# LISTA DE REFERÊNCIAS BIBLIOGRÁFICAS E RESUMOS– COVID -19

Atualizado em: 30 de julho de 2021

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| **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. *et al.* 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*l.*], 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 |

LISTA DE REFERÊNCIAS BIBLIOGRÁFICAS E RESUMOS– COVID -19

Atualizado em: 30 de julho de 2021

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| **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 *et al.* 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/ |

Atualizado em: 30 de julho de 2021

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. |
| **Resumo** | 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 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 facilites 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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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/ |

Atualizado em: 30 de julho de 2021

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| **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. *et al.* Conhecimento científico sobre infecções pelo novo coronavírus no idoso: *scoping review*. **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&lang=pt |

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| **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 *Coronaviridae* 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 *et al.* 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 |

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| **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 80%, sexo feminino, escolaridade, profissional/estudante da saúde, 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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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 |
| **Resumo** | Background: 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 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. |

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| **Referências** | FOLEY, M. K. *et al.* 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 |

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| **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 shutdown reversed the linear growth. |
| **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 |

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| **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 |

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| **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<br>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<br>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 . *et al.* 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 |

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| **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 *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. **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&lang=pt |

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| **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 Brasilira 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&lang=pt |

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| **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. *et al.* 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 |

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| **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 |

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| **Título** | SARS-CoV-2 outbreak in a synagogue community: longevity and strength of anti-SARS-CoV-2 IgG responses |
| **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 re-use or in order to create a derivative work. |
| **Referências** | GOZLAN, Y. *et al.* 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. |
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| **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. |
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| **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 |

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| **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 |

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| **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, representing a 3.3-fold higher number of deaths in quintile 1 compared with quintile 5. Adjustment for the number of certified beds reduced the mean (SE) difference between these 2 nursing home groups to 2.2 (0.2) deaths. Controlling for case mix measures and other nursing home characteristics did not modify this association. Adjustment for county-level COVID-19 prevalence further reduced the mean (SE) difference to 1.0 (0.2) death.CONCLUSIONS AND RELEVANCE In this study, nursing homes with the highest proportions of non-White residents experienced COVID-19 death counts that were 3.3-fold higher than those of facilities with the highest proportions of White residents. These differences were associated with factors such as larger nursing home size and higher infection burden in counties in which nursing homes with high proportions of non-White residents were located. Focusing limited available |

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| **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. |
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| **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...<br>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. |
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| **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 activity. |

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| **Referências** | GUPTA, S. *et al.* 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. |
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| **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 |

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| | 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 assumptions, at least 50% of new SARS-CoV-2 infections was estimated to have originated from exposure to individuals with infection but without symptoms. **Conclusions and Relevance** In this decision 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. |
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| **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 |

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| | 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 |

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| **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. |

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| **Referências** | SHROTRI, M. *et al.* 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 |

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| **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. |

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| **Referências** | HYAMS, C. *et al.* 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 |

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| **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 (CrI), 94.8-96.6%). This was higher than that from low prevalence countries/regions (e.g., 23.4%, 95% CrI, 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 |

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| | 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 |

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| **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 *Acinetobacter*, to -28% for Methicillin-resistant *Staphylococcus aureus* 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. *et al.* 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. |

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| **Fonte** | https://www.thelancet.com/action/showPdf?pii=S2666-7762%2821%2900080-6 |

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| **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 |
| **Autor(es)** | 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 Linley , Maria Zambon , John Poh , Angie Lackenby , Joanna Ellis , Gayatri Amirthalingam , Kevin E Brown , Mary E Ramsay |

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| **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. *et al.* 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 |

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| | 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. *et al.* 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 |

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| **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 |

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| | 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. *et al.* 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 |
| | 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 |

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| **Resumo** | 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 |

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| **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 |
| | This cross-sectional seroepidemiological survey presents the seroprevalence of SARS-CoV-2 in a population living in 15 Long-Term Care Facilities (LTCFs), after |

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| **Resumo** | 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 *et al.* 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&lang=en |

