saúde. O presente artigo objetiva ser uma revisão narrativa sobre os efeitos da pandemia em presídios e como governos e sociedade civil têm se organizado a fim de reduzir as consequências sobre esses locais. A publicação foi dividida em três seções: na primeira, há uma revisão da literatura em saúde sobre a temática; na segunda, é tratado o modo como diferentes países estão lidando com a situação carcerária no contexto da pandemia; na terceira e última parte, é abordado o modo como o Sistema Penal brasileiro tem reagido à nova doença.
Referências	CARVALHO, S. G. de; SANTOS, A. B. S. dos; SANTOS, I. M. A pandemia no cárcere: intervenções no superisolamento. Ciênc. Saúde Colet ., Rio de Janeiro, , v. 25, n. 9, p. 3493–3502, 28 ago. 2020. Disponível em: https://doi.org/10.1590/1413-81232020259.15682020.
Fonte	https://www.scielo.br/pdf/csc/v25n9/1413-8123-csc-25-09-3493.pdf



Título	COVID-19 nas prisões: um desafio impossível para a saúde pública?
Autor(es)	Alexandra Sánchez, Luciana Simas, Vilma Diuana, Bernard Larouze
Resumo	Introdução As 748 mil pessoas privadas de liberdade (PPL) no Brasil ¹ , inclusive as 50 mil no Estado de Rio de Janeiro, estão praticamente ausentes dos debates públicos sobre a COVID-19. Entretanto, pode-se conceber condições mais favoráveis à disseminação do SARS-CoV-2, vírus de transmissão aérea e por contato interpessoal, do que nessa população confinada em celas superlotadas, pouco ventiladas e com acesso limitado à água? []
Referências	SÁNCHEZ, A. et al. COVID-19 nas prisões: um desafio impossível para a saúde pública? Cad. Saúde Pública , Rio de Janeiro, v. 36, n. 5, p. e00083520, 8 maio 2020. Disponível em: https://doi.org/10.1590/0102-311x000835208.
Fonte	https://www.arca.fiocruz.br/bitstream/icict/41204/2/COVID-19Pris%C3%B5es.pdf



Título	Surveillance-based informative testing for detection and containment of SARS-CoV-2 outbreaks on a public university campus: an observational and modelling study
	(Testes informativos baseados na vigilância para detecção e contenção de surtos de SRA-CoV-2 num campus universitário público: um estudo de observação e modelização)
Autor(es)	Lior Rennert, Christopher McMahan, Corey A Kalbaugh, Yuan Yang, Brandon Lumsden, Delphine Dean, Lesslie Pekarek, Christopher C Colenda
Resumo	Despite severe outbreaks of COVID-19 among colleges and universities across the USA during the Fall 2020 semester, the majority of institutions did not routinely test students. While high-frequency repeated testing is considered the most effective strategy for disease mitigation, most institutions do not have the necessary infrastructure or funding for implementation. Therefore, alternative strategies for testing the student population are needed. Our study detailed the implementation and results of testing strategies to mitigate SARS-CoV-2 spread on a university campus, and we aimed to assess the relative effectiveness of the different testing strategies.
Referências	RENNERT, L. <i>et al.</i> Surveillance-based informative testing for detection and containment of SARS-CoV-2 outbreaks on a public university campus: an observational and modelling study. The Lancet. Child & adolescent health , [United Kingdom], p. S2352464221000602, 2021. Disponível em: https://doi.org/10.1016/S2352-4642(21)00060-2.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-4642%2821%2900060-2



Título	Seroprevalence and humoral immune durability of anti-SARS-CoV-2 antibodies in Wuhan, China: a longitudinal, population-level, cross-sectional study
Autor(es)	Zhenyu He, Lili Ren, Juntao Yang, Li Guo, Luzhao Feng, Chao Ma, Xia Wang, Zhiwei Leng, Xunliang Tong, Wang Zhou, Geng Wang, Ting Zhang, Yan Guo, Chao Wu, Qing Wang, Manqing Liu, Conghui Wang, Mengmeng Jia, Xuejiao Hu, Ying Wang, Xingxing Zhang, Rong Hu, Jingchuan Zhong, Jin Yang, Juan Dai, Lan Chen, Xiaoqi Zhou, Jianwei Wang, Weizhong Yang, Chen Wang
Resumo	Wuhan was the epicentre of the COVID-19 outbreak in China. We aimed to determine the seroprevalence and kinetics of anti-SARS-CoV-2 antibodies at population level in Wuhan to inform the development of vaccination strategies.
Referências	ZHENYU, He <i>et al.</i> Seroprevalence and humoral immune durability of anti-SARS-CoV-2 antibodies in Wuhan, China: a longitudinal, population-level, cross-sectional study. The Lancet , [United Kingdom], v. 397, n. 10279, p. 1075–1084, Mar. 20, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00238-5.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900238-5



Título	The potential health and economic value of SARS-CoV-2 vaccination alongside physical distancing in the UK: a transmission model-based future scenario analysis and economic evaluation
Autor(es)	Frank G Sandmann, Nicholas G Davies, Anna Vassall, W John Edmunds, Mark Jit, on behalf of the Centre for the Mathematical Modelling of Infectious Diseases COVID-19 working group
Resumo	In response to the COVID-19 pandemic, the UK first adopted physical distancing measures in March, 2020. Vaccines against SARS-CoV-2 became available in December, 2020. We explored the health and economic value of introducing SARS-CoV-2 immunisation alongside physical distancing in the UK to gain insights about possible future scenarios in a post-vaccination era.
Referências	SANDMANN, F. G. <i>et al.</i> The potential health and economic value of SARS-CoV-2 vaccination alongside physical distancing in the UK: a transmission model-based future scenario analysis and economic evaluation. The Lancet. Infectious diseases , [United Kingdom], p. 13, Mar. 18, 2021. Disponível em: https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900079-7.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900079-7



Título	Vaccination and non-pharmaceutical interventions for COVID-19: a mathematical modelling study
Autor(es)	Sam Moore, Edward M Hill, Michael J Tildesley, Louise Dyson, Matt J Keeling
Resumo	The dynamics of vaccination against SARS-CoV-2 are complicated by age-dependent factors, changing levels of infection, and the relaxation of non-pharmaceutical interventions (NPIs) as the perceived risk declines, necessitating the use of mathematical models. Our aims were to use epidemiological data from the UK together with estimates of vaccine efficacy to predict the possible long-term dynamics of SARS-CoV-2 under the planned vaccine rollout.
Referências	MOORE, S. et al. Vaccination and non-pharmaceutical interventions for COVID-19: a mathematical modelling study. The Lancet. Infectious diseases , [United Kingdom], Mar. 18, 2021. Disponível em: https://doi.org/10.1016/S1473-3099(21)00143-2.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900143-2



Título	Assessment of protection against reinfection with SARS-CoV-2 among 4 million PCR-tested individuals in Denmark in 2020: a population-level observational study
Autor(es)	Christian Holm Hansen, Daniela Michlmayr, Sophie Madeleine Gubbels, Kare Molbak, Steen Ethelberg
Resumo	The degree to which infection with SARS-CoV-2 confers protection towards subsequent reinfection is not well described. In 2020, as part of Denmark's extensive, free-of-charge PCR-testing strategy, approximately 4 million individuals (69% of the population) underwent 10·6 million tests. Using these national PCR-test data from 2020, we estimated protection towards repeat infection with SARS-CoV-2.
Referências	HANSEN, C. H. <i>et al.</i> Assessment of protection against reinfection with SARS-CoV-2 among 4 million PCR-tested individuals in Denmark in 2020: a population-level observational study. Lancet , [United Kingdom], p. S0140673621005754, Mar. 17, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00575-4.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900575-4



Título	Mavrilimumab in patients with severe COVID-19 pneumonia and systemic hyperinflammation (MASH-COVID): an investigator initiated, multicentre, double-blind, randomised, placebo-controlled trial
Autor(es)	Paul C Cremer, Antonio Abbate, Kristin Hudock, Carla McWilliams, Jinesh Mehta, Steven Y Chang, Calvin C Sheng, Benjamin Van Tassell, Aldo Bonaventura, Alessandra Vecchié, Brenna Carey, Qiuqing Wang, Katherine E Wolski, Prabalini Rajendram, Abhijit Duggal, Tisha S Wang, John F Paolini, Bruce C Trapnell, on behalf of the MASH-COVID study group.
Resumo	In patients with COVID-19, granulocyte-macrophage colony stimulating factor (GM-CSF) might be a mediator of the hyperactive inflammatory response associated with respiratory failure and death. We aimed to evaluate whether mavrilimumab, a monoclonal antibody to the GM-CSF receptor, would improve outcomes in patients with COVID-19 pneumonia and systemic hyperinflammation.
Referências	CREMER, P. C. <i>et al.</i> Mavrilimumab in patients with severe COVID-19 pneumonia and systemic hyperinflammation (MASH-COVID): an investigator initiated, multicentre, double-blind, randomised, placebo-controlled trial. The Lancet. Rheumatology , [United Kingdom], p. S2665991321000709, Mar. 12, 2021. Disponível em: https://doi.org/10.1016/S2665-9913(21)00070-9.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2665-9913%2821%2900070-9



Título	Predicting endoscopic activity recovery in England after COVID-19: a national analysis
Autor(es)	Kai Man Alexander Ho, Amitava Banerjee, Mark Lawler, Matthew D Rutter, Laurence B Lovat
Resumo	The COVID-19 pandemic has led to a substantial reduction in gastrointestinal endoscopies, creating a backlog of procedures. We aimed to quantify this backlog nationally for England and assess how various interventions might mitigate the backlog.
Referências	HO, K. M. A. <i>et al.</i> Predicting endoscopic activity recovery in England after COVID-19: a national analysis. The Lancet. Gastroenterology & hepatology , [United Kingdom], Mar. 10, 2021. Disponível em: https://doi.org/10.1016/S2468-1253(21)00058-3.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2468-1253%2821%2900058-3



Título	Prevalence of SARS-CoV-2 in six districts in Zambia in July, 2020: a cross-sectional cluster sample survey
Autor(es)	Lloyd B Mulenga, Jonas Z Hines, Sombo Fwoloshi, Lameck Chirwa, Mpanji Siwingwa, Samuel Yingst, Adam Wolkon, Danielle T Barradas, Jennifer Favaloro, James E Zulu, Dabwitso Banda, Kotey I Nikoi, Davies Kampamba, Ngawo Banda, Batista Chilopa, Brave Hanunka, Thomas L Stevens Jr, Aaron Shibemba, Consity Mwale, Suilanji Sivile, Khozya D Zyambo, Alex Makupe, Muzala Kapina, Aggrey Mweemba, Nyambe Sinyange, Nathan Kapata, Paul M Zulu, Duncan Chanda, Francis Mupeta, Chitalu Chilufya, Victor Mukonka, Simon Agolory, Kennedy Malama
Resumo	Between March and December, 2020, more than 20 000 laboratory-confirmed cases of SARS-CoV-2 infection were reported in Zambia. However, the number of SARS-CoV-2 infections is likely to be higher than the confirmed case counts because many infected people have mild or no symptoms, and limitations exist with regard to testing capacity and surveillance systems in Zambia. We aimed to estimate SARS-CoV-2 prevalence in six districts of Zambia in July, 2020, using a population-based household survey.
Referências	MULENGA, L. B. <i>et al.</i> Prevalence of SARS-CoV-2 in six districts in Zambia in July, 2020: a cross-sectional cluster sample survey. The Lancet. Global health , [Netherlands], p. S2214109X2100053X, Mar. 9, 2021. Disponível em: https://doi.org/10.1016/S2214-109X(21)00053-X.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2214-109X%2821%2900053-X



Título	Factors linked to severe outcomes in multisystem inflammatory syndrome in children (MIS-C) in the USA: a retrospective surveillance study
Autor(es)	Joseph Y Abrams, Matthew E Oster, Shana E Godfred-Cato, Bobbi Bryant, S Deblina Datta, Angela P Campbell, Jessica W Leung, Clarisse A Tsang, Timmy J Pierce, Jordan L Kennedy, Teresa A Hammett, Ermias D Belay
Resumo	Multisystem inflammatory syndrome in children (MIS-C) is a newly identified and serious health condition associated with SARS-CoV-2 infection. Clinical manifestations vary widely among patients with MIS-C, and the aim of this study was to investigate factors associated with severe outcomes.
Referências	ABRAMS, J. Y. <i>et al.</i> Factors linked to severe outcomes in multisystem inflammatory syndrome in children (MIS-C) in the USA: a retrospective surveillance study. The Lancet. Child & adolescent health , [United Kingdom], p. S235246422100050X, Mar. 9, 2021. Disponível em: https://doi.org/10.1016/S2352-4642(21)00050-X.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-4642%2821%2900050-X



Título	Safety and immunogenicity of an inactivated SARS-CoV-2 vaccine, BBV152: interim results from a double-blind, randomised, multicentre, phase 2 trial, and 3-month follow-up of a double-blind, randomised phase 1 trial
Autor(es)	Raches Ella, Siddharth Reddy, Harsh Jogdand, Vamshi Sarangi, Brunda Ganneru, Sai Prasad, Dipankar Das, Dugyala Raju, Usha Praturi, Gajanan Sapkal, Pragya Yadav, Prabhakar Reddy, Savita Verma, Chandramani Singh, Sagar Vivek Redkar, Chandra Sekhar Gillurkar, Jitendra Singh Kushwaha, Satyajit Mohapatra, Amit Bhate, Sanjay Rai, Samiran Panda, Priya Abraham, Nivedita Gupta, Krishna Ella, Balram Bhargava, Krishna Mohan Vadrevu
Resumo	BBV152 is a whole-virion inactivated SARS-CoV-2 vaccine (3 μg or 6 μg) formulated with a toll-like receptor 7/8 agonist molecule (IMDG) adsorbed to alum (Algel). We previously reported findings from a doubleblind, multicentre, randomised, controlled phase 1 trial on the safety and immunogenicity of three different formulations of BBV152 (3 μg with Algel-IMDG, 6 μg with Algel-IMDG, or 6 μg with Algel) and one Algel-only control (no antigen), with the first dose administered on day 0 and the second dose on day 14. The 3 μg and 6 μg with Algel-IMDG formulations were selected for this phase 2 study. Herein, we report interim findings of the phase 2 trial on the immunogenicity and safety of BBV152, with the first dose administered on day 0 and the second dose on day 28.
Referências	ELLA, R. <i>et al.</i> Safety and immunogenicity of an inactivated SARS-CoV-2 vaccine, BBV152: interim results from a double-blind, randomised, multicentre, phase 2 trial, and 3-month follow-up of a double-blind, randomised phase 1 trial. The Lancet. Infectious diseases , [United Kingdom], p. S1473309921000700, Mar. 9, 2021. Disponível em: https://doi.org/10.1016/S1473-3099(21)00070-0.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900070-0



