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Covid-19/SARS-CoV-2: References, Resources & Guidance

[Updated 06/04/2021 – items added since the last update are placed in the "New Additions" section at the beginning and then moved to the relevant section in the next issue]

[Disclaimers: This is not a complete or comprehensive listing and it is not intended to compete with the huge resources of medical libraries nor the specific guidance of professional bodies. It is intended to provide a "Go To" resource, containing publications and links from a wide range of sources, that may be of practical use to health care workers dealing with the COVID-19 epidemic.

We will update this at intervals, and this will work best if you, the users, feed back to us. So if you know of any useful references or resources that are not included, or if you are aware that any of the references or resources listed are out of date or have been superseded, please let us know so that we can put them in, change them or cut them out!

(Inclusion of a title in this listing does not imply approval, endorsement or certification of the work or results therein by the Faculty of Conflict and Catastrophe Medicine or the Worshipful Society of Apothecaries of London. The items are included for information only and should be evaluated by the readers before use. When reading items published in printed or on-line journals, please bear in mind that the peer review process may have been curtailed or that an item may be a preprint that has not been certified by peer review. Such reports of new medical research may not yet have been evaluated and so should not be used to guide clinical practice).].

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Covid-19: Sore throat, fatigue, and myalgia are more common with new UK variant. *BMJ* 2021; 372 doi: https://doi.org/10.1136/bmj.n288 (Published 29 January 2021)

Clinical Matters: care of recovering patients

Giné Servén E, Martinez Ramirez M, Boix Quintana E et al. **Emerging cycloid psychosis episodes during COVID-19 pandemic: a case series.** Nord J Psychiatry. 2021 Feb 25:1-6. doi: 10.1080/08039488.2021.1885061. Epub ahead of print. PMID: 33630694. https://pubmed.ncbi.nlm.nih.gov/33630694/

Graham EL, Clark JR, Orban ZS et al. **Persistent neurologic symptoms and cognitive dysfunction in non-hospitalized Covid-19 "long haulers".** Annals of Clinical and Translational Neurology. First published: 23 March 2021. https://doi.org/10.1002/acn3.51350

PHOSP-COVID Collaborative Group, Evans RA, McAuley H et al. **Physical, cognitive and mental health impacts of COVID-19 following hospitalisation – a multi-centre prospective cohort study.** medRxiv 25 March 2021. doi: https://doi.org/10.1101/2021.03.22.21254057. [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

Rentero D, Juanes A, Losada CP et al. **New-onset psychosis in COVID-19 pandemic: a case series in Madrid.** Psychiatry Res. 2020 Aug; 290: 113097. Published online 2020 May 13. doi: 10.1016/j.psychres.2020.113097

Clinical Matters: long covid

Sigfrid L, Drake TM, Pauley E et al. Long Covid in adults discharged from UK hospitals after Covid-19: A prospective, multicentre cohort study using the ISARIC WHO Clinical Characterisation Protocol. medRxiv 25 March 2021. doi: https://doi.org/10.1101/2021.03.18.21253888 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

<u>Infection Control</u>

Homeland Security. Science and Technology. **Estimated Surface Decay of SARS-CoV-2 (virus that causes COVID-19) on surfaces under a range of temperatures, relative humidity, and UV Index.** https://www.dhs.gov/science-and-technology/sars-calculator

Epidemiology

Office for National Statistics. Coronavirus (COVID-19) Infection Survey: characteristics of people testing positive for COVID-19 in England, 25 March 2021.

https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19infectionsinthecommunityinengland/characteristicsofpeopletestingpositiveforcovid19inengland25march2021

Sermet-Gaudelus I, Temmam S, Huon C et al, . Prior infection by seasonal coronaviruses, as assessed by serology, does not prevent SARS-CoV-2 infection and disease in children, France, April to June 2020. Euro Surveill. 2021;26(13):pii=2001782. https://doi.org/10.2807/1560-7917.ES.2021.26.13.2001782