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| **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] |
| | COVID-19 outbreak has become a global pandemic that affected more than 200 countries. Predictingthe epidemiological behavior of this outbreak has a vital |

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| **Resumo** | 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 coun-tries; 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 socialdistancing 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. *et al*. 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#! |

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| **Título** | Change in outbreak epicentre and its impact on the importation risks of COVID-19 progression: A modelling study |

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| **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. *et al.* 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 |

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| **Título** | Structural dynamics of SARS-CoV-2 variants: A health monitoring strategy for anticipating Covid-19 outbreaks |

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| **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 |

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| **Título** | COVID-2019 |

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| **Autor(es)** | Escola Superior de Saúde Dr. Lopes Dias do Instituto Politécnico de Castelo Branco |
| **Resumo** | Índice:<br><br>Artigo de opinião<br>SARS-COV-2: comparação dos diferentes testes de diagnóstico laboratorial - uma revisão adaptada à realidade portuguesa<br>COVID-19: valores preditos e estratégia de testagem<br>Opinião dos docentes da esald sobre a implementação do ensino por via remota, devido à pandemia COVID-19<br>Caracterização dos utilizadores dos serviços de urgência da unidade local de saúde do norte alentejano, durante o estado de emergência devido à COVID-19<br>Da vulnerabilidade à invisibilidade. Os idosos institucionalizados durante a pandemia COVID 19<br>Vacinas SARS-COV-2: principais caraterísticas e perspetivas futuras – revisão da bibliografia<br>COVID-19: uma pandemia anunciada<br>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 |

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| **Título** | Clinical characteristics and risk factors for death among hospitalised children and adolescents with COVID-19 in Brazil: an analysis of |

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| | 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. *et al.* 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 |

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| **Título** | Inflammatory biomarkers in COVID-19-associated multisystem inflammatory syndrome in children, Kawasaki disease, and macrophage activation syndrome: a cohort study |

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| **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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **Título** | Associations of Race/Ethnicity and Food Insecurity With COVID-19 Infection Rates Across US Counties |

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| **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. *et al.* 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 |

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| | 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 “ |

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| **Título** | |
| **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 *et al.* 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 |

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| **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% CrI: 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% CrI: 95.4%-96.3%) and 95.8% (95% CrI: 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. *et al.* 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/ |

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| **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. *et al.* 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 |

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| **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 |

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| **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 ≥60 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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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™, 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™ 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™ positive cases and IgG positivity in 4/5 VivaDiag™ positive cases. Our study suggests that the VivaDiag™ test can be of help in identifying SARS-CoV-2 infected people in cohorts of subjects with a high prevalence. |
| **Referências** | PARADISO, A. V. *et al.* 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 |

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| **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 |

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| **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 |

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| **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 |

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| **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 rates of transfer can cause very large outbreaks. We note that risks may persist after vaccination, due for example to variant strains, and in prison systems where widespread vaccination has not occurred. Decarceration remains urgently needed as a public health measure. |
| **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 |

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| **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/ |

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| **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 |

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| | 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 |

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| **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 re-opening 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**, 2**021. 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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 *et al.* 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 |

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| **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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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 co-circulação 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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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 |

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| **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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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 |

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| **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 under 5% and likely as low as 2%, while rural Jimma 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 significantly higher seroprevalence figures in large cities in Europe and America only two to three months after the first cases. This population-based seroepidemiological study thus provides evidence of a slower spread of SARS-CoV-2 in the Ethiopian population during the first wave of the pandemic and does not appear to support the notion that lower case numbers were simply a reflection of limited testing and surveillance. |

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| **Referências** | ABDELLA, S. *et al.* 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 |

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| **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. *et al.* Vaccine Breakthrough Infections with SARS-CoV-2 Variants. **New England Journal of medicine**, [United States], p. NEJMoa2105000l, Apr. 21, 2021. Disponível em: https://doi.org/10.1056/NEJMoa2105000. |
| **Fonte** | https://www.nejm.org/doi/pdf/10.1056/NEJMoa2105000?articleTools=true |

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| **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. *et al.* (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 |

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| **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. *et al.* 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 |