Título	Risk of adverse outcomes in patients with underlying respiratory conditions admitted to hospital with COVID-19: a national, multicentre prospective cohort study using the ISARIC WHO Clinical Characterisation Protocol UK
Autor(es)	Chloe I Bloom, Thomas M Drake, Annemarie B Docherty, Brian J Lipworth, Sebastian L Johnston, Jonathan S Nguyen-Van-Tam, Gail Carson, Jake Dunning, Ewen M Harrison, J Kenneth Baillie, Malcolm G Semple, Paul Cullinan [†] , Peter J M Openshaw, on behalf of the ISARIC investigators
Resumo	Studies of patients admitted to hospital with COVID-19 have found varying mortality outcomes associated with underlying respiratory conditions and inhaled corticosteroid use. Using data from a national, multicentre, prospective cohort, we aimed to characterise people with COVID-19 admitted to hospital with underlying respiratory disease, assess the level of care received, measure in-hospital mortality, and examine the effect of inhaled corticosteroid use.
Referências	BLOOM, C. I. <i>et al.</i> Risk of adverse outcomes in patients with underlying respiratory conditions admitted to hospital with COVID-19: a national, multicentre prospective cohort study using the ISARIC WHO Clinical Characterisation Protocol UK. The Lancet. Respiratory medicine , [Netherlands], Mar. 4, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(21)00013-8.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900013-8



Título	Sarilumab in patients admitted to hospital with severe or critical COVID-19: a randomised, double-blind, placebocontrolled, phase 3 trial
Autor(es)	François-Xavier Lescure, Hitoshi Honda, Robert A Fowler, Jennifer Sloane Lazar, Genming Shi, Peter Wung, Naimish Patel, Owen Hagino, on behalf of the Sarilumab COVID-19 Global Study Group
Resumo	Elevated proinflammatory cytokines are associated with greater COVID-19 severity. We aimed to assess safety and efficacy of sarilumab, an interleukin-6 receptor inhibitor, in patients with severe (requiring supplemental oxygen by nasal cannula or face mask) or critical (requiring greater supplemental oxygen, mechanical ventilation, or extracorporeal support) COVID-19.
Referências	LESCURE, FX. <i>et al.</i> Sarilumab in patients admitted to hospital with severe or critical COVID-19: a randomised, double-blind, placebo-controlled, phase 3 trial. The Lancet. Respiratory medicine , [Netherlands], Mar. 4, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(21)00099-0.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900099-0



Título	Tocilizumab plus standard care versus standard care in patients in India with moderate to severe COVID-19- associated cytokine release syndrome (COVINTOC): an openlabel, multicentre, randomised, controlled, phase 3 trial
Autor(es)	Arvinder S Soin, Kuldeep Kumar, Narendra S Choudhary, Pooja Sharma, Yatin Mehta, Sushila Kataria, Deepak Govil, Vikas Deswal, Dhruva Chaudhry, Pawan Kumar Singh, Ashish Gupta, Vikas Agarwal, Suresh Kumar, Shashikala A Sangle, Rajesh Chawla, Suneetha Narreddy, Rahul Pandit, Vipul Mishra, Manoj Goel, Athimalaipet V Ramanan
Resumo	Global randomised controlled trials of the anti-IL-6 receptor antibody tocilizumab in patients admitted to hospital with COVID-19 have shown conflicting results but potential decreases in time to discharge and burden on intensive care. Tocilizumab reduced progression to mechanical ventilation and death in a trial population enriched for racial and ethnic minorities. We aimed to investigate whether tocilizumab treatment could prevent COVID-19 progression in the first multicentre randomised controlled trial of tocilizumab done entirely in a lower-middle-income country.
Referências	SOIN, A. S. <i>et al.</i> Tocilizumab plus standard care versus standard care in patients in India with moderate to severe COVID-19-associated cytokine release syndrome (COVINTOC): an open-label, multicentre, randomised, controlled, phase 3 trial. The Lancet. Respiratory medicine , [Netherlands], Mar. 4, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(21)00081-3.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900081-3



Título	Viral targets for vaccines against COVID-19
Autor(es)	Lianpan Dai, George F. Gao
Resumo	Vaccines are urgently needed to control the coronavirus disease 2019 (COVID-19) pandemic and to help the return to prepandemic normalcy. A great many vaccine candidates are being developed, several of which have completed late-stage clinical trials and are reporting positive results. In this Progress article, we discuss which viral elements are used in COVID-19 vaccine candidates, why they might act as good targets for the immune system and the implications for protective immunity.
Referências	DAI, L.; GAO, G. F. Viral targets for vaccines against COVID-19. Nature reviews. Immunology , [United Kingdom.], v. 21, n. 2, p. 73–82, Feb. 2021. Disponível em: https://doi.org/10.1038/s41577-020-00480-0.
Fonte	https://doi.org/10.1038/s41577-020-00480-0



Título	Household transmission of SARS-CoV-2 (COVID-19) in Lima, Peru
Autor(es)	Yolanda Angulo-Bazán, Gilmer Solis-Sánchez, Fany Cardenas, Ana Jorge, Joshi Acosta, César Cabezas
Resumo	The study aimed to describe the characteristics of SARS-CoV-2 transmission among members of households with a confirmed primary case of COVID-19 in districts with low burden of cases in Lima, Peru, compared to a district with high burden. This was a retrospective study with a secondary database review. Information was collected from an epidemiological surveillance activity in close contacts (household members) in 52 households in Lima, with a single member with COVID-19. Reevaluation was conducted in 10 households. The study evaluated epidemiological and clinical variables and their association with the result of the rapid serological test (presence of IgG, IgM, or both). Secondary cases were found in 40 households, representing mean identification of 49.9% per household. Secondary attack rate in household members was 53% (125 cases), and symptomatic individuals accounted for 77.6% of cases (symptomatic/asymptomatic ratio: 3.5). Presence of fever and/or chills was found in 40% of persons with positive test results, followed by sore throat with 39.2%. Ageusia and anosmia were present in 22.4% and 20.8% of cases, respectively. When there was a primary case of COVID-19 in the household, the secondary attack rate was 53%; however, in an important proportion of households there were no positive cases other than the primary case. The epidemiological and clinical findings were consistent with reports from other international series.
Referências	ANGULO-BAZÁN, Y. <i>et al.</i> Household transmission of SARS-CoV-2 (COVID-19) in Lima, Peru. Cad. Saúde Pública , Rio de janeiro, v.37, n. 3, p. 14, Mar. 2021.Disponível em: http://dx.doi.org/10.1590/0102-311X00238720.
Fonte	http://dx.doi.org/10.1590/0102-311X00238720



Título	Interferon antagonism by SARS-CoV-2: a functional study using reverse genetics
Autor(es)	Simon Schroeder, Fabian Pott, Daniela Niemeyer, Talitha Veith, Anja Richter, Doreen Muth, Christine Goffinet, Marcel A Müller, Christian Drosten
Resumo	The COVID-19 agent, SARS-CoV-2, is conspecific with SARS-CoV, the causal agent of the severe acute respiratory syndrome epidemic in 2002–03. Although the viruses share a completely homologous repertoire of proteins and use the same cellular entry receptor, their transmission efficiencies and pathogenetic traits differ. We aimed to compare interferon antagonism by SARS-CoV and SARS-CoV-2.
Referências	SCHROEDER, S. et al. Interferon antagonism by SARS-CoV-2: a functional study using reverse genetics. The Lancet microbe , [United Kingdom], Mar. 4, 2021. Disponível em: https://doi.org/10.1016/S2666-5247(21)00027-6.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2821%2900027-6



Título	Azithromycin for community treatment of suspected COVID-19 in people at increased risk of an adverse clinical course in the UK (PRINCIPLE): a randomised, controlled, open-label, adaptive platform trial
Autor(es)	PRINCIPLE Trial Collaborative Group
Resumo	Azithromycin, an antibiotic with potential antiviral and anti-inflammatory properties, has been used to treat COVID-19, but evidence from community randomised trials is lacking. We aimed to assess the effectiveness of azithromycin to treat suspected COVID-19 among people in the community who had an increased risk of complications.
Referências	BUTLER, C. C. <i>et al.</i> Azithromycin for community treatment of suspected COVID-19 in people at increased risk of an adverse clinical course in the UK (PRINCIPLE): a randomised, controlled, open-label, adaptive platform trial. Lancet , [Netherlands], Mar. 4, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00461-X.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900461-X



Título	Global effect of the COVID-19 pandemic on paediatric cancer care: a cross-sectional study
Autor(es)	Dylan Graetz, Asya Agulnik, Radhikesh Ranadive, Yuvanesh Vedaraju, Yichen Chen, Guillermo Chantada, Monika L Metzger, Sheena Mukkada, Lisa M Force, Paola Friedrich, Catherine Lam, Elizabeth Sniderman, Nickhill Bhakta, Laila Hessissen, Rashmi Dalvi, Meenakshi Devidas, Kathy Pritchard-Jones, Carlos Rodriguez-Galindo, Daniel C Moreira
Resumo	Although mortality due to COVID-19 has been reportedly low among children with cancer, changes in health-care services due to the pandemic have affected cancer care delivery. This study aimed to assess the effect of the COVID-19 pandemic on childhood cancer care worldwide.
Referências	GRAETZ, D. <i>et al.</i> Global effect of the COVID-19 pandemic on paediatric cancer care: a cross-sectional study. The Lancet. Child & adolescent health , [Netherlands],Mar. 3, 2021. Disponível em: https://doi.org/10.1016/S2352-4642(21)00031-6.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-4642%2821%2900031-6



Título	Estimating risk of mechanical ventilation and in-hospital mortality among adult COVID-19 patients admitted to Mass General Brigham: the VICE and DICE scores
Autor(es)	Christopher J. Nicholson, Luke Wooster, Haakon H. Sigurslid, Rebecca H. Li, Wanlin Jiang, Wenjie Tian, Christian L. Lino Cardenas, Rajeev Malhotra
Resumo	Risk stratification of COVID-19 patients upon hospital admission is key for their successful treatment and efficient utilization of hospital resources. We sought to evaluate the risk factors on admission (including comorbidities, vital signs, and initial laboratory assessment) associated with ventilation need and in-hospital mortality in COVID-19.
Referências	NICHOLSON, C. J. <i>et al.</i> Estimating risk of mechanical ventilation and in-hospital mortality among adult COVID-19 patients admitted to Mass General Brigham: the VICE and DICE scores. EClinicalMedicine , [Netherlands.], v. 33, p. 100765, Feb. 4, 2021. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100765.
Fonte	https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370(21)00045-6.pdf



Título	Infection and transmission of SARS-CoV-2 in London care homes reporting no cases or outbreaks of COVID-19: prospective observational cohort study, England 2020
Autor(es)	Anna Jeffery-Smith, Kate Dun-Campbell, Roshni Janarthanan, Jonathan Fok, Emma Crawley-Boevey, Amoolya Vusirikala, Elena Fernandez Ruiz De Olano, Marina Sanchez Perez, Suzanne Tang, Thomas AJ Rowland, Edward Wynne-Evans, Anita Bell, Bharat Patel, Zahin Amin-Chowdhury, Felicity Aiano, Karthik Paranthaman, Thomas Ma, Maria Saavedra-Campos, Joanna Ellis, Angie Lackenby, Heather Whitaker, Richard Myers, Katja Hoschler, Kevin Brown, Mary E Ramsay, Nandini Shetty, J. Yimmy Chow, Shamez Ladhani, Maria Zambon
Resumo	Care homes have been disproportionately affected by the COVID-19 pandemic. We investigated the potential role of asymptomatic infection and silent transmission in London care homes that reported no cases of COVID-19 during the first wave of the pandemic.
Referências	JEFFERY-SMITH, A. <i>et al.</i> Infection and transmission of SARS-CoV-2 in London care homes reporting no cases or outbreaks of COVID-19: Prospective observational cohort study, England 2020. The Lancet regional health. Europe , [Netherlands], v. 3, p. 100038, Jan. 18, 2021. Disponível em: https://doi.org/10.1016/j.lanepe.2021.100038.
Fonte	https://www.thelancet.com/pdfs/journals/lanepe/PIIS2666-7762(21)00015-6.pdf



Título	Identification and validation of clinical phenotypes with prognostic implications in patients admitted to hospital with COVID-19: a multicentre cohort study
Autor(es)	Belén Gutiérrez-Gutiérrez, María Dolores del Toro, Alberto M Borobia, Antonio Carcas, Inmaculada Jarrín, María Yllescas, Pablo Ryan, Jerónimo Pachón, Jordi Carratalà, Juan Berenguer, Jose Ramón Arribas, Jesús Rodríguez-Baño, on behalf of the REIPI-SEIMC COVID-19 group and COVID@HULP groups
Resumo	The clinical presentation of COVID-19 in patients admitted to hospital is heterogeneous. We aimed to determine whether clinical phenotypes of patients with COVID-19 can be derived from clinical data, to assess the reproducibility of these phenotypes and correlation with prognosis, and to derive and validate a simplified probabilistic model for phenotype assignment. Phenotype identification was not primarily intended as a predictive tool for mortality.
Referências	GUTIÉRREZ-GUTIÉRREZ, B. <i>et al.</i> Identification and validation of clinical phenotypes with prognostic implications in patients admitted to hospital with COVID-19: a multicentre cohort study. The Lancet. Infectious diseases , [United Kingdom], p. S1473309921000190, Feb. 23, 2021. Disponível em: https://doi.org/10.1016/S1473-3099(21)00019-0.
Fonte	https://www.thelancet.com/pdfs/journals/laninf/PIIS1473-3099(21)00019-0.pdf



Título	Single-dose administration and the influence of the timing of the booster dose on immunogenicity and efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine: a pooled analysis of four randomised trials
Autor(es)	Merryn Voysey, Sue Ann Costa Clemens, Shabir A Madhi, Lily Y Weckx, Pedro M Folegatti, Parvinder K Aley, Brian Angus, Vicky L Baillie, Shaun L Barnabas, Qasim E Bhorat, Sagida Bibi, Carmen Briner, Paola Cicconi, Elizabeth A Clutterbuck, Andrea M Collins, Clare L Cutland, Thomas C Darton, Keertan Dheda, Christina Dold, Christopher J A Duncan, Katherine R W Emary, Katie J Ewer, Amy Flaxman, Lee Fairlie, Saul N Faust, Shuo Feng, Daniela M Ferreira, Adam Finn, Eva Galiza, Anna L Goodman, Catherine M Green, Christopher A Green, Melanie Greenland, Catherine Hill, Helen C Hill, Ian Hirsch, Alane Izu, Daniel Jenkin, Carina C D Joe, Simon Kerridge, Anthonet Koen, Gaurav Kwatra, Rajeka Lazarus, Vincenzo Libri, Patrick J Lillie, Natalie G Marchevsky, Richard P Marshall, Ana V A Mendes, Eveline P Milan, Angela M Minassian, Alastair McGregor, Yama F Mujadidi, Anusha Nana, Sherman D Padayachee, Daniel J Phillips, Ana Pittella, Emma Plested, Katrina M Pollock, Maheshi N Ramasamy, Adam J Ritchie, Hannah Robinson, Alexandre V Schwarzbold, Andrew Smith, Rinn Song, Matthew D Snape, Eduardo Sprinz, Rebecca K Sutherland, Emma C Thomson, M Estée Török, Mark Toshner, David P J Turner, Johan Vekemans, Tonya L Villafana, Thomas White, Christopher J Williams, Alexander D Douglas, Adrian V S Hill, Teresa Lambe, Sarah C Gilbert, Andrew J Pollard, on behalf of the Oxford COVID Vaccine Trial Group
Resumo	The ChAdOx1 nCoV-19 (AZD1222) vaccine has been approved for emergency use by the UK regulatory authority, Medicines and Healthcare products Regulatory Agency, with a regimen of two standard doses given with an interval of 4–12 weeks. The planned roll-out in the UK will involve vaccinating people in high-risk categories with their first dose immediately, and delivering the second dose 12 weeks later. Here, we provide both a further prespecified pooled analysis of trials of ChAdOx1 nCoV-19 and exploratory analyses of the impact on immunogenicity and efficacy of extending the interval between priming and booster doses. In addition, we show the immunogenicity and protection afforded by the first dose, before a booster dose has been offered.
Referências	VOYSEY, M. et al. Single-dose administration and the influence of the timing of the booster dose on immunogenicity and efficacy of ChAdOx1 nCoV-19 (AZD1222) vaccine: a pooled analysis of four randomised trials. Lancet , [Netherlands], p. S0140673621004323, Feb. 19, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00432-3.
Fonte	https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(21)00432-3.pdf