Taxonomy and genetics

Rehman HA, Ramzan F, Basharat Z et al. Comprehensive Comparative Genomic and Microsatellite Analysis of SARS, MERS, BAT-SARS and COVID-19 Coronaviruses. J Med Virol. 30 March 2021. https://doi.org/10.1002/jmv.26974

Vaccines Tests and Treatments: Tests and Testing

BMJ News. Covid-19: Lateral flow tests are better at identifying people with symptoms, finds Cochrane review

BMJ 2021; 372 doi: https://doi.org/10.1136/bmj.n823 (Published 25 March 2021) Cite this as: BMJ 2021;372:n823

Dinnes J, Deeks JJ, Berhane S, **Rapid, point-of-care antigen and molecular-based tests for diagnosis of SARS-CoV-2 infection.** Cochrane Database of Systematic Reviews 2021, Issue 3. Art. No.: CD013705. https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD013705.pub2/full

Miscellaneous: other pathogens

Clancy CJ, Schwartz IS, Kula B, Nguyen MH. **Bacterial Superinfections Among Persons With Coronavirus Disease 2019: A Comprehensive Review of Data From Postmortem Studies.** *Open Forum Infectious Diseases*, Volume 8, Issue 3, March 2021, ofab065, https://doi.org/10.1093/ofid/ofab065

RESOURCES & GUIDANCE

CIDRAP (Centre for Infectious Disease Research and Policy). **COVID-19 Maps & visuals**. https://www.cidrap.umn.edu/covid-19/maps-visuals

International Society for Infectious Diseases. (*This page provides you with the latest information, publications, and news articles on the evolving novel coronavirus outbreak from trusted sources*). https://isid.org/2019-novel-coronavirus/

Johns Hopkins University. **Coronavirus resource center**. https://coronavirus.jhu.edu/

LitCovid: a curated literature hub for tracking up-to-date scientific information about the 2019 novel Coronavirus. It is the most comprehensive resource on the subject, providing a central access to more than 115,314 (and growing) relevant articles in PubMed. The articles are updated daily and are further categorized by different research topics and geographic locations for improved access. https://www.ncbi.nlm.nih.gov/research/coronavirus/

LSHTM. COVID-19 https://www.lshtm.ac.uk/research/research-action/covid-19

Medscape UK. **COVID-19**. https://www.medscape.com/resource/uk-coronavirus?src=ban ret ukcovid 728x90 desk 03172020 int

NICE website. Coronavirus (COVID-19). https://www.nice.org.uk/covid-19

NNEdPro Global Centre for Nutrition and Health. (COVID19: Useful Resources). https://www.nnedpro.org.uk/coronavirus

Our World in Data. **Coronavirus Pandemic (COVID-19).** https://ourworldindata.org/coronavirus

Oxford Centre for Evidence Based Medicine. **Oxford COVID-19 Evidence Service.** https://www.cebm.net/oxford-covid-19-evidence-service/

PHE. **COVID-19:** guidance for health professionals. Updated on 24 December 2020 https://www.gov.uk/government/collections/wuhan-novel-coronavirus

PHE. **Coronavirus (COVID-19): guidance.** https://www.gov.uk/government/collections/coronavirus-covid-19-list-of-guidance

ProMED. (International Society for Infectious Diseases - ISID). (The Program for Monitoring Emerging Diseases (ProMED) is a program of ISID. It is an Internet service to identify unusual health events related to emerging and re-emerging infectious diseases and toxins affecting humans, animals and plants. It is the largest publicly-available system conducting global reporting of infectious diseases outbreaks) https://promedmail.org/about-promed/

RCGP learning. **Covid-19 resource hub**. https://elearning.rcgp.org.uk/course/view.php?id=373

Royal College of Physicians and Surgeons of Glasgow. **Publications and Academic Resources**. https://rcpsg.ac.uk/college/covid-19/publications-and-academic-resources