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| **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 *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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 *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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 *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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 |

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| **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 *et al.* 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 |

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| **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. *et al.* 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 |

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| **Título** | Habitat loss and the risk of disease outbreak<br><br>(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 |

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| **Título** | SARS-CoV-2 seropositivity and subsequent infection risk in healthy young adults: a prospective cohort study<br><br>(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. *et al.* 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 |

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| **Título** | Longitudinal assessment of symptoms and risk of SARS-CoV-2 infection in healthcare workers across 5 hospitals to understand ethnic differences in infection risk.<br><br>(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. *et al.* 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 |

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| **Título** | Can ketone bodies inactivate coronavirus spike protein? The potential of biocidal agents against SARS-CoV-2<br><br>(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 |

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| **Título** | Recurrent COVID-19 including evidence of reinfection and enhanced severity in thirty Brazilian healthcare workers<br><br>(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 signifcantly 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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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...<br>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 |

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| **Título** | Monitoring the proportion of the population infected by SARS-CoV-2 using age-stratified hospitalisation and serological data: a modelling study<br><br>(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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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<br>[...] 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-economicos..pdf. |
| **Fonte** | https://publications.iadb.org/pt/covid-19-e-reabertura-das-escolas-uma-revisao-sistematica-dos-riscos-de-saude-e-uma-analise-dos |

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| **Título** | SARS-CoV-2 infection rates of antibody-positive compared with antibody-negative health-care workers in England: a large, multicentre, prospective cohort study (SIREN)<br><br>(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)) |
| **Autor(es)** | Victoria Jane Hall, Sarah Foulkes, Andre Charlett, Ana Atti, Edward J Monk, Ruth Simmons , Edgar Wellington, Michelle J Cole, 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 |
| **Resumo** | Increased understanding of whether individuals who have recovered from COVID-19 are protected from future SARS-CoV-2 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 |

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| **Título** | A cross-sectional and prospective cohort study of the role of schools in the SARS-CoV-2 second wave in Italy<br><br>(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. *et al.* 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 |

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| **Título** | 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<br><br>(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) |
| **Autor(es)** | 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 |
| **Resumo** | 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. |
| **Referências** | BUNDGAARD, H. *et al.* 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. **Ann Intern Med.**, [United States], v. 174, n. 3, p. 335–343, Mar. 2021. Disponível em: https://doi.org/10.7326/M20-6817. |
| **Fonte** | https://www.acpjournals.org/doi/pdf/10.7326/M20-6817 |

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| **Título** | Diagnosis of COVID-19 for controlling the pandemic: A review of the state-of-the-art<br><br>(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 |

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| **Título** | Performance of intensive care unit severity scoring systems across different ethnicities in the USA: a retrospective observational study<br><br>(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. *et al.* 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 |

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| **Título** | COVID-19 outcomes in patients with inflammatory rheumatic and musculoskeletal diseases treated with rituximab: a cohort study<br><br>(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 |

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| **Título** | The first and second waves of the COVID-19 pandemic in Africa: a cross-sectional study<br><br>(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 |

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| **Título** | Multisystem Inflammatory Syndrome in U.S. Children and Adolescents<br><br>(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. *et al.* 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 |

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| **Título** | Antibody Status and Incidence of SARS-CoV-2 Infection in Health Care Workers<br><br>(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, A.-M. 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 |

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| **Título** | Estimated transmissibility and impact of SARS-CoV-2 lineage B.1.1.7 in England<br><br>(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. *et al.* 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 |

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| **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. *In:* 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 |

Atualizado em: 30 de julho de 2021

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| **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 *et al.* 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/ |

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| **Título** | SARS-CoV-2 outbreak investigation in a German meat processing plant<br><br>(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 *et al.* 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** |

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| **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 |

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| **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. *et al*. 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 |

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| **Título** | COVID-19 Outbreak in a Large Penitentiary Complex, April–June 2020, Brazil<br>(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. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **Título** | 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 |
| **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 pós-pandemia, como forma de minimizar os efeitos secundários desta. |
| **Referências** | SCHUCHMANN, A. Z. *et al.* 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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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 |