Título	Association between Clinical Frailty Scale score and hospital mortality in adult patients with COVID-19 (COMET): an international, multicentre, retrospective, observational cohort study
Autor(es)	Roos S G Sablerolles, Melvin Lafeber, Janneke A L van Kempen, Bob P A van de Loo, Eric Boersma, Wim J R Rietdijk, Harmke A Polinder-Bos, Simon P Mooijaart, Hugo van der Kuy, Jorie Versmissen, Miriam C Faes, on behalf of the COMET research team
Resumo	During the COVID-19 pandemic, the scarcity of resources has necessitated triage of critical care for patients with the disease. In patients aged 65 years and older, triage decisions are regularly based on degree of frailty measured by the Clinical Frailty Scale (CFS). However, the CFS could also be useful in patients younger than 65 years. We aimed to examine the association between CFS score and hospital mortality and between CFS score and admission to intensive care in adult patients of all ages with COVID-19 across Europe.
Referências	SABLEROLLES, R. S. G. <i>et al.</i> Association between Clinical Frailty Scale score and hospital mortality in adult patients with COVID-19 (COMET): an international, multicentre, retrospective, observational cohort study. The Lancet. Healthy longevity , [United Kingdom], p. S2666756821000064, Feb. 9, 2021. Disponível em: https://doi.org/10.1016/S2666-7568(21)00006-4.
Fonte	https://www.thelancet.com/pdfs/journals/lanhl/PIIS2666-7568(21)00006-4.pdf



Título	Trabalho, saúde e vulnerabilidade na pandemia de COVID-19
Autor(es)	Kionna Oliveira Bernardes Santos, Rita de Cássia Pereira Fernandes, Milena Maria Cordeiro de Almeida, Samilly Silva Miranda, Yukari Figueroa Mise, Monica Angelim Gomes de Lima
Resumo	Este ensaio discute as repercussões da pandemia COVID-19 na relação trabalho e saúde, sob a perspectiva do risco e vulnerabilidade de trabalhadores. A pandemia tem se configurado como uma crise humanitária, uma vez que tanto a doença quanto as medidas de contenção desta geram efeitos socioeconômicos persistentes. Nesse contexto, a categoria trabalho assume um papel relevante, seja pela viabilidade de manutenção do distanciamento social e das condições de vida permitidas pelo vínculo de trabalho, seja pela impossibilidade de adoção das estratégias de proteção devido à precarização do trabalho. A construção do ensaio iniciou com base numa revisão da literatura na interface COVID-19 e saúde dos trabalhadores, realizada de dezembro de 2019 a abril de 2020, nas bases PubMed, BIREME, Cochrane Library, medRxiv e LitCovid, bem como da literatura cinza. Profissionais de saúde são mais acometidos, mas também com maior acesso ao diagnóstico, persistindo lacunas sobre as demais categorias profissionais, bem como sobre os determinantes sociais que implicam uma maior vulnerabilidade relacionada ao trabalho. A pandemia coincide no Brasil com uma conjuntura na qual trabalhadoras(es) acumulam perdas relevantes de direitos trabalhistas e previdenciários, somadas às desigualdades sociais preexistentes, ao exemplo de precariedade de moradia, com maiores exposição e risco. Embora a evolução da pandemia ainda esteja em curso, prevê-se que as desigualdades sociais se intensificarão com a profunda retração da economia, e trabalhadores devem ser alvo prioritário da atenção no controle e disseminação da doença, além de eixo articulador das políticas públicas de proteção social e à saúde.
Referências	SANTOS, K. O. B. <i>et al.</i> Trabalho, saúde e vulnerabilidade na pandemia de COVID-19. Cad. Saúde Pública , Rio De janeiro, v. 36, n. 12, p. e00178320, dez. 2020. Disponível em: https://doi.org/10.1590/0102-311x00178320.
Fonte	http://cadernos.ensp.fiocruz.br/static//arquivo/1678-4464-csp-36-12-e00178320.pdf



Título	Excesso de mortes durante a pandemia de COVID-19: subnotificação e desigualdades regionais no Brasil
Autor(es)	Jesem Douglas Yamall Orellana, Geraldo Marcelo da Cunha, Lihsieh Marrero, Ronaldo Ismerio Moreira, Iuri da Costa Leite, Bernardo Lessa Horta
Resumo	O Brasil é um dos países mais afetados pela pandemia de COVID-19 e o real número de mortes pela doença torna o cenário ainda mais desafiador. O objetivo deste estudo foi estimar o excesso de mortes e suas diferenças em adultos com 20 anos e mais em Manaus (Amazonas), Fortaleza (Ceará), Rio de Janeiro e São Paulo, de acordo com o local de ocorrência do óbito, características demográficas e trajetória ao longo do tempo. Os dados foram obtidos no Sistema de Informações sobre Mortalidade e na Central de Informações do Registro Civil Nacional. As estimativas de óbitos esperados foram obtidos por meio de modelos aditivos generalizados <i>quasi</i> -Poisson com ajuste de sobredispersão. Entre 23 de fevereiro e 13 de junho de 2020, foram registradas 74.410 mortes naturais nas quatro cidades, com excesso de mortes de 46% (IC95%: 44-47). O maior excesso de mortes ocorreu em Manaus, 112% (IC95%: 103-121), seguido por Fortaleza, 72% (IC95%: 67-78), Rio de Janeiro, 42% (IC95%: 40-45) e São Paulo, 34% (IC95%: 32-36). O excesso de mortes foi maior nos homens e não significativo nas Semanas Epidemiológicas (SE) 9-12, exceto em São Paulo, 10% (IC95%: 6-14). Em geral, o pico de mortes excedentes ocorreu nas SE 17-20. O excesso de mortes não explicado diretamente pela COVID-19 e de mortes em domicílios/via pública foi alto, especialmente em Manaus. A elevada porcentagem de mortes excedentes, de mortes não explicadas diretamente pela COVID-19 e de mortes fora do hospital sugerem alta subnotificação de mortes por COVID-19 e reforça a extensa dispersão do SARS-CoV-2, como também a necessidade da revisão de todas as causas de mortes associadas a sintomas respiratórios pelos serviços de vigilância epidemiológica.
Referências	ORELLANA, J. D. Y. <i>et al.</i> Excesso de mortes durante a pandemia de COVID-19: subnotificação e desigualdades regionais no Brasil. Cad. Saúde Pública , Rio De janeiro, v. 37, n. 1, p. e00259120, jan. 2021. Disponível em: https://doi.org/10.1590/0102-311x00259120.
Fonte	http://cadernos.ensp.fiocruz.br/static//arquivo/1678-4464-csp-37-01-e00259120.pdf



Título	Análises de classes latentes dos sintomas relacionados à COVID-19 no Brasil: resultados da PNAD-COVID19
Autor(es)	Rafael da Silveira Moreira
Resumo	A ausência de testagens em massa para o diagnóstico da COVID-19 gera a necessidade de conhecer a dimensão da doença por meio da sua sintomatologia clínica. O objetivo foi investigar o perfil de sintomas relacionados à COVID-19 e aspectos relacionados. Foi analisada a amostra de participantes da <i>Pesquisa Nacional por Amostra de Domicílios</i> (PNAD-COVID19) realizada em maio de 2020. Foi realizada análise de classes latentes (ACL) com covariáveis sociodemográficas sobre 11 sintomas relatados por 346.181 indivíduos. Foram utilizados testes de Rao-Scott e análise de resíduos padronizados para mensurar a associação com o padrão de utilização dos serviços de saúde. Análise espacial de varredura foi realizada para identificar as áreas de risco para os casos de COVID-19. A ACL mostrou seis classes de sintomatologia, segundo o padrão de respostas dos indivíduos analisados: (1) todos os sintomas; (2) prevalência alta dos sintomas; (3) predominância de febre; (4) predominância de tosse/dor de garganta; (5) leves sintomas com predominância de dor de cabeça e (6) ausência de sintomas. Pessoas do sexo feminino, cor parda, provenientes das regiões Norte e Nordeste e em todas as três faixas etárias mais velhas apresentaram maior associação com a classe com todos os sintomas (classe 1). A maioria da procura por serviços também foi realizada por esse grupo de indivíduos, porém com distintos perfis de uso. A análise espacial mostrou sobreposição dessa classe com áreas de maior risco de casos de COVID-19. Os achados sustentam a importância da investigação dos sintomas, servindo para a identificação epidemiológica de possíveis casos em um cenário com baixa taxa de testagem populacional.
Referências	MOREIRA, R. da S. Análises de classes latentes dos sintomas relacionados à COVID-19 no Brasil: resultados da PNAD-COVID19. Cad. Saúde Pública , Rio De janeiro, v. 37, n. 1, p. e00238420, jan. 2021. Disponível em: https://doi.org/10.1590/0102-311x00238420.
Fonte	http://cadernos.ensp.fiocruz.br/static//arquivo/1678-4464-csp-37-01-e00238420.pdf



Título	Preterm care during the COVID-19 pandemic: A comparative risk analysis of neonatal deaths averted by kangaroo mother care versus mortality due to SARS-CoV-2 infection
Autor(es)	Nicole Minckas, Melissa M. Medvedev, Ebunoluwa A. Adejuyigbe, Helen Brotherton, Harish Chellani, Abiy Seifu Estifanos, Chinyere Ezeaka, Abebe G. Gobezayehu, Grace Irimu, Kondwani Kawaza, Vishwajeet Kumar, Augustine Massawe, Sarmila Mazumder, Ivan Mambule, Araya Abrha Medhanyie, Elizabeth M. Molyneux, Sam Newton, Nahya Salim, Henok Tadele, Cally J. Tann, Sachiyo Yoshida, Rajiv Bahl, Suman P.N. Rao, Joy E. Lawn, on behalf of the COVID-19 Small and Sick Newborn Care Collaborative Group
Resumo	COVID-19 is disrupting health services for mothers and newborns, particularly in low- and middle-income countries (LMIC). Preterm newborns are particularly vulnerable. We undertook analyses of the benefits of kangaroo mother care (KMC) on survival among neonates weighing 2000 g compared with the risk of SARS-CoV-2 acquired from infected mothers/caregivers.
Referências	MINCKAS, N. Preterm care during the COVID-19 pandemic: a comparative risk analysis of neonatal deaths averted by kangaroo mother care versus mortality due to SARS-CoV-2 infection. EclinicalMedicine , [Netherlands], p. 8, Feb. 5, 2021.
Fonte	https://www.thelancet.com/pdfs/journals/eclinm/PIIS2589-5370(21)00013-4.pdf



Título	Factors associated with SARS-CoV-2 infection and outbreaks in long-term care facilities in England: a national crosssectional survey
Autor(es)	Laura Shallcross, Danielle Burke, Owen Abbott, Alasdair Donaldson, Gemma Hallatt, Andrew Hayward, Susan Hopkins, Maria Krutikov, Katie Sharp, Leone Wardman, Sapphira Thorne
Resumo	Outbreaks of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection have occurred in long-term care facilities (LTCFs) worldwide, but the reasons why some facilities are particularly vulnerable to outbreaks are poorly understood. We aimed to identify factors associated with SARS-CoV-2 infection and outbreaks among staff and residents in LTCFs.
Referências	SHALLCROSS, L. Factors associated with SARS-CoV-2 infection and outbreaks in long-term care facilities in England: a national cross-sectional survey. Lancet Healthy Longev , [United Kingdom], p. 14, Feb. 11, 2021. DOI: https://doi.org/10.1016/S2666-7568(20)30065-9.
Fonte	https://www.thelancet.com/pdfs/journals/lanhl/PIIS2666-7568(20)30065-9.pdf



Título	Indirect acute effects of the COVID-19 pandemic on physical and mental health in the UK: a population-based study
Autor(es)	Kathryn E Mansfield, Rohini Mathur, John Tazare, Alasdair D Henderson, Amy R Mulick, Helena Carreira, Anthony A Matthews, Patrick Bidulka, Alicia Gayle, Harriet Forbes, Sarah Cook, Angel Y S Wong, Helen Strongman, Kevin Wing, Charlotte Warren-Gash, Sharon L Cadogan, Liam Smeeth, Joseph F Hayes, Jennifer K Quint, Martin McKee, Sinéad M Langan
Resumo	There are concerns that the response to the COVID-19 pandemic in the UK might have worsened physical and mental health, and reduced use of health services. However, the scale of the problem is unquantified, impeding development of effective mitigations. We aimed to ascertain what has happened to general practice contacts for acute physical and mental health outcomes during the pandemic.
Referências	MANSFIELD, K. E. <i>et al.</i> Indirect acute effects of the COVID-19 pandemic on physical and mental health in the UK: a population-based study. The Lancet Digital Health , [United Kingdom], Feb. 18, 2021. DOI: 10.1016/S2589-7500(21)00017-0.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900017-0



Título	Clinical outcomes of different therapeutic options for COVID-19 in two Chinese case cohorts: a propensity-score analysis
Autor(es)	Carlos K.H. Wong, Eric Y.F. Wan, Sihui Luo, Yu Ding, Eric H.Y. Lau, Ping Ling, Xiaowen Hu, Edward C.H. Lau, Jerry Wong, Xueying Zheng, Benjamin J. Cowling, Jianping Weng, Gabriel M. Leung
Resumo	The timing of administration of agents and use of combination treatments in COVID-19 remain unclear. We assessed the effectiveness of therapeutics in cohorts in Hong Kong SAR and Anhui, China.
Referências	WONG, C. K. H. <i>et al.</i> Clinical outcomes of different therapeutic options for COVID-19 in two Chinese case cohorts: A propensity-score analysis. EClinicalMedicine , [Netherlands], p. 100743, Feb. 12, 2021. Disponível em: https://doi.org/10.1016/j.eclinm.2021.100743.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900023-7