Royal College of Surgeons. Covid-19 Information hub.

https://www.rcseng.ac.uk/coronavirus/

https://www.rcseng.ac.uk/coronavirus/coronavirus-resources/

https://www.rcseng.ac.uk/dental-faculties/fds/coronavirus/

Royal College of Surgeons. Covid-19. Guidance for surgeons working during the pandemic. (Updated Friday 5 June 2020).

https://www.rcseng.ac.uk/coronavirus/joint-guidance-for-surgeons-v2/

UK Research and Innovation (UKRI). For latest information about the coronavirus research funded by UKRI <u>please visit our main website</u>, or check out the links on the <u>About page</u> for other sources of coronavirus information.

WHO. **Country and Technical Guidance – Coronavirus Disease (COVID-19).** (All technical guidance on COVID-19 - select topic from drop down menu) https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance-publications

WHO. Operational planning guidance to support country preparedness and response. COVID-19 strategic preparedness and response. 22 May 2020. https://www.who.int/publications/i/item/draft-operational-planning-guidance-for-uncountry-teams

WHO. Global Alert and Response Network (GOARN) Knowledge Hub. https://extranet.who.int/goarn/COVID19Hub

WHO. **Rolling updates on coronavirus disease (COVID-19).** (Updated 31 July 2020). https://www.who.int/emergencies/diseases/novel-coronavirus-2019/events-as-they-happen

WHO. COVID-19 dashboard.

https://who.sprinklr.com/

WHO. **Health Cluster Guide 2nd Edition 2020**. https://www.who.int/health-cluster/resources/publications/hc-guide/en

WHO. Considerations for implementing a risk-based approach to international travel in the context of COVID-19. 16 December 2020.

https://www.who.int/publications/i/item/WHO-2019-nCoV-Risk-based-international-travel-2020.1

WHO. Interim recommendations for use of the Pfizer–BioNTech COVID-19 vaccine, BNT162b2, under Emergency Use Listing. 8 January 2021. https://www.who.int/publications/i/item/WHO-2019-nCoV-vaccines-SAGE recommendation-BNT162b2-2021.1

Worldometer. **Covid-19 coronavirus pandemic.** https://www.worldometers.info/coronavirus/

Journals

BMJ's Coronavirus (Covid-19) Hub. This hub supports health professionals and researchers with practical guidance, online CPD courses, as well as the latest news, comment, and research from BMJ. The content is free and updated daily. https://www.bmj.com/coronavirus

Journal of the American Medical Association. **JAMA Network**. **Coronavirus (COVID19)**. (COVID-19 diagnosis and treatment). https://jamanetwork.com/collections/46099/coronavirus-covid19

Lancet Coronavirus Resource Centre. This resource brings together new 2019 novel coronavirus disease (COVID-19) content from across *The Lancet* journals as it is published. (All of the Lancet COVID-19 content is free to access). https://www.thelancet.com/coronavirus

Nature Medicine. Research, news and comments. https://www.nature.com/nm/

New England Journal of Medicine. Coronavirus (Covid-19). A collection of articles and other resources on the Coronavirus (Covid-19) outbreak, including clinical reports, management guidelines, and commentary. All *Journal* content related to the Covid-19 pandemic is freely available. https://www.nejm.org/coronavirus

CLINICAL MATTERS

Clinical characteristics/Symptoms

<u>Chen T. et al.</u> Clinical characteristics of 113 deceased patients with coronavirus disease 2019: retrospective study.