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| **Título** | Epidemiology and clinical features of COVID-19 outbreaks in aged care facilities: A systematic review and meta-analysis<br><br>(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 |

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| **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<br><br>(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. *et al.* 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 |

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| **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 |

Atualizado em: 30 de julho de 2021

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| **Título** | COVID-19 nas prisões: um desafio impossível para a saúde pública? |
| **Autor(es)** | Alexandra Sánchez, Luciana Simas, Vilma Diuana, Bernard Larouze |
| **Resumo** | *Introdução...*<br>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 |

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| **Título** | Surveillance-based informative testing for detection and containment of SARS-CoV-2 outbreaks on a public university campus: an observational and modelling study<br><br>(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. *et al.* 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 |

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| **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 *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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, F.-X. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 pre-pandemic 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 obtidas por meio de modelos aditivos generalizados *quasi*-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. *et al.* 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 |

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| **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 *Pesquisa Nacional por Amostra de Domicílios* (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 |

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| **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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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 (irrespective of vaccine characteristics, defined as opting for no vaccination in all eight tasks) from vaccine hesitancy (acceptance depending on vaccine characteristics). Findings Survey responses were collected from 1942 working-age adults, of whom 560 (28·8%) opted for no vaccination in all eight tasks (outright vaccine refusal) and 1382 (71·2%) did not. In our model, outright vaccine refusal and vaccine hesitancy were both significantly associated with female gender, age (with an inverted U-shaped relationship), lower educational level, poor compliance with recommended vaccinations in the past, and no report of specified chronic conditions (ie, no hypertension [ for vaccine |

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| **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. *et al.* 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 |

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| **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, Harry L A Janssen, Bettina E Hansen |
| **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 $\chi^2$ 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 $10^6$ copies per mL, 15 (79%) of 19 patients in the peginterferon lambda group had undetectable virus on day 7, compared with six |

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| | (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. *et al.* 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 |

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| **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 scenario (Re of 2·2) is weekly testing followed by a 2-week isolation period subsequent to a positive test result. Under low transmission scenarios (Re of 1·2), monthly testing of the population followed by 1-week isolation rather than 2-week isolation is likely to be most cost-effective. Expanded surveillance testing is more likely to be cost-effective than the status-quo testing strategy if the price per test is less than $75 across all transmission rates considered. Interpretation Extensive expansion of SARS-CoV-2 testing programmes with more frequent and rapid tests across communities coupled with isolation of individuals with confirmed infection is essential for mitigating the COVID-19 pandemic. Furthermore, resources recouped from shortened isolation duration could be cost-effectively allocated to more frequent testing. |
| **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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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/ |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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/ |

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| **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 |

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| **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 |

Atualizado em: 30 de julho de 2021

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| **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 |

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| **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 re-detectable 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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 (*Betacoronavirus*) 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 (*Microchiroptera, Chiroptera*). Appearance of SARS-CoV, SARS-CoV-2 (subgenus *Sarbecovirus*), 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# |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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#! |

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| **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. *et al.* 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 |

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| **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 under-sampling 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<br>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 |

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| **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-19 cases, and also encouraging the readers to develop other similar AI-based automated detection / recognition systems using ZSL. |
| **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 |

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| **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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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. *et al.* 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 |

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| **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 |

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| **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 |

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| **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 |

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| **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 |

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| **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 |

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| **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. *et al.* 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** |

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| **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. *et al.* 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/** |

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| **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. *et al.* 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 |

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| **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/** |

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| **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/** |

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| **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 |

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| **Título** | Safety, tolerability, and immunogenicity<br>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. *et al.* 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** |

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| **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. *et al*. 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 |

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| **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. *et al.* 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 |

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| **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. ***Sci. Transl. Med***., 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** |

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| **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; anti–β2 glycoprotein I 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. *et al.* Prothrombotic autoantibodies in serum from patients hospitalized with COVID-19. ***Sci. Transl. Med.***, 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 |

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| **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. *et al.* Transmission heterogeneities, kinetics, and controllability of SARS-CoV-2. ***Sciense***, 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 |