Título	Antibody seroprevalence in the epicenter Wuhan, Hubei, and six selected provinces after containment of the first epidemic wave of COVID-19 in China
Autor(es)	Zhongjie Li, Xuhua Guan, Naiying Mao, Huiming Luo, Ying Qin, Na He, Zhen Zhu, Jianxing Yu, , Yu Li, Jianhua Liu, Zhijie An, Wenjing Gao, Xiaoli Wang, Xiaodong Sun, Tie Song, Xingfen Yang, Ming Wu, Xianping Wu, Wenqing Yao, Zhibin Peng, Junling Sun, Liping Wang, Qing Guo, Nijuan Xiang, Jun Liu, Bike Zhang, Xuemei Su, Lance Rodewald, Liming Li, Wenbo Xu, Hongbing Shen, Zijian Feng, George F Gao
Resumo	China implemented containment measures to stop SARS-CoV-2 transmission in response to the COVID-19 epidemic. After the first epidemic wave, we conducted population-based serological surveys to determine extent of infection, risk factors for infection, and neutralization antibody levels to assess the real infections in the random sampled population.
Referências	LI, Z. et al. Antibody seroprevalence in the epicenter Wuhan, Hubei, and six selected provinces after containment of the first epidemic wave of COVID-19 in China. The Lancet regional health. Western Pacific , [United Kingdom], v. 8, p. 100094, Jan. 11, 2021. DOI: 10.1016/j.lanwpc.2021.100094.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-6065%2821%2900003-1



Título	COVID-19 vaccine hesitancy in a representative working-age population in France: a survey experiment based on vaccine characteristics
Autor(es)	Michaël Schwarzinger, Verity Watson, Pierre Arwidson, François Alla, Stéphane Luchini
Resumo	Opinion polls on vaccination intentions suggest that COVID-19 vaccine hesitancy is increasing worldwide; however, the usefulness of opinion polls to prepare mass vaccination campaigns for specific new vaccines and to estimate acceptance in a country's population is limited. We therefore aimed to assess the effects of vaccine characteristics, information on herd immunity, and general practitioner (GP) recommendation on vaccine hesitancy in a representative working-age population in France. Methods In this survey experiment, adults aged 18–64 years residing in France, with no history of SARS-CoV-2 infection, were randomly selected from an online survey research panel in July, 2020, stratified by gender, age, education, household size, and region and area of residence to be representative of the French population. Participants completed an online questionnaire on their background and vaccination behaviour-related variables (including past vaccine compliance, risk factors for severe COVID-19, and COVID-19 perceptions and experience), and were then randomly assigned according to a full factorial design to one of three groups to receive differing information on herd immunity (>50% of adults aged 18–64 years must be immunised [either by vaccination or infection]; >50% of adults must be immunised [either by vaccination or infection]; or no information on herd immunity) and to one of two groups regarding GP recommendation of vaccination (GP recommends vaccination or expresses no opinion). Participants then completed a series of eight discrete choice tasks designed to assess vaccine acceptance or refusal based on hypothetical vaccine characteristics (efficacy [50%, 80%, 90%, or 100%], risk of serious side-effects [1 in 10000 or 1 in 100000], location of manufacture [EU, USA, or China], and place of administration [GP practice, local pharmacy, or mass vaccination centre]). Responses were analysed with a two-part model to disentangle outright vaccine refusal in a leight tasks (outright vaccine refusal) and 1382 (71·2%) did



Resumo	hesitancy] or no chronic conditions other than hypertension [for outright vaccine refusal]). Outright vaccine refusal was also associated with a lower perceived severity of COVID-19, whereas vaccine hesitancy was lower when herd immunity benefits were communicated and in working versus nonworking individuals, and those with experience of COVID-19 (had symptoms or knew someone with COVID-19). For a mass vaccination campaign involving mass vaccination centres and communication of herd immunity benefits, our model predicted outright vaccine refusal in 29·4% (95% CI 28·6–30·2) of the French working-age population. Predicted hesitancy was highest for vaccines manufactured in China with 50% efficacy and a 1 in 10000 risk of serious side-effects (vaccine acceptance 27·4% [26·8–28·0]), and lowest for a vaccine manufactured in the EU with 90% efficacy and a 1 in 100 000 risk of serious side-effects (vaccine acceptance 61·3% [60·5–62·1]). Interpretation COVID-19 vaccine acceptance depends on the characteristics of new vaccines and the national vaccination strategy, among various other factors, in the working-age population in France.
Referências	SCHWARZINGER, M. <i>et al.</i> COVID-19 vaccine hesitancy in a representative working-age population in France: a survey experiment based on vaccine characteristics. The Lancet. Public health, [United Kingdom], Feb. 5, 2021. Disponível em: https://doi.org/10.1016/S2468-2667(21)00012-8.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2468-2667%2821%2900012-8



Título	Peginterferon lambda for the treatment of outpatients with COVID-19: a phase 2, placebo-controlled randomised trial
Autor(es)	Jordan J Feld, Christopher Kandel, Mia J Biondi, Robert A Kozak, Muhammad Atif Zahoor, Camille Lemieux, Sergio M Borgia, Andrea K Boggild, Jeff Powis, Janine McCready, Darrell H S Tan, Tiffany Chan, Bryan Coburn, Deepali Kumar, Atul Humar, Adrienne Chan, Braden O'Neil, Seham Noureldin, Joshua Booth, Rachel Hong, David Smookler, Wesam Aleyadeh, Anjali Patel, Bethany Barber, Julia Casey, Ryan Hiebert, Henna Mistry, Ingrid Choong, Colin Hislop, Deanna M Santer, D Lorne Tyrrell, Jeffrey S Glenn, Adam J Gehring,
Resumo	To date, only monoclonal antibodies have been shown to be effective for outpatients with COVID-19. Interferon lambda-1 is a type III interferon involved in innate antiviral responses with activity against respiratory pathogens. We aimed to investigate the safety and efficacy of peginterferon lambda in the treatment of outpatients with mild-to-moderate COVID-19. Methods In this double-blind, placebo-controlled trial, outpatients with laboratory-confirmed COVID-19 were randomly assigned to a single subcutaneous injection of peginterferon lambda 180 μg or placebo within 7 days of symptom onset or first positive swab if asymptomatic. Participants were randomly assigned (1:1) using a computergenerated randomisation list created with a randomisation schedule in blocks of four. At the time of administration, study nurses received a sealed opaque envelope with the treatment allocation number. The primary endpoint was the proportion of patients who were negative for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) RNA on day 7 after the injection, analysed by a χ² test following an intention-to-treat principle. Prespecified analysis of the primary endpoint, adjusted for baseline viral load, using bivariate logistic regression was done. The trial is now complete. This trial is registered with ClinicalTrials.gov, NCT04354259. Findings Between May 18, and Sept 4, 2020, we recruited 30 patients per group. The decline in SARS-CoV-2 RNA was greater in those treated with peginterferon lambda than placebo from day 3 onwards, with a difference of 2·42 log copies per mL at day 7 (p=0·0041). By day 7, 24 (80%) participants in the peginterferon lambda group had an undetectable viral load, compared with 19 (63%) in the placebo group (p=0·15). After controlling for baseline viral load, patients in the peginterferon lambda group were more likely to have undetectable virus by day 7 than were those in the placebo group (odds ratio [OR] 4·12 [95% CI 1·15–16·73; p=0·029). Of those with baseline viral load above



	(38%) of 16 in the placebo group (OR 6·25 [95% CI 1·49–31·06]; p=0·012). Peginterferon lambda was well tolerated, and adverse events were similar between groups with mild and transient aminotransferase, concentration increases more frequently observed in the peginterferon lambda group. Two individuals met the threshold of grade 3 increase, one in each group, and no other grade 3 or 4 laboratory adverse events were reported. Interpretation Peginterferon lambda accelerated viral decline in outpatients with COVID-19, increasing the proportion of patients with viral clearance by day 7, particularly in those with high baseline viral load. Peginterferon lambda has potential to prevent clinical deterioration and shorten duration of viral shedding.
Referências	FELD, J. J. <i>et al.</i> Peginterferon lambda for the treatment of outpatients with COVID-19: a phase 2, placebo-controlled randomised trial. The Lancet. Respiratory medicine , [Netherlands.], p. S221326002030566X, Feb. 5, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(20)30566-X.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930566-X



Título	Comparative cost-effectiveness of SARS-CoV-2 testing strategies in the USA: a modelling study
Autor(es)	Zhanwei Du, Abhishek Pandey, Yuan Bai, Meagan C Fitzpatrick, Matteo Chinazzi, Ana Pastore y Piontti, Michael Lachmann, Alessandro Vespignani, Benjamin J Cowling, Alison P Galvani, Lauren Ancel Meyers
Resumo	To mitigate the COVID-19 pandemic, countries worldwide have enacted unprecedented movement restrictions, physical distancing measures, and face mask requirements. Until safe and efficacious vaccines or antiviral drugs become widely available, viral testing remains the primary mitigation measure for rapid identification and isolation of infected individuals. We aimed to assess the economic trade-offs of expanding and accelerating testing for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) across the USA in different transmission scenarios. Methods We used a multiscale model that incorporates SARS-CoV-2 transmission at the population level and daily viral load dynamics at the individual level to assess eight surveillance testing strategies that varied by testing frequency (from daily to monthly testing) and isolation period (1 or 2 weeks), compared with the status-quo strategy of symptom-based testing and isolation. For each testing strategy, we first estimated the costs (incorporating costs of diagnostic testing and admissions to hospital, and salary lost while in isolation) and years of life lost (YLLs) prevented under rapid and low transmission scenarios. We then assessed the testing strategies across a range of scenarios, each defined by effective reproduction number (Re), willingness to pay per YLL averted, and cost of a test, to estimate the probability that a particular strategy had the greatest net benefit. Additionally, for a range of transmission scenarios (Re from 1·1 to 3), we estimated a threshold test price at which the status-quo strategy outperforms all testing strategies considered. Findings Our modelling showed that daily testing combined with a 2-week isolation period was the most costly strategy considered, reflecting increased costs with greater test frequency and length of isolation period. Assuming a societal willingness to pay of US\$100000 per YLL averted and a price of \$5 per test, the strategy most likely to be cost-effective under a rapid transmission scenarios (Re of 1·2)
Referências	DU, Z. et al. Comparative cost-effectiveness of SARS-CoV-2 testing strategies in the USA: a modelling study. The Lancet. Public health , [United Kingdom], Feb. 4, 2021. Disponível em: https://doi.org/10.1016/S2468-2667(21)00002-5.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2468-2667%2821%2900002-5



Título	Safety and efficacy of an rAd26 and rAd5 vector-based heterologous prime-boost COVID-19 vaccine: an interim analysis of a randomised controlled phase 3 trial in Russia
Autor(es)	Denis Y Logunov, Inna V Dolzhikova, Dmitry V Shcheblyakov, Amir I Tukhvatulin, Olga V Zubkova, Alina S Dzharullaeva, Anna V Kovyrshina, Nadezhda L Lubenets, Daria M Grousova, Alina S Erokhova, Andrei G Botikov, Fatima M Izhaeva, Olga Popova, Tatiana A Ozharovskaya, Ilias B Esmagambetov, Irina A Favorskaya, Denis I Zrelkin, Daria V Voronina, Dmitry N Shcherbinin, Alexander S Semikhin, Yana V Simakova, Elizaveta A Tokarskaya, Daria A Egorova, Maksim M Shmarov, Natalia A Nikitenko, Vladimir A Gushchin, Elena A Smolyarchuk, Sergey K Zyryanov, Sergei V Borisevich, Boris S Naroditsky, Alexander L Gintsburg, and the Gam-COVID-Vac Vaccine Trial Group
Resumo	A heterologous recombinant adenovirus (rAd)-based vaccine, Gam-COVID-Vac (Sputnik V), showed a good safety profile and induced strong humoral and cellular immune responses in participants in phase 1/2 clinical trials. Here, we report preliminary results on the efficacy and safety of Gam-COVID-Vac from the interim analysis of this phase 3 trial.
Referências	LOGUNOV, D. Y. <i>et al.</i> Safety and efficacy of an rAd26 and rAd5 vector-based heterologous prime-boost COVID-19 vaccine: an interim analysis of a randomised controlled phase 3 trial in Russia. Lancet , [Netherlands], p. S0140673621002348, Feb. 2, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(21)00234-8.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2900234-8



Título	6-month consequences of COVID-19 in patients discharged from hospital: a cohort study
Autor(es)	Chaolin Huang, Lixue Huang, Yeming Wang, Xia Li, Lili Ren, Xiaoying Gu, Liang Kang, Li Guo, Min Liu, Xing Zhou, Jianfeng Luo, Zhenghui Huang, Shengjin Tu, Yue Zhao, Li Chen, Decui Xu, Yanping Li, Caihong Li, Lu Peng, Yong Li, Wuxiang Xie, Dan Cui, Lianhan Shang, Guohui Fan, Jiuyang Xu, Geng Wang, Ying Wang, Jingchuan Zhong, Chen Wang, Jianwei Wang [†] , Dingyu Zhang [†] , Bin Cao
Resumo	The long-term health consequences of COVID-19 remain largely unclear. The aim of this study was to describe the long-term health consequences of patients with COVID-19 who have been discharged from hospital and investigate the associated risk factors, in particular disease severity.
Referências	HUANG, C. et al. 6-month consequences of COVID-19 in patients discharged from hospital: a cohort study. Lancet, [Netherlands], v. 397, n. 10270, p. 220–232, Jan. 8, 2021. Disponível em: https://doi.org/10.1016/S0140-6736(20)32656-8.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932656-8



Título	DNA vaccines against COVID-19: Perspectives and challenges
Autor(es)	Marcelle Moura Silveira, Gustavo Marçal Schmidt Garcia Moreira, Marcelo Mendonça
Resumo	The coronavirus disease 2019 (COVID-19) is caused by a novel coronavirus known as severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which is associated with several fatal cases worldwide. The rapid spread of this pathogen and the increasing number of cases highlight the urgent development of vaccines. Among the technologies available for vaccine development, DNA vaccination is a promising alternative to conventional vaccines. Since its discovery in the 1990s, it has been of great interest because of its ability to elicit both humoral and cellular immune responses while showing relevant advantages regarding producibility, stability, and storage. This review aimed to summarize the current knowledge and advancements on DNA vaccines against COVID-19, particularly those in clinical trials.
Referências	SILVEIRA, M. M.; MOREIRA, G. M. S. G.; MENDONÇA, M. DNA vaccines against COVID-19: Perspectives and challenges. Life Sci , [Netherlands.], v. 267, p. 118919, Feb. 2021. Disponível em: https://doi.org/10.1016/j.lfs.2020.118919.
Fonte	https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7749647/



Título	Effect of anakinra versus usual care in adults in hospital with COVID-19 and mild-to-moderate pneumonia (CORIMUNO-ANA-1): a randomised controlled trial
Autor(es)	BUREAU, S. et al. (The CORIMUNO-19 Collaborative group).
Resumo	Patients with COVID-19 pneumonia have an excess of inflammation and increased concentrations of cytokines including interleukin-1 (IL-1). We aimed to determine whether anakinra, a recombinant human IL-1 receptor antagonist, could improve outcomes in patients in hospital with mild-to-moderate COVID-19 pneumonia.
Referências	BUREAU, S. <i>et al.</i> Effect of anakinra versus usual care in adults in hospital with COVID-19 and mild-to-moderate pneumonia (CORIMUNO-ANA-1): a randomised controlled trial. The Lancet. Respiratory medicine , [Netherlands], p. S2213260020305567, Jan. 22, 2021. Disponível em: https://doi.org/10.1016/S2213-2600(20)30556-7.
Fonte	https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30556-7/abstract