BMJ 2020; 368 doi: https://doi.org/10.1136/bmj.m1091 (Published 26 March 2020

Feuth T. et al. Is sleep apnoea a risk factor for Covid-19? Findings from a retrospective cohort study. medRxiv.

https://www.medrxiv.org/content/10.1101/2020.05.14.20098319v1

[This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

Galvan-Casas C. et al. Classification of the cutaneous manifestations of COVID-19: a rapid prospective nationwide consensus study in Spain with 375 cases. Br J Dermatol. 2020 Apr 29. doi: 10.1111/bjd.19163. [Epub ahead of print]. https://www.ncbi.nlm.nih.gov/pubmed/32348545

Guan W et al. Clinical Characteristics of Coronavirus Disease 2019 in China. New England Journal of Medicine. Feb28,2020. https://www.nejm.org/doi/full/10.1056/NEJMoa2002032

Gupta, A., Madhavan, M.V., Sehgal, K. et al. **Extrapulmonary manifestations of COVID-19**. Nat Med 26, 1017–1032 (2020). https://doi.org/10.1038/s41591-020-0968-3

Huang C. et al. Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. Lancet 395 Feb 15, 2020. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30183-5/fulltext

Patterson RW et al., The emerging spectrum of COVID-19 neurology: clinical, radiological and laboratory findings, *Brain*, awaa240, 08 July 2020 https://doi.org/10.1093/brain/awaa240

Public Health England. **Guidance. COVID-19: investigation and initial clinical management of possible cases.** Updated 14 December 2020. https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-investigation-of-possible-cases/investigation-and-initial-clinical-management-of-possible-cases-of-wuhan-novel-coronavirus-wn-cov-infection

Richardson S et al. Presenting Characteristics, Comorbidities, and Outcomes Among 5700 Patients Hospitalized With COVID-19 in the New York City Area *JAMA*. Published online April 22, 2020. doi:10.1001/jama.2020.6775 https://jamanetwork.com/journals/jama/fullarticle/2765184

Roberts M & Colleagues. **Covid-19: a complex multisystem clinical syndrome.** The bmj opinion. 1 May.2020. https://blogs.bmj.com/bmj/2020/05/01/covid-19-a-complex-multisystem-clinical-syndrome/

Shi, Y., Yu, X., Zhao, H. *et al.* Host susceptibility to severe COVID-19 and establishment of a host risk score: findings of 487 cases outside Wuhan. *Crit Care* 24, 108 (2020). https://doi.org/10.1186/s13054-020-2833-7

Varatharaj A et al., **Neurological and neuropsychiatric complications of COVID-19 in 153 patients: a UK-wide surveillance study.** The Lancet Psychiatry. 25 June 2020. DOI:https://doi.org/10.1016/S2215-0366(20)30287-X

Vincent J-L, Taccone FS. **Understanding pathways to death in patients with COVID-19.** The Lancet Respiratory Medicine 6 April 2020. DOI:https://doi.org/10.1016/S2213-2600(20)30165-X

The WHO Rapid Evidence Appraisal for COVID-19 Therapies (REACT) Working Group. Association Between Administration of Systemic Corticosteroids and Mortality Among Critically III Patients With COVID-19 A Meta-analysis. *JAMA*. Published online September 2, 2020. doi:10.1001/jama.2020.17023 https://jamanetwork.com/journals/jama/fullarticle/2770279

Wiersinga W J. et al. Pathophysiology, Transmission, Diagnosis, and Treatment of Coronavirus Disease 2019 (COVID-19) A Review. *JAMA*. Published online July 10, 2020. doi:10.1001/jama.2020.12839. https://jamanetwork.com/journals/jama/fullarticle/2768391

Wu Y et al., **Nervous system involvement after infection with COVID-19 and other coronaviruses.** Brain, Behaviour and Immunity. Volume 87, July 2020, Pages 18-22. https://doi.org/10.1016/j.bbi.2020.03.031

Management of cases

CDC Atlanta. Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19). Updated Dec 8 2020. https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html

Libster R, Gonzalo Perez M, Wappner D at al. Early High-Titer Plasma Therapy to Prevent Severe Covid-19 in Older Adults. NEJM. 6 January 2021. https://www.nejm.org/doi/full/10.1056/NEJMoa2033700#:~:text=In%20our%20randomized%2C%20controlled%20trial,Covid-19%20to%20severe%20illness.