Título	The impact of the COVID-19 pandemic on radiotherapy services in England, UK: a population-based study
Autor(es)	Katie Spencer, Christopher M Jones, Rebecca Girdler, Catherine Roe, Michael Sharpe, Sarah Lawton, Louise Miller, Philippa Lewis, Mererid Evans, David Sebag-Montefiore, Tom Roques, Rebecca Smittenaar, Eva Morris.
Resumo	The indirect impact of the COVID-19 pandemic on cancer outcomes is of increasing concern. However, the extent to which key treatment modalities have been affected is unclear. We aimed to assess the impact of the pandemic on radiotherapy activity in England.
Referências	SPENCER, K. <i>et al.</i> The impact of the COVID-19 pandemic on radiotherapy services in England, UK: a population-based study. Lancet. Oncology , [Netherlands], v. 22, n. 1, p. S1470204520307439, Jan. 22, 2021. Disponível em: https://doi.org/10.1016/S1470-2045(20)30743-9.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1470-2045%2820%2930743-9



Título	Prevalence and intensity of soil-transmitted helminth infections of children in sub-Saharan Africa, 2000–18: a geospatial analysis
Autor(es)	Benn Sartorius, Jorge Cano, Hope Simpson, Lucy S Tusting, Laurie B Marczak, Molly K Miller-Petrie, Boniface Kinvi, Honorat Zoure, Pauline Mwinzi, Simon I Hay, Maria Rebollo, Rachel L Pullan.
Resumo	Driven by global targets to eliminate soil-transmitted helminths as a public health problem, governments have rapidly rolled out control programmes using school and community-based platforms. To justify and target ongoing investment, quantification of impact and identification of remaining high-risk areas are needed. We aimed to assess regional progress towards these targets.
Referências	SARTORIUS, B. <i>et al.</i> Prevalence and intensity of soil-transmitted helminth infections of children in sub-Saharan Africa, 2000–18: a geospatial analysis. The Lancet. Global health , [Netherlands], v. 9, n. 1, p. e52–e60, 2021. Disponível em: https://doi.org/10.1016/S2214-109X(20)30398-3.
Fonte	https://www.thelancet.com/pdfs/journals/langlo/PIIS2214-109X(20)30398-3.pdf



Título	SARS-CoV-2 causing pneumonia-associated respiratory disorder (COVID-19): diagnostic and proposed therapeutic options
Autor(es)	C Chakraborty, A R Sharma, G Sharma, M Bhattacharya, S S Lee
Resumo	SARS-CoV-2 is responsible for the outbreak of severe respiratory illness (COVID-19) in Wuhan City, China and is now spreading rapidly throughout the world. The prompt outbreak of COVID-19 and its quick spread without any controllable measure defines the severity of the situation. In this crisis, a collective pool of knowledge about the advancement of clinical diagnostic and management for COVID-19 is a prerequisite. Here, we summarize all the available updates on the multidisciplinary approaches for the advancement of diagnosis and proposed therapeutic strategies for COVID-19. Moreover, the review discusses different aspects of the COVID-19, including its epidemiology; incubation period; the general clinical features of patients; the clinical features of intensive care unit (ICU) patients; SARS-CoV-2 infection in the presence of co-morbid diseases and the clinical features of pediatric patients infected with the SARS-CoV-2. Advances in various diagnostic approaches, such as the use of real-time polymerase chain reaction (RT-PCR), chest radiography, and computed tomography (CT) imaging; and other modern diagnostic methods, for this infection have been highlighted. However, due to the unavailability of adequate evidence, presently there are no officially approved drugs or vaccines available against SARS-CoV-2. Additionally, we have discussed various therapeutic strategies for COVID-19 under different categories, like the possible treatment plans with drug (antiviral drugs and anti-cytokines) therapy for disease prevention. Lastly, potentials candidates for the vaccines against SARS-CoV-2 infection have been described. Collectively, the review provides an overview of the SARS-CoV-2 infection outbreak along with the recent advancements and strategies for diagnosis and therapy of COVID-19.
Referências	CHAKRABORTY, C. <i>et al.</i> SARS-CoV-2 causing pneumonia-associated respiratory disorder (COVID-19): diagnostic and proposed therapeutic options. Eur. Rev. Med. Pharmacol. Sci., [Italy], v. 24, n. 7, p. 4016–4026, Apr. 2020. Disponível em: https://doi.org/10.26355/eurrev_202004_20871.
Fonte	https://pubmed.ncbi.nlm.nih.gov/32329877/



Título	COVID-19 Vaccines: Should We Fear ADE?
Autor(es)	Scott B Halstead, Leah Katzelnick
Resumo	Might COVID-19 vaccines sensitize humans to antibody-dependent enhanced (ADE) breakthrough infections? This is unlikely because coronavirus diseases in humans lack the clinical, epidemiological, biological, or pathological attributes of ADE disease exemplified by dengue viruses (DENV). In contrast to DENV, SARS and MERS CoVs predominantly infect respiratory epithelium, not macrophages. Severe disease centers on older persons with preexisting conditions and not infants or individuals with previous coronavirus infections. Live virus challenge of animals given SARS or MERS vaccines resulted in vaccine hypersensitivity reactions (VAH), similar to those in humans given inactivated measles or respiratory syncytial virus vaccines. Safe and effective COVID-19 vaccines must avoid VAH.
Referências	HALSTEAD, S. B.; KATZELNICK, L. COVID-19 Vaccines: Should We Fear ADE? The journal of infectious diseases (University of Chicago Press), [United Kingdom], v. 222, n. 12, p. 1946–1950, Nov. 13, 2020. Disponível em: https://doi.org/10.1093/infdis/jiaa518.
Fonte	https://academic.oup.com/jid/article/222/12/1946/5891764



Título	Aging in COVID-19: Vulnerability, immunity and intervention
Autor(es)	Yiyin Chen, Sabra L Klein, Brian T Garibaldi, Huifen Li, Cunjin Wu, Nicole M Osevala, Taisheng Li, Joseph B Margolick, Graham Pawelec, Sean X Leng
Resumo	The severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2) pandemic was first reported in Wuhan, China in December 2019, moved across the globe at an unprecedented speed, and is having a profound and yet still unfolding health and socioeconomic impacts. SARS-CoV-2, a β-coronavirus, is a highly contagious respiratory pathogen that causes a disease that has been termed the 2019 coronavirus disease (COVID-19). Clinical experience thus far indicates that COVID-19 is highly heterogeneous, ranging from being asymptomatic and mild to severe and causing death. Host factors including age, sex, and comorbid conditions are key determinants of disease severity and progression. Aging itself is a prominent risk factor for severe disease and death from COVID-19. We hypothesize that age-related decline and dysregulation of immune function, i.e., immunosenescence and inflammaging play a major role in contributing to heightened vulnerability to severe COVID-19 outcomes in older adults. Much remains to be learned about the immune responses to SARS-CoV-2 infection. We need to begin partitioning all immunological outcome data by age to better understand disease heterogeneity and aging. Such knowledge is critical not only for understanding of COVID-19 pathogenesis but also for COVID-19 vaccine development.
Referências	CHEN, Y. et al. Aging in COVID-19: Vulnerability, immunity and intervention. Ageing research reviews , [Netherlands], v. 65, p. 101205, Jan. 1, 2021. Disponível em: https://doi.org/10.1016/j.arr.2020.101205.
Fonte	https://www.sciencedirect.com/science/article/pii/S1568163720303408?via%3Dihub



Título	COVID-19 diagnosis -A review of current methods
Autor(es)	Meral Yüce , Elif Filiztekin, Korin Gasia Özkaya
Resumo	A fast and accurate self-testing tool for COVID-19 diagnosis has become a prerequisite to comprehend the exact number of cases worldwide and to take medical and governmental actions accordingly. SARS-CoV-2 (formerly, 2019-nCoV) infection was first reported in Wuhan (China) in December 2019, and then it has rapidly spread around the world, causing ~14 million active cases with ~582,000 deaths as of July 2020. The diagnosis tools available so far have been based on a) viral gene detection, b) human antibody detection, and c) viral antigen detection, among which the viral gene detection by RT-PCR has been found as the most reliable technique. In this report, the current SARS-CoV-2 detection kits, exclusively the ones that were issued an "Emergency Use Authorization" from the U.S. Food and Drug Administration, were discussed. The key structural components of the virus were presented to provide the audience with an understanding of the scientific principles behind the testing tools. The methods that are still in the early research state were also reviewed in a subsection based on the reports available so far.
Referências	YÜCE, M.; FILIZTEKIN, E.; ÖZKAYA, K. G. COVID-19 diagnosis —A review of current methods. Biosensors & bioelectronics , [United Kingdom], v. 172, p. 112752, Jan. 15, 2021. Disponível em: https://doi.org/10.1016/j.bios.2020.112752.
Fonte	https://www.sciencedirect.com/science/article/abs/pii/S0956566320307405?via%3Dihub



Título	Recurrence of SARS-CoV-2 viral RNA in recovered COVID-19 patients: a narrative review
Autor(es)	Thi Loi Dao, Van Thuan Hoang, Philippe Gautret
Resumo	Many studies have shown that re-positive tests for SARS-CoV-2 by RT-PCR in recovered COVID-19 patients are very common. We aim to conduct this review to summarize the clinical and epidemiological characteristics of these patients and discuss the potential explanations for recurrences, the contagiousness of redetectable positive SARS-CoV-2 virus, and the management of COVID-19 patients after discharge from hospital. The proportion of re-positive tests in discharged COVID-19 patients varied from 2.4 to 69.2% and persisted from 1 to 38 days after discharge, depending on population size, age of patients, and type of specimens. Currently, several causes of re-positive tests for SARS-CoV-2 in recovered COVID-19 patients are suggested, including false-negative, false-positive RT-PCR tests; reactivation; and re-infection with SARS-CoV-2, but the mechanism leading to these re-positive cases is still unclear. The prevention of re-positive testing in discharged patients is a fundamental measure to control the spread of the pandemic. In order to reduce the percentage of false-negative tests prior to discharge, we recommend performing more than two tests, according to the standard sampling and microbiological assay protocol. In addition, specimens should be collected from multiple body parts if possible, to identify SARS-CoV-2 viral RNA before discharge. Further studies should be conducted to develop novel assays that target a crucial region of the RNA genome in order to improve its sensitivity and specificity.
Referências	DAO, T. L.; HOANG, V. T.; GAUTRET, P. Recurrence of SARS-CoV-2 viral RNA in recovered COVID-19 patients: a narrative review. Eur J Clin Microbiol Infect Dis., [Germany], v. 40, n. 1, p. 13–25, Jan. 2021. Disponível em: https://doi.org/10.1007/s10096-020-04088-z.
Fonte	https://link.springer.com/article/10.1007/s10096-020-04088-z



Título	Systematic review with meta-analysis of the accuracy of diagnostic tests for COVID-19
Autor(es)	Beatriz Böger, Mariana M Fachi, Raquel O Vilhena, Alexandre F Cobre, Fernanda s tonin, Roberto Pontarolo
Resumo	OBJECTIVE: To collate the evidence on the accuracy parameters of all available diagnostic methods for detecting SARS-CoV-2. METHODS: A systematic review with meta-analysis was performed. Searches were conducted in Pubmed and Scopus (April 2020). Studies reporting data on sensitivity or specificity of diagnostic tests for COVID-19 using any human biological sample were included. RESULTS: Sixteen studies were evaluated. Meta-analysis showed that computed tomography has high sensitivity (91.9% [89.8%-93.7%]), but low specificity (25.1% [21.0%-29.5%]). The combination of IgM and IgG antibodies demonstrated promising results for both parameters (84.5% [82.2%-86.6%]; 91.6% [86.0%-95.4%], respectively). For RT-PCR tests, rectal stools/swab, urine, and plasma were less sensitive while sputum (97.2% [90.3%-99.7%]) presented higher sensitivity for detecting the virus. CONCLUSIONS: RT-PCR remains the gold standard for the diagnosis of COVID-19 in sputum samples. However, the combination of different diagnostic tests is highly recommended to achieve adequate sensitivity and specificity.
Referências	BÖGER, B. <i>et al.</i> Systematic review with meta-analysis of the accuracy of diagnostic tests for COVID-19. Am J Infect Control. , [United States], v. 49, n. 1, p. 21–29, Jan. 2021. Disponível em: https://doi.org/10.1016/j.ajic.2020.07.011
Fonte	https://www.ajicjournal.org/article/S0196-6553(20)30693-3/fulltext



Título	COVID-19 risk, disparities and outcomes in patients with chronic liver disease in the United States
Autor(es)	QuanQiu Wanga , Pamela B Davisb , Rong Xua
Resumo	Scientific evidence is lacking regarding the risk of patients with chronic liver disease (CLD) for COVID-19, and how these risks are affected by age, gender and race.
Referências	WANG, Q.; DAVIS, P. B.; XU, R. COVID-19 risk, disparities and outcomes in patients with chronic liver disease in the United States. EClinicalMedicine , [Netherland], p. 100688, Dec. 22, 2020. Disponível em: https://doi.org/10.1016/j.eclinm.2020.100688.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2820%2930432-6



Título	Multiplex assays for the identification of serological signatures of SARS-CoV-2 infection: an antibody-based diagnostic and machine learning study
Autor(es)	Jason Rosado, Stéphane Pelleau, Charlotte Cockram, Sarah Hélène Merkling, Narimane Nekkab, Caroline Demeret, Annalisa Meola, Solen Kerneis, Benjamin Terrier, Samira Fafi-Kremer, Jerome de Seze, Timothée Bruel, François Dejardin, Stéphane Petres, Rhea Longley, Arnaud Fontanet, Marija Backovic, Ivo Mueller, Michael T White
Resumo	Infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) induces an antibody response targeting multiple antigens that changes over time. This study aims to take advantage of this complexity to develop more accurate serological diagnostics.
Referências	ROSADO, J. <i>et al.</i> Multiplex assays for the identification of serological signatures of SARS-CoV-2 infection: an antibody-based diagnostic and machine learning study. The Lancet Microbe , [United Kingdom.], p. S266652472030197X, Dec. 21, 2020. Disponível em: https://doi.org/10.1016/S2666-5247(20)30197-X.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2666-5247%2820%2930197-X



Título	Source of the COVID-19 pandemic: ecology and genetics of coronaviruses (Betacoronavirus: Coronaviridae) SARS-CoV, SARS-CoV-2 (subgenus Sarbecovirus), and MERS-CoV (subgenus Merbecovirus)
Autor(es)	Dmitry K. Lvov, Sergey V. Alkhovsky
Resumo	Since the early 2000s, three novel zooanthroponous coronaviruses (<i>Betacoronavirus</i>) have emerged. The first outbreak of infection (SARS) caused by SARS-CoV virus occurred in the fall of 2002 in China (Guangdong Province). A second outbreak (MERS) associated with the new MERS-CoV virus appeared in Saudi Arabia in autumn 2012. The third epidemic, which turned into a COVID-19 pandemic caused by SARS-CoV-2 virus, emerged in China (Hubei Province) in the autumn 2019. This review focuses on ecological and genetic aspects that lead to the emergence of new human zoanthroponous coronaviruses. The main mechanism of adaptation of zoonotic betacoronaviruses to humans is to changes in the receptor-binding domain of surface protein (S), as a result of which it gains the ability to bind human cellular receptors of epithelial cells in respiratory and gastrointestinal tract. This process is caused by the high genetic diversity and variability combined with frequent recombination, during virus circulation in their natural reservoir - bats (<i>Microchiroptera, Chiroptera</i>). Appearance of SARS-CoV, SARS-CoV-2 (subgenus <i>Sarbecovirus</i>), and MERS (subgenus Merbecovirus) viruses is a result of evolutionary events occurring in bat populations with further transfer of viruses to the human directly or through the intermediate vertebrate hosts, ecologically connected with bats.
Referências	LVOV, D. K.; ALKHOVSKY, S. V. Source of the COVID-19 pandemic: ecology and genetics of coronaviruses (Betacoronavirus: Coronaviridae) SARS-CoV, SARS-CoV-2 (subgenus Sarbecovirus), and MERS-CoV (subgenus Merbecovirus). Vopr. Virusol. , Russian, n. 2, v. 65, p. 62-70, 2020. Disponível em: https://doi.org/10.36233/0507-4088-2020-65-2-62-70.
Fonte	https://virusjour.elpub.ru/jour/article/view/280#



Título	Comparison of the characteristics, morbidity, and mortality of COVID-19 and seasonal influenza: a nationwide, population-based retrospective cohort study
Autor(es)	Lionel Piroth, Jonathan Cottenet, Anne-Sophie Mariet, Philippe Bonniaud, Mathieu Blot, Pascale Tubert-Bitter, Catherine Quantin
Resumo	To date, influenza epidemics have been considered suitable for use as a model for the COVID-19 epidemic, given that they are respiratory diseases with similar modes of transmission. However, data directly comparing the two diseases are scarce.
Referências	PIROTH, L. <i>et al.</i> Comparison of the characteristics, morbidity, and mortality of COVID-19 and seasonal influenza: a nationwide, population-based retrospective cohort study. The Lancet. Respiratory medicine , [Netherlands], p. S2213260020305270, Dec. 17, 2020. Disponível em: https://doi.org/10.1016/S2213-2600(20)30527-0.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930527-0



Título	Thromboembolism risk of COVID-19 is high and associated with a higher risk of mortality: A systematic review and meta-analysis
Autor(es)	Mahmoud B. Malas, Isaac N. Naazie, Nadin Elsayed, Asma Mathlouthi, Rebecca Marmor, Bryan Clary
Resumo	Studies have suggested that there is increased risk of thromboembolism (TE) associated with coronavirus disease 2019 (COVID-19). However, overall arterial and venous TE rates of COVID-19 and effect of TE on COVID-19 mortality is unknown.
Referências	MALAS, M. B. <i>et al</i> . Thromboembolism risk of COVID-19 is high and associated with a higher risk of mortality: A systematic review and meta-analysis. EClinicalMedicine , [Netherland], v. 29–30, p. 100639, Nov. 20, 2020. Disponível em: https://doi.org/10.1016/j.eclinm.2020.100639.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-5370%2820%2930383-7



Título	Development and dissemination of infectious disease dynamic transmission models during the COVID-19 pandemic: what can we learn from other pathogens and how can we move forward?
Autor(es)	Alexander D Becker, Kyra H Grantz, Sonia T Hegde, Sophie Bérubé, Derek A T Cummings, Amy Wesolowski
Resumo	The current COVID-19 pandemic has resulted in the unprecedented development and integration of infectious disease dynamic transmission models into policy making and public health practice. Models offer a systematic way to investigate transmission dynamics and produce short-term and long-term predictions that explicitly integrate assumptions about biological, behavioural, and epidemiological processes that affect disease transmission, burden, and surveillance. Models have been valuable tools during the COVID-19 pandemic and other infectious disease outbreaks, able to generate possible trajectories of disease burden, evaluate the effectiveness of intervention strategies, and estimate key transmission variables. Particularly given the rapid pace of model development, evaluation, and integration with decision making in emergency situations, it is necessary to understand the benefits and pitfalls of transmission models. We review and highlight key aspects of the history of infectious disease dynamic models, the role of rigorous testing and evaluation, the integration with data, and the successful application of models to guide public health. Rather than being an expansive history of infectious disease models, this Review focuses on how the integration of modelling can continue to be advanced through policy and practice in appropriate and conscientious ways to support the current pandemic response.
Referências	BECKER, A. D. <i>et al.</i> Development and dissemination of infectious disease dynamic transmission models during the COVID-19 pandemic: what can we learn from other pathogens and how can we move forward? The Lancet Digital Health , [United Kingdom], p. S2589750020302685, Dec. 7, 2020. Disponível em: https://doi.org/10.1016/S2589-7500(20)30268-5.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2589-7500%2820%2930268-5



Título	A clade of SARS-CoV-2 viruses associated with lower viral loads in patient upper airways
Autor(es)	Ramon Lorenzo-Redondo, Hannah H. Nam, Scott C. Roberts, Lacy M. Simons, Lawrence J. Jennings, Chao Qi2, Chad J. Achenbach, Alan R. Hauser, Michael G. Ison, Judd F. Hultquist, Egon A. Ozer
Resumo	Background: The rapid spread of SARS-CoV-2, the causative agent of Coronavirus disease 2019 (COVID-19), has been accompanied by the emergence of distinct viral clades, though their clinical significance remains unclear. Here, we aimed to investigate the phylogenetic characteristics of SARS-CoV-2 infections in Chicago, Illinois, and assess their relationship to clinical parameters.
Referências	LORENZO-REDONDO, R. <i>et al.</i> A clade of SARS-CoV-2 viruses associated with lower viral loads in patient upper airways. EBioMedicine , [Netherlands], v. 62, p. 103112, Nov. 11, 2020. Disponível em: https://doi.org/10.1016/j.ebiom.2020.103112.
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-3964%2820%2930488-6



Título	Wastewater-Based Epidemiology (WBE) and Viral Detection in Polluted Surface Water: A Valuable Tool for COVID-19 Surveillance—A Brief Review
Autor(es)	Maria de Lourdes Aguiar-Oliveira, Aline Campos, Aline R. Matos, Caroline Rigotto, Adriana Sotero-Martins, Paulo F. P. Teixeira, Marilda M. Siqueira
Resumo	SARS-COV-2 is the causative agent of the current COVID-19 pandemic. Disease clinical manifestations range from asymptomatic to severe multiple organ damage. SARS-CoV-2 uses ACE2 as a cellular receptor, which is abundantly expressed in the small intestine, allowing viral replication in the gastrointestinal tract. Viral RNA has been detected in the stool of COVID-19 patients and viable viruses had been isolated in some of these samples. Thus, a putative role of SARS-CoV-2 fecal-oral transmission has been argued. SARS-CoV-2 is shed in human excreta and further disposed in the sewerage or in the environment, in poor basic sanitation settings. Wastewater-based epidemiology (WBE) is a valuable population level approach for monitoring viral pathogens and has been successfully used in di_erent contexts. This review summarizes the current global experience on SARS-CoV-2 WBE in distinct continents and viral detection in polluted surface water. The advantages and concerns of this strategy for SARS-CoV-2 surveillance are discussed. Outcomes suggest that WBE is a valuable early warning alert and a helpful complementary surveillance tool to subside public health response, to tailor containment and mitigation measures and to determine target populations for testing. In poor sanitation settings, contaminated rivers could be alternatively used as a source for environmental surveillance.
Referências	AGUIAR-OLIVEIRA, M. de L. <i>et al.</i> Wastewater-Based Epidemiology (WBE) and Viral Detection in Polluted Surface Water: A Valuable Tool for COVID-19 Surveillance—A Brief Review. Int. J. Environ. Res. Public Health , [Basel], v. 17, n. 24, p. 9251, Nov. 10, 2020. Disponível em: https://doi.org/10.3390/ijerph17249251.
Fonte	https://www.mdpi.com/1660-4601/17/24/9251



Título	Extracorporeal membrane oxygenation for severe acute respiratory distress syndrome associated with COVID-19: a retrospective cohort study
Autor(es)	Matthieu Schmidt, David Hajage, Guillaume Lebreton, Antoine Monsel, Guillaume Voiriot, David Levy, Elodie Baron, Alexandra Beurton, Juliette Chommeloux, Paris Meng, Paris Meng, Safaa Nemlaghi, Pierre Bay, Pascal Leprince, Alexandre Demoule, Bertrand Guidet, Jean Michel Constantin, Muriel Fartoukh, Martin Dres, Alain Combes
Resumo	Patients with COVID-19 who develop severe acute respiratory distress syndrome (ARDS) can have symptoms that rapidly evolve to profound hypoxaemia and death. The efficacy of extracorporeal membrane oxygenation (ECMO) for patients with severe ARDS in the context of COVID-19 is unclear. We aimed to establish the clinical characteristics and outcomes of patients with respiratory failure and COVID-19 treated with ECMO.
Referências	SCHMIDT, M. <i>et al.</i> Extracorporeal membrane oxygenation for severe acute respiratory distress syndrome associated with COVID-19: a retrospective cohort study. The Lancet. Respiratory medicine , [Netherlands], v. 8, n. 11, p. 1121–1131, Nov. 1, 2020. Disponível em: https://doi.org/10.1016/S2213-2600(20)30328-3.
Fonte	https://www.sciencedirect.com/science/article/pii/S2213260020303283#!



Título	Fragmented health systems in COVID-19: rectifying the misalignment between global health security and universal health coverage
Autor(es)	Arush Lal, Ngozi A Erondu, David L Heymann, Githinji Gitahi, Robert Yates
Resumo	The COVID-19 pandemic has placed enormous strain on countries around the world, exposing long-standing gaps in public health and exacerbating chronic inequities. Although research and analyses have attempted to draw important lessons on how to strengthen pandemic preparedness and response, few have examined the effect that fragmented governance for health has had on effectively mitigating the crisis. By assessing the ability of health systems to manage COVID-19 from the perspective of two key approaches to global health policy—global health security and universal health coverage—important lessons can be drawn for how to align varied priorities and objectives in strengthening health systems. This Health Policy paper compares three types of health systems (ie, with stronger investments in global health security, stronger investments in universal health coverage, and integrated investments in global health security and universal health coverage) in their response to the ongoing COVID-19 pandemic and synthesises four essential recommendations (ie, integration, financing, resilience, and equity) to reimagine governance, policies, and investments for better health towards a more sustainable future.
Referências	LAL, A. <i>et al.</i> Fragmented health systems in COVID-19: rectifying the misalignment between global health security and universal health coverage. The Lancet , [United Kingdom], p. S0140673620322285, Dec. 1, 2020. Disponível em: https://doi.org/10.1016/S0140-6736(20)32228-5.
Fonte	https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932228-5



Título	Outlier-SMOTE: A refined oversampling technique for improved detection of COVID-19
Autor(es)	Venkata Pavan Kumar Turlapati, Manas Ranjan Prusty
Resumo	Almost every dataset these days continually faces the predicament of class imbalance. It is difficult to train classifiers on these types of data as they become biased towards a set of classes, hence leading to reduction in classifier performance. This setback is often tackled by the use of various over-sampling or undersampling algorithms. But, the method which stood out of all the numerous algorithms was the Synthetic Minority Oversampling Technique (SMOTE). SMOTE generates synthetic samples of the minority class by oversampling each data-point by considering linear combinations of existing minority class neighbors. Each minority data sample generates an equal number of synthetic data. As the world is suffering from the plight of COVID-19 pandemic, the authors applied the idea to help boost the classifying performance whilst detecting this deadly virus. This paper presents a modified version of SMOTE known as Outlier-SMOTE wherein each data-point is oversampled with respect to its distance from other data-points. The data-point which is farther than the other data-points is given greater importance and is oversampled more than its counterparts. Outlier-SMOTE reduces the chances of overlapping of minority data samples which often occurs in the traditional SMOTE algorithm. This method is tested on five benchmark datasets and is eventually tested on a COVID-19 dataset. F-measure, Recall and Precision are used as principle metrics to evaluate the performance of the classifier as is the case for any class imbalanced data set. The proposed algorithm performs considerably better than the traditional SMOTE algorithm for the considered datasets.
Referências	TURLAPATI, V. P. K.; PRUSTY, M. R. Outlier-SMOTE: a refined oversampling technique for improved detection of COVID-19. Intelligence-Based Medicine, [Netherlands], v. 1-2, p. 100023, Nov. 16, 2020. Disponível em: https://doi.org/10.1016/j.ibmed.2020.100023.
Fonte	https://linkinghub.elsevier.com/retrieve/pii/S2666521220300235



Título	Zero-shot learning and its applications from autonomous vehicles to COVID-19 diagnosis: A review
Autor(es)	Mahdi Rezaei, Mahsa Shahidi
Resumo	The challenge of learning a new concept, object, or a new medical disease recognition without receiving any examples beforehand is called Zero-Shot Learning (ZSL). One of the major issues in deep learning based methodologies such as in Medical Imaging and other real-world applications is the requirement of large annotated datasets prepared by clinicians or experts to train the model. ZSL is known for having minimal human intervention by relying only on previously known or trained concepts plus currently existing auxiliary information. This is ever-growing research for the cases where we have very limited or no annotated datasets available and the detection / recognition system has human-like characteristics in learning new concepts. This makes the ZSL applicable in many real-world scenarios, from unknown object detection in autonomous vehicles to medical imaging and unforeseen diseases such as COVID-19 Chest X-Ray (CXR) based diagnosis. In this review paper, we introduce a novel and broaden solution called Few / one-shot learning, and present the definition of the ZSL problem as an extreme case of the few-shot learning. We review over fundamentals and the challenging steps of Zero-Shot Learning, including state-of-the-art categories of solutions, as well as our recommended solution, motivations behind each approach, their advantages over each category to guide both clinicians and AI researchers to proceed with the best techniques and practices based on their applications. Inspired from different settings and extensions, we then review through different datasets inducing medical and non-medical images, the variety of splits, and the evaluation protocols proposed so far. Finally, we discuss the recent applications and future directions of ZSL. We aim to convey a useful intuition through this paper towards the goal of handling complex learning tasks more similar to the way humans learn. We mainly focus on two applications in the current modern yet challenging era: coping with an early and fast diagnosis of COVID-1
Referências	REZAEI, M.; SHAHIDI, M. Zero-shot learning and its applications from autonomous vehicles to COVID-19 diagnosis: a review. Intelligence-Based Medicine , [Netherlands], v. 3–4, p. 100005, 2020. Disponível em: https://doi.org/10.1016/j.ibmed.2020.100005.
Fonte	https://linkinghub.elsevier.com/retrieve/pii/S2666521220300053



Título	The granting of emergency use designation to COVID-19 candidate vaccines: implications for COVID-19 vaccine trials
Autor(es)	Jerome Amir Singh, Ross E G Upshur
Resumo	An efficacious COVID-19 vaccine is currently the world's leading research priority. Several nations have indicated that if there is a compelling case for use of a vaccine before it is licensed, they would be prepared to authorise its emergency use or conditional approval on public health grounds. As of Dec 1, 2020, several developers of leading COVID-19 candidate vaccines have indicated that they have applied, or intend to apply, for emergency authorisation for their vaccines. Should candidate vaccines attain emergency use designation and be programmatically deployed before their phase 3 trials conclude, such a strategy could have far reaching consequences for COVID-19 vaccine research and the effective control of the COVID-19 pandemic. These issues merit careful consideration.
Referências	SINGH, J. A.; UPSHUR, R. E. G. The granting of emergency use designation to COVID-19 candidate vaccines: implications for COVID-19 vaccine trials. Lancet Infect Dis, [United Kingdom], p. S1473309920309233, Dec. 8, 2020. Disponível em: https://doi.org/10.1016/S1473-3099(20)30923-3.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930923-3