NICE. COVID-19 rapid guideline: managing suspected or confirmed pneumonia in adults in the community. NICE guideline [NG165]Published date: 03 April 2020 Last updated: 23 April 2020 https://www.nice.org.uk/guidance/ng165

Public Health England. **Guidance. COVID-19: investigation and initial clinical management of possible cases.** Updated 14 December 2020. https://www.gov.uk/government/publications/wuhan-novel-coronavirus-initial-clinical-management-of-possible-cases-of-wuhan-novel-coronavirus-wn-cov-infection

Phua J et al. Intensive care management of coronavirus disease 2019 (COVID-19): challenges and recommendations. The Lancet 6 April 2020. https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30161-2/fulltext

PHE. **COVID-19:** guidance for health professionals. Updated on 24 December 2020 https://www.gov.uk/government/collections/wuhan-novel-coronavirus

Royal College of Nursing. **Clinical guidance for managing COVID-19**. https://www.rcn.org.uk/clinical-topics/infection-prevention-and-control/novel-coronavirus

Royal College of Physicians. Specialty-specific guidance on aspects of clinical care and treatment for COVID-19. https://www.rcplondon.ac.uk/education-practice/advice/specialty-specific-guidance-aspects-clinical-care-and-treatment-covid-19

WHO. Clinical management of COVID-19. Interim Guidance. 27 May 2020. https://www.who.int/publications/i/item/clinical-management-of-covid-19

WHO. **Use of chest imaging in COVID-19. A rapid Advice Guide.** 11 June 2020. https://www.who.int/publications/i/item/use-of-chest-imaging-in-covid-19

WHO. Criteria for releasing COVID-19 patients from isolation. Scientific Brief. 17 June 2020. https://www.who.int/publications/i/item/criteria-for-releasing-covid-19-patients-from-isolation

WHO. Home care for patients with suspected or confirmed COVID-19 and management of their contacts. Interim Guidance. WHO Publications 13 August 2020. https://www.who.int/publications/i/item/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts

Children & Adolescents

British Paediatric Respiratory Society. Guidance for the clinical management of children admitted to hospital with suspected COVID-19. (Version 2) https://www.rcpch.ac.uk/sites/default/files/2020-03/bprs_management_of_children_admitted_to_hospital_with_covid19_-20200319.pdf

Goldman PS, van Ijzendoom MH, Sonuga-Barke EJS. **The implications of COVID-19 for the care of children living in residential institutions.** The Lancet Child and Adolescent Health. https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(20)30130-9/fulltext

Jones VG, Mills M, Suarez D, et al. **COVID-19 and Kawasaki disease: novel virus and novel case.** Hosp Pediatr. 2020; doi: 10.1542/hpeds.2020-0123 (This is a prepublication version of an article that has undergone peer review and been accepted for publication but is not the final version of record)

https://hosppeds.aappublications.org/content/hosppeds/early/2020/04/06/hpeds.2020-0123.full.pdf

Liao J et al. **Epidemiological and clinical characteristics of COVID-19 in adolescents and young adults.** 12 March 2020 (*Please note this is a preprint and has not been certified by peer review. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice*) https://www.medrxiv.org/content/10.1101/2020.03.10.20032136v1.full.pdf+html

Ma, H., Hu, J., Tian, J. *et al.* A single-center, retrospective study of COVID-19 features in children: a descriptive investigation. *BMC Med* 18, 123 (2020). https://doi.org/10.1186/s12916-020-01596-9

Paediatric Intensive Care Society. **PICS Statement: Increased number of reported cases of novel presentation of multisystem inflammatory disease.** 27 April 2020. https://picsociety.uk/wp-content/uploads/2020/04/PICS-statement-re-novel-KD-C19-presentation-v2-27042020.pdf

Paediatric Intensive Care Society. **Covid-19 Infection.** (Information on Covid-19 infection relevant to the paediatric critical care community). https://picsociety.uk/covid19/