Título	SARS-CoV-2 infection and transmission in educational settings: a prospective, cross-sectional analysis of infection clusters and outbreaks in England
Autor(es)	Sharif A Ismail, Vanessa Saliba, Jamie Lopez Bernal, Mary E Ramsay, Shamez N Ladhani
Resumo	Understanding severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection and transmission in educational settings is crucial for ensuring the safety of staff and children during the COVID-19 pandemic. We estimated the rate of SARS-CoV-2 infection and outbreaks among staff and students in educational settings during the summer half-term (June–July, 2020) in England.
Referências	ISMAIL, S. A. <i>et al.</i> SARS-CoV-2 infection and transmission in educational settings: a prospective, cross-sectional analysis of infection clusters and outbreaks in England. Lancet Infect Dis , [United Kingdom], p. S1473309920308823, Dec. 8, 2020. Disponível em: https://doi.org/10.1016/S1473-3099(20)30882-3.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930882-3



Título	Towards an accurate and systematic characterisation of persistently asymptomatic infection with SARS-CoV-2
Autor(es)	Eric A Meyerowitz, Aaron Richterman, Isaac I Bogoch, Nicola Low, Muge Cevik
Resumo	People with persistently asymptomatic severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection experience no symptoms throughout the course of infection, and pre-symptomatic individuals become infectious days before they report symptoms. Transmission of SARS-CoV-2 from individuals without symptoms contributes to pandemic spread, but the extent of transmission from persistently asymptomatic individuals remains unknown. We describe three methodological issues that hinder attempts to estimate this proportion. First, incomplete symptom assessment probably overestimates the asymptomatic fraction. Second, studies with inadequate follow-up misclassify pre-symptomatic individuals. Third, serological studies might identify people with previously unrecognised infection, but reliance on poorly defined antibody responses and retrospective symptom assessment might result in misclassification. We provide recommendations regarding definitions, detection, documentation, and follow-up to improve the identification and evaluation of people with persistently asymptomatic SARS-CoV-2 infection and their contacts. Accurate characterisation of the persistently asymptomatic fraction of infected individuals might shed light on COVID-19 pathogenesis and transmission dynamics, and inform public health responses.
Referências	MEYEROWITZ, E. A. <i>et al.</i> Towards an accurate and systematic characterisation of persistently asymptomatic infection with SARS-CoV-2. Lancet Infect Dis , [United Kingdom], p. S1473309920308379, Dec. 7, 2020. Disponível em: https://doi.org/10.1016/S1473-3099(20)30837-9.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930837-9



Título	Remdesivir for the Treatment of Covid-19 — Final Report
Autor(es)	J.H. Beigel, K.M. Tomashek, L.E. Dodd, A.K. Mehta, B.S. Zingman, A.C. Kalil, E. Hohmann, H.Y. Chu, A. Luetkemeyer, S. Kline, D. Lopez de Castilla, R.W. Finberg, K. Dierberg, V. Tapson, L. Hsieh, T.F. Patterson, R. Paredes, D.A. Sweeney, W.R. Short, G. Touloumi, D.C. Lye, N. Ohmagari, M. Oh, G.M. Ruiz-Palacios, T. Benfield, G. Fätkenheuer, M.G. Kortepeter, R.L. Atmar, C.B. Creech, J. Lundgren, A.G. Babiker, S. Pett, J.D. Neaton, T.H. Burgess, T. Bonnett, M. Green, M. Makowski, A. Osinusi, S. Nayak, and H.C. Lane, for the ACTT-1 Study Group Members.
Resumo	Although several therapeutic agents have been evaluated for the treatment of coronavirus disease 2019 (Covid-19), no antiviral agents have yet been shown to be efficacious.
Referências	BEIGEL, J. H. <i>et al.</i> Remdesivir for the Treatment of Covid-19 — Final Report. N Engl J Med , USA, v. 383, n. 19, p. 1813–1826, Nov. 5, 2020. Disponível em: https://doi.org/10.1056/NEJMoa2007764.
Fonte	https://www.nejm.org/doi/pdf/10.1056/NEJMoa2007764?articleTools=true



Título	Role of Genetic Variants and Gene Expression in the Susceptibility and Severity of COVID-19
Autor(es)	Sarita Choudhary, Karli Sreenivasulu, Prasenjit Mitra , Sanjeev Misra , Praveen Sharma.
Resumo	Since its first report in December 2019, coronavirus disease 2019 (COVID-19), caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), has rapidly emerged as a pandemic affecting nearly all countries worldwide. As the COVID-19 pandemic progresses, the need to identify genetic risk factors for susceptibility to this serious illness has emerged. Host genetic factors, along with other risk factors may help determine susceptibility to respiratory tract infections. It is hypothesized that the ACE2 gene, encoding angiotensin-converting enzyme 2 (ACE2), is a genetic risk factor for SARS-CoV-2 infection and is required by the virus to enter cells. Together with ACE2, transmembrane protease serine 2 (TMPRSS2) and dipeptidyl peptidase-4 (DPP4) also play an important role in disease severity. Evaluating the role of genetic variants in determining the direction of respiratory infections will help identify potential drug target candidates for further study in COVID-19 patients. We have summarized the latest reports demonstrating that ACE2 variants, their expression, and epigenetic factors may influence an individual's susceptibility to SARS-CoV-2 infection and disease outcome.
Referências	CHOUDHARY, S. <i>et al.</i> Role of Genetic Variants and Gene Expression in the Susceptibility and Severity of COVID-19. Ann. lab. medicine , [Korea, Republic of], v. 41, n. 2, p. 129–138, 2021. Disponível em: https://doi.org/10.3343/alm.2021.41.2.129.
Fonte	https://www.annlabmed.org/journal/view.html?uid=3201&vmd=Full



Título	Defensin 5 for prevention of SARS-CoV-2 invasion and Covid-19 disease
Autor(es)	Yaron Niv
Resumo	Corona virus disease 2019 (Covid-19), a pandemia emerged recently, caused by severe acute respiratory syndrome corona virus 2 (SARS-CoV-2). The receptor for corona virus and influenza A is the mucosal cell membrane protein angiotensin converting enzyme 2 (ACE2), which is abundant on the membrane of alveolar cells and enterocytes. Viral spike protein 1 (S1) is the ligand, with an affinity of 14.7 nM to the receptor. The main port of entry for the virus is the upper respiratory tract, and the diagnosis is usually by PCR of the viral RNA with nasal and pharyngeal swab test. Human defensin 5 (HDEF5) is a protein encoded by the DEFA gene, secreted by Paneth cells in the small intestine and by granules of neutrophils. It has an affinity of 39.3 nM to ACE2, much higher than that of the corona S1. HDEF5 may also attach to glycosylated Corona S1 protein, make its efficiency even better. The issues to be investigated are the affinity of HDEF5 to S1 protein, the ability of recombinant HDEF5 function in attaching both ACE2 and S1, and the feasibility to perform aerosol spray of this protein. In addition, safety and efficiency should be studied in phases I, II and II clinical protocols. Thus, an aerosol spray of HDEF5 given through the nose and throat, once to several times a day, may be a very efficient approach to prevent infection with SARA-CoV-2 as well as influenza A.
Referências	NIV, Y. Defensin 5 for prevention of SARS-CoV-2 invasion and Covid-19 disease. Medical Hypotheses , [United Kingdom], v. 143, p. 110244, Oct. 2020. Disponível em: https://doi.org/10.1016/j.mehy.2020.110244
Fonte	https://www.sciencedirect.com/science/article/pii/S0306987720326761



Título	Coronavirus disease 2019 (COVID-19): role of chest CT in diagnosis and management
Autor(es)	Yan Li, Liming Xia
Resumo	The objective of our study was to determine the misdiagnosis rate of radiologists for coronavirus disease 2019 (COVID-19) and evaluate the performance of chest CT in the diagnosis and management of COVID-19. The CT features of COVID-19 are reported and compared with the CT features of other viruses to familiarize radiologists with possible CT patterns.
Referências	LI, Y.; XIA, L. Coronavirus disease 2019 (COVID-19): Role of chest CT in diagnosis and management. American Journal of Roentgenology , [USA], v. 214, n. 6, p. 1280–1286, 2020. Disponível em: https://doi.org/10.2214/AJR.20.22954.
Fonte	https://www.ajronline.org/doi/pdf/10.2214/AJR.20.22954



Título	Understanding of COVID-19 based on current evidence
Autor(es)	Pengfei Sun, Xiaosheng Lu , Chao Xu , Wenjuan Sun, , Bo Pan
Resumo	Since December 2019, a series of unexplained pneumonia cases have been reported in Wuhan, China. On 12 January 2020, the World Health Organization (WHO) temporarily named this new virus as the 2019 novel coronavirus (2019-nCoV). On 11 February 2020, the WHO officially named the disease caused by the 2019-nCoV as coronavirus disease (COVID-19). The COVID-19 epidemic is spreading all over the world, especially in China. Based on the published evidence, we systematically discuss the characteristics of COVID-19 in the hope of providing a reference for future studies and help for the prevention and control of the COVID-19 epidemic.
Referências	SUN, P. et al. Understanding of COVID-19 based on current evidence. J Med Virol. , [USA], v. 92, n. 6, p. 548–551, 2020. Disponível em: https://doi.org/10.1002/jmv.25722.
Fonte	https://onlinelibrary.wiley.com/doi/epdf/10.1002/jmv.25722



Título	Genomic evidence for reinfection with SARS-CoV-2: a case study
Autor(es)	Richard L Tillett, Joel R Sevinsky, Paul D Hartley, Heather Kerwin, Natalie Crawford, Andrew Gorzalski, Chris Laverdure, Subhash C Verma, Cyprian C Rossetto, David Jackson, Megan J Farrell, Stephanie Van Hooser, Mark Pandori
Resumo	The degree of protective immunity conferred by infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is currently unknown. As such, the possibility of reinfection with SARS-CoV-2 is not well understood. We describe an investigation of two instances of SARS-CoV-2 infection in the same individual.
Referências	TILLETT, R. L. et al. Genomic evidence for reinfection with SARS-CoV-2: a case study. Lancet Infect Dis., [United Kingdom], p. S1473309920307647, Oct. 12, 2020. Disponível em: https://doi.org/10.1016/S1473-3099(20)30764-7.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930764-7



Título	Are SARS-CoV-2 reinfection and Covid-19 recurrence possible? a case report from Brazil
Autor(es)	Lívia Pimenta Bonifácio, Ana Paula Sulino Pereira, Daniel Cardoso de Almeida e Araújo,, Viviane da Mata Pasti Balbão,, Benedito Antônio Lopes da Fonseca,, Afonso Dinis Costa Passos, Fernando Bellissimo-Rodrigues
Resumo	With the large number of individuals infected and recovered from Covid-19, there is intense discussion about the quality and duration of the immunity elicited by SARS-CoV-2 infection, including the possibility of disease recurrence. Here we report a case with strong clinical, epidemiological and laboratorial evidence of, not only reinfection by SARS-CoV-2, but also clinical recurrence of Covid-19.
Referências	BONIFÁCIO, L. P. et al. Are SARS-CoV-2 reinfection and Covid-19 recurrence possible? a case report from Brazil. Rev. Soc. Bras. Med. Trop., Uberaba, v. 53, p. e20200619, Sept. 18, 2020. Disponível em: https://doi.org/10.1590/0037-8682-0619-2020.
Fonte	https://www.scielo.br/pdf/rsbmt/v53/1678-9849-rsbmt-53-e20200619.pdf



Título	Newcastle disease virus (NDV) expressing the spike protein of SARS-CoV-2 as a live virus vaccine candidate
Autor(ES)	Weina Suna , Sarah R. Leistg , Stephen McCroskerya , Yonghong Liua , Stefan Slamaniga , Justine Olivaa , Fatima Amanata,b , Alexandra Sch€ aferg , Kenneth H. Dinnon IIIg , Adolfo García-Sastrea,c,d,e , Florian Krammera , Ralph S. Baricf,g , Peter Palesea,c.
Resumo	Due to the lack of protective immunity of humans towards the newly emerged SARS-CoV-2, this virus has caused a massive pandemic across the world resulting in hundreds of thousands of deaths. Thus, a vaccine is urgently needed to contain the spread of the vírus.
Referências	SUN, W. <i>et al.</i> Newcastle disease virus (NDV) expressing the spike protein of SARS-CoV-2 as a live virus vaccine candidate. EBioMedicine , [Netherlands], v. 62, p. 103132, 2020. Disponível em: https://doi.org/10.1016/j.ebiom.2020 .
Fonte	https://www.thelancet.com/action/showPdf?pii=S2352-3964%2820%2930508-9



Título	Clinical recurrences of COVID-19 symptoms after recovery: viral relapse, reinfection or inflammatory rebound?
Autor(es)	Marie Gousseff, Pauline Penot, Laure Gallay, Dominique Batisse, Nicolas Benech, Kevin bouiller, Rocco Collarino, Anne Conrad, Dorsaf Slama, Cédric Joseph, Adrien Lemaignen, François-Xavier Lescure, Bruno Levy, Matthieu Mahevas, Bruno Pozzetto, Nicolas Vignier, Benjamin Wyplosz, Dominique Salmon, François Goehringer, Elisabeth Botelho-Nevers
Resumo	For the first 3 months of COVID-19 pandemic, COVID-19 was expected to be an immunizing non-relapsing disease. We report a national case series of 11 virologically-confirmed COVID-19 patients having experienced a second clinically- and virologically-confirmed acute COVID-19 episode. According to the clinical history, we discuss either re-infection or reactivation hypothesis. Larger studies including further virological, immunological and epidemiologic data are needed to understand the mechanisms of these recurrences.
Referências	GOUSSEFF, M. <i>et al.</i> Clinical recurrences of COVID-19 symptoms after recovery: Viral relapse, reinfection or inflammatory rebound? The Journal of Infection , Amsterdam, v. 81, n. 5, p. 816–846, 2020. Disponível em: https://doi.org/10.1016/j.jinf.2020.06.073.
Fonte	https://pubmed.ncbi.nlm.nih.gov/32619697/



Título	On the potential role of exosomes in the COVID-19 reinfection/reactivation opportunity
Autor(es)	Fatma Elrashdy , Abdullah A Aljaddawi , Elrashdy M Redwan , Vladimir N Uversky
Resumo	We propose here that one of the potential mechanisms for the relapse of the COVID-19 infection could be a cellular transport pathway associated with the release of the SARS-CoV-2-loaded exosomes and other extracellular vesicles. It is possible that this "Trojan horse" strategy represents possible explanation for the re-appearance of the viral RNA in the recovered COVID-19 patients 7-14 day post discharge, suggesting that viral material was hidden within such exosomes or extracellular vesicles during this "silence" time period and then started to re-spread again.
Referências	ELRASHDY, F. <i>et al.</i> On the potential role of exosomes in the COVID-19 reinfection/reactivation opportunity. Journal of Biomolecular Structure & Dynamics , United Kingdom, p. 1–12, 2020. Disponível em: https://doi.org/10.1080/07391102.2020.1790426.
Fonte	https://doi.org/10.1080/07391102.2020.1790426



Título	COVID-19 Reinfection: myth or truth?
Autor(es)	Sayak Roy
Resumo	The novel coronavirus disease (COVID-19) has posed a large problem to this world and has exposed the skeleton of healthcare system all over. There have been reports of patients getting reinfected with COVID-19 as they tested positive for the virus again after discharge. We try to address the issue of this reinfection and want to clarify whether this entity actually exists or is it just a myth.
Referências	ROY, S. COVID-19 Reinfection: myth or truth? SN Compr. Clin. Med , Switzerland, n. 2, p. 710–713, 2020. Disponível em: https://doi.org/10.1007/s42399-020-00335-8.
Fonte	https://pubmed.ncbi.nlm.nih.gov/32838134/



Título	The SARS-CoV-2 outbreak: what we know
Autor(es)	Di Wu, Tiantian Wu, Qun Liu, Zhicong Yang
Resumo	There is a current worldwide outbreak of the novel coronavirus Covid-19 (coronavirus disease 2019; the pathogen called SARS-CoV-2; previously 2019-nCoV), which originated from Wuhan in China and has now spread to 6 continents including 66 countries, as of 24:00 on March 2, 2020. Governments are under increased pressure to stop the outbreak from spiraling into a global health emergency. At this stage, preparedness, transparency, and sharing of information are crucial to risk assessments and beginning outbreak control activities. This information should include reports from outbreak site and from laboratories supporting the investigation. This paper aggregates and consolidates the epidemiology, clinical manifestations, diagnosis, treatments and preventions of this new type of coronavirus.
Referências	WU, D. et al. The SARS-CoV-2 outbreak: what we know. Int J Infect Dis., Netherlands, v. 94, p. 44–48, May 1, 2020. Disponível em: https://doi.org/10.1016/j.ijid.2020.03.004 .
Fonte	https://pubmed.ncbi.nlm.nih.gov/32171952/



Título	Molecular basis of pathogenesis of coronaviruses: a comparative genomics approach to planetary health to prevent zoonotic outbreaks in the 21st century
Autor(es)	Purva Asrani, Gulam Mustafa Hasan, Sukhwinder Singh Sohal, Md. Imtaiyaz Hassan
Resumo	In the first quarter of the 21st century, we are already facing the third emergence of a coronavirus outbreak, the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) responsible for the coronavirus disease 2019 (COVID-19) pandemic. Comparative genomics can inform a deeper understanding of the pathogenesis of COVID-19. Previous strains of coronavirus, SARS-CoV, and Middle-East respiratory syndrome-coronavirus (MERS-CoV), have been known to cause acute lung injuries in humans. SARS-CoV-2 shares genetic similarity with SARS-CoV with some modification in the S protein leading to their enhanced binding affinity toward the angiotensin-converting enzyme 2 (ACE2) receptors of human lung cells. This expert review examines the features of all three coronaviruses through a conceptual lens of comparative genomics. In particular, the life cycle of SARS-CoV-2 that enables its survival within the host is highlighted. Susceptibility of humans to coronavirus outbreaks in the 21st century calls for comparisons of the transmission history, hosts, reservoirs, and fatality rates of these viruses so that evidence-based and effective planetary health interventions can be devised to prevent future zoonotic outbreaks. Comparative genomics offers new insights on putative and novel viral targets with an eye to both therapeutic innovation and prevention. We conclude the expert review by (1) articulating the lessons learned so far, whereas the research is still being actively sought after in the field, and (2) the challenges and prospects in deciphering the linkages among multiomics biological variability and COVID-19 pathogenesis.
Referências	ASRANI, P. et al. Molecular Basis of Pathogenesis of Coronaviruses: A Comparative Genomics Approach to Planetary Health to Prevent Zoonotic Outbreaks in the 21st Century. OMICS : A Journal of Integrative Biology, India, v. 24, n. 11, p. 634–644, Nov. 4, 2020. Disponível em: https://doi.org/10.1089/omi.2020.0131.
Fonte	https://doi.org/10.1089/omi.2020.0131



Título	Safety, tolerability, and immunogenicity of an inactivated SARS-CoV-2 vaccine in healthy adults aged 18–59 years: a randomised, double-blind, placebo-controlled, phase 1/2 clinical trial
Autor(es)	Yanjun Zhang, Gang Zeng, Hongxing Pan, Changgui Li, Yaling Hu, Kai Chu, Weixiao Han, Zhen Chen, Rong Tang, Weidong Yin, Xin Chen, Yuansheng Hu, Xiaoyong Liu, Congbing Jiang, Jingxin Li, Minnan Yang, Yan Song, Xiangxi Wang, Qiang Gao [†] , Fengcai Zhu
Resumo	Background With the unprecedented morbidity and mortality associated with the COVID-19 pandemic, a vaccine against COVID-19 is urgently needed. We investigated CoronaVac (Sinovac Life Sciences, Beijing, China), an inactivated vaccine candidate against COVID-19, containing inactivated severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), for its safety, tolerability and immunogenicity.
Referências	ZHANG, Y. <i>et al.</i> Safety, tolerability, and immunogenicity of an inactivated SARS-CoV-2 vaccine in healthy adults aged 18–59 years: a randomised, double-blind, placebo-controlled, phase 1/2 clinical trial. Lancet Infect Dis. , [China?], p. S1473309920308434, Nov. 17, 2020. Disponível em: https://doi.org/10.1016/S1473-3099(20)30843-4.
Fonte	https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930843-4



Título	SARS-CoV-2 seroprevalence and transmission risk factors among high-risk close contacts: a retrospective cohort study
Autor(es)	Oon Tek Ng, Kalisvar Marimuthu, Vanessa Koh, Junxiong Pang, Kyaw Zaw Linn, Jie Sun, Liang De Wang, Wan Ni Chia, Charles Tiu, Monica Chan, Li Min Ling, Shawn Vasoo, Mohammad Yazid Abdad, Po Ying Chia, Tau Hong Lee, Ray Junhao Lin, Sapna P Sadarangani, Mark I-Cheng Chen, Zubaidah Said, Lalitha Kurupatham, Rachael Pung, Lin-Fa Wang, Alex R Cook, Yee-Sin Leo, Vernon JM Lee.
Resumo	The proportion of asymptomatic carriers and transmission risk factors of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) among household and non-household contacts remains unclear. In Singapore, extensive contact tracing by the Ministry of Health for every diagnosed COVID-19 case, and legally enforced quarantine and intensive health surveillance of close contacts provided a rare opportunity to determine asymptomatic attack rates and SARS-CoV-2 transmission risk factors among community close contacts of patients with COVID-19.
Referências	NG, O. T. <i>et al.</i> SARS-CoV-2 seroprevalence and transmission risk factors among high-risk close contacts: a retrospective cohort study. Lancet Infect Dis. , Singapore, p. S1473309920308331, Nov. 2, 2020. Disponível em: https://doi.org/10.1016/S1473-3099(20)30833-1.
Fonte	https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30833-1/fulltext



Título	The correspondence between the structure of the terrestrial mobility network and the spreading of COVID-19 in Brazil
Autor(es)	Vander Luis de Souza Freitas, Thais Cláudia Roma de Oliveira Konstantyner, Jeferson Feitosa Mendes, Cátia Souza do Nascimento Sepetauskas, Leonardo Bacelar Lima Santos
Resumo	The inter-cities mobility network is of great importance in understanding outbreaks, especially in Brazil, a continental-dimension country. We adopt the data from the Brazilian Ministry of Health and the terrestrial flow of people between cities from the Brazilian Institute of Geography and Statistics database in two scales: cities from Brazil, without the North region, and from the São Paulo State. Grounded on the complex networks approach, and considering that the mobility network serves as a proxy for the SARS-CoV-2 spreading, the nodes and edges represent cities and flows, respectively. Network centrality measures such as strength and degree are ranked and compared to the list of cities, ordered according to the day that they confirmed the first case of COVID-19. The strength measure captures the cities with a higher vulnerability of receiving new cases. Besides, it follows the interiorization process of SARS-CoV-2 in the São Paulo State when the network flows are above specific thresholds. Some countryside cities such as Feira de Santana (Bahia State), Ribeirão Preto (São Paulo State), and Caruaru (Pernambuco State) have strength comparable to states' capitals. Our analysis offers additional tools for understanding and decision support to inter-cities mobility interventions regarding the SARS-CoV-2 and other epidemics.
Referências	FREITAS, V. L. de S. <i>et al.</i> The correspondence between the structure of the terrestrial mobility network and the spreading of COVID-19 in Brazil. Cad. Saúde Pública , Rio de Janeiro, v. 36, n. 9, p. e00184820, 2020. Disponível em: https://doi.org/10.1590/0102-311x00184820.
Fonte	https://scielosp.org/pdf/csp/2020.v36n9/e00184820/en



Título	Prospects for a safe COVID-19 vaccine
Autor(es)	Barton F. Haynes, Lawrence Corey, Prabhavathi Fernandes, Peter B. Gilbert, Peter J. Hotez, Srinivas Rao, Michael R. Santos, Hanneke Schuitemaker, Michael Watson, Ann Arvin.
Resumo	Rapid development of an efficacious vaccine against the viral pathogen severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2), the cause of the coronavirus disease 2019 (COVID-19) pandemic, is essential, but rigorous studies are required to determine the safety of candidate vaccines. Here, on behalf of the Accelerating COVID-19 Therapeutic Interventions and Vaccines (ACTIV) Working Group, we evaluate research on the potential risk of immune enhancement of disease by vaccines and viral infections, including coronavirus infections, together with emerging data about COVID-19 disease. Vaccine-associated enhanced disease has been rarely encountered with existing vaccines or viral infections. Although animal models of SARS-CoV-2 infection may elucidate mechanisms of immune protection, we need observations of enhanced disease in people receiving candidate COVID-19 vaccines to understand the risk of immune enhancement of disease. Neither principles of immunity nor preclinical studies provide a basis for prioritizing among the COVID-19 vaccine candidates with respect to safety at this time. Rigorous clinical trial design and postlicensure surveillance should provide a reliable strategy to identify adverse events, including the potential for enhanced severity of COVID-19 disease, after vaccination.
Referências	HAYNES, B. F. et al. Prospects for a safe COVID-19 vaccine. <i>Sci. Transl. Med.</i> , Washington, DC, v. 12, n. 568, p. eabe0948, Nov. 4, 2020. Disponível em: https://doi.org/10.1126/scitranslmed.abe0948.
Fonte	https://stm.sciencemag.org/content/12/568/eabe0948/tab-pdf



Título	Prothrombotic autoantibodies in serum from patients hospitalized with COVID-19
Autor(es)	Yu Zuo , Shanea K. Estes , Ramadan A. Ali , Alex A. Gandhi, Srilakshmi Yalavarthi, Hui Shi, Gautam Sule , Kelsey Gockman , Jacqueline A. Madison , Melanie Zuo, Vinita Yadav, Jintao Wang , Wrenn Woodard , Sean P. Lezak, Njira L. Lugogo, Stephanie A. Smith , James H. Morrissey, Yogendra Kanthi, Jason S. Knight.
Resumo	Patients with COVID-19 are at high risk for thrombotic arterial and venous occlusions. Lung histopathology often reveals fibrin-based blockages in the small blood vessels of patients who succumb to the disease. Antiphospholipid syndrome is an acquired and potentially life-threatening thrombophilia in which patients develop pathogenic autoantibodies targeting phospholipids and phospholipid-binding proteins (aPL antibodies). Case series have recently detected aPL antibodies in patients with COVID-19. Here, we measured eight types of aPL antibodies in serum samples from 172 patients hospitalized with COVID-19. These aPL antibodies included anticardiolipin IgG, IgM, and IgA; and IgG, IgM, and IgA; and anti-phosphatidylserine/prothrombin (aPS/PT) IgG and IgM. We detected aPS/PT IgG in 24% of serum samples, anticardiolipin IgM in 23% of samples, and aPS/PT IgM in 18% of samples. Antiphospholipid autoantibodies were present in 52% of serum samples using the manufacturer's threshold and in 30% using a more stringent cutoff (≥40 ELISA-specific units). Higher titers of aPL antibodies were associated with neutrophil hyperactivity, including the release of neutrophil extracellular traps (NETs), higher platelet counts, more severe respiratory disease, and lower clinical estimated glomerular filtration rate. Similar to IgG from patients with antiphospholipid syndrome, IgG fractions isolated from patients with COVID-19 promoted NET release from neutrophils isolated from healthy individuals. Furthermore, injection of IgG purified from COVID-19 patient serum into mice accelerated venous thrombosis in two mouse models. These findings suggest that half of patients hospitalized with COVID-19 become at least transiently positive for aPL antibodies and that these autoantibodies are potentially pathogenic.
Referências	ZUO, Y. <i>et al.</i> Prothrombotic autoantibodies in serum from patients hospitalized with COVID-19. <i>Sci. Transl. Med.</i> , Washington, DC, v. 12, n. 570, p. eabd3876, Nov. 18, 2020. Disponível em: https://doi.org/10.1126/scitranslmed.abd3876. Acesso em: nov. 26, 2020.
Fonte	https://stm.sciencemag.org/content/12/570/eabd3876/tab-pdf



Título	Transmission heterogeneities, kinetics, and controllability of SARS-CoV-2
Autor(es)	Kaiyuan Sun, Wei Wang, Lidong Gao, Yan Wang, Kaiwei Luo, Lingshuang Ren, Zhifei Zhan, Xinghui Chen, Shanlu Zhao, Yiwei Huang, Qianlai Sun, Ziyan Liu, Maria Litvinova, Alessandro Vespignani, Marco Ajelli, Cécile Viboud, Hongjie Yu
Resumo	A long-standing question in infectious disease dynamics concerns the role of transmission heterogeneities, driven by demography, behavior and interventions. Based on detailed patient and contact tracing data in Hunan, China we find 80% of secondary infections traced back to 15% of SARS-CoV-2 primary infections, indicating substantial transmission heterogeneities. Transmission risk scales positively with the duration of exposure and the closeness of social interactions and is modulated by demographic and clinical factors. The lockdown period increases transmission risk in the family and households, while isolation and quarantine reduce risks across all types of contacts. The reconstructed infectiousness profile of a typical SARS-CoV-2 patient peaks just before symptom presentation. Modeling indicates SARS-CoV-2 control requires the synergistic efforts of case isolation, contact quarantine, and population-level interventions, owing to the specific transmission kinetics of this virus.
Referências	SUN, K. <i>et al.</i> Transmission heterogeneities, kinetics, and controllability of SARS-CoV-2. <i>Sciense</i> , Washington, DC, v. 370, n. 6520, p. eabe2424, Nov. 27, 2020. Disponível em: https://doi.org/10.1101/2020.08.09.20171132.
Fonte	https://science.sciencemag.org/content/early/2020/11/23/science.abe2424