Pathak EB et al. Covid-19 in Children in the United States. Intensive Care Admissions, Estimated Total Infected, and Projected Numbers of Severe Pediatric Cases in 2020. Journal of Public Health Management and Practice: April 16, 2020 - Volume Publish Ahead of Print https://journals.lww.com/jphmp/Abstract/publishahead/COVID_19 in Children in the United States .99293.aspx

Care of recovering patients

NHS. **Supporting your recovery after COVID-19.** https://www.yourcovidrecovery.nhs.uk

Puntmann VO et al. Outcomes of Cardiovascular Magnetic Resonance Imaging in Patients Recently Recovered From Coronavirus Disease 2019 (COVID-19). *JAMA Cardiol.* Published online July 27, 2020. https://jamanetwork.com/journals/jamacardiology/fullarticle/2768916

Stam HJ, Stucki G, Bickenbach J. Covid-19 and Post Intensive Care Syndrome: A Call for Action. J Rehabil Med. 2020 Apr 15;52(4):jrm00044. https://www.ncbi.nlm.nih.gov/pubmed/32286675

Long Covid

Carfi A et al. **Persistent Symptoms in Patients After Acute COVID-19.** *JAMA.* 2020;324(6):603-605. Doi:10.1001/jama.2020.12603. https://jamanetwork.com/journals/jama/fullarticle/2768351

Eiros R et al. Pericarditis and myocarditis long after SARS-CoV-2 infection: a cross-sectional descriptive study in health-care workers.

medRxiv 2020.07.12.20151316; doi: https://doi.org/10.1101/2020.07.12.20151316 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.] Lambert, N. J. & Survivor Corps. **COVID-19 "Long Hauler" Symptoms Survey Report.** Indiana University School of Medicine; 2020. https://dig.abclocal.go.com/wls/documents/2020/072720-wls-covid-symptom-study-doc.pdf

Munro KJ et al., **Persistent self-reported changes in hearing and tinnitus in post-hospitalisation COVID-19 cases,** International Journal of Audiology, (2020) DOI: <u>10.1080/14992027.2020.1798519</u>

National Institute for Health Research. Living with Covid19. 15 Oct 2020. Doi: 10.3310/themedreview 41169

Sudre CH, Murray B, Varsavsky T et al. **Attributes and predictors of Long-COVID:** analysis of COVID cases and their symptoms collected by the Covid Symptoms Study App. medRxiv 19 December 2020.

https://www.medrxiv.org/content/10.1101/2020.10.19.20214494v2 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

Tenford MW et al. Symptom Duration and Risk Factors for Delayed Return to Usual Health Among Outpatients with COVID-19 in a Multistate Health Care Systems Network — United States, March–June 2020. Morbidity and Mortality Weekly Report (MMWR). Weekly / July 31, 2020 / 69(30);993-998. https://www.cdc.gov/mmwr/volumes/69/wr/mm6930e1.htm

ETHICAL ISSUES

BMA. **BMA Guidance COVID-19: ethical issues.** Updated Mon 7th September 2020. https://www.bma.org.uk/advice-and-support/covid-19/ethics/covid-19-ethical-issues

BMA. **COVID-19 Ethical Issues. A guidance note** https://www.bma.org.uk/media/2226/bma-covid-19-ethics-guidance.pdf

Royal College of Physicians. **Ethical Dimensions of Covid-19 for frontline staff.** (Updated December 2020) https://www.rcplondon.ac.uk/news/ethical-guidance-published-frontline-staff-dealing-pandemic

Royal College of Psychiatrists. **COVID-19: Ethical Considerations.** https://www.rcpsych.ac.uk/about-us/responding-to-covid-19/responding-to-covid-19-guidance-for-clinicians/covid-19-ethical-considerations

Sokol D. Decision Making for Intensive Care Triage in COVID-19 Emergency. A practical Guide for Clinicians and Hospital Mangers. April 2020. http://medicalethicist.net/wp-content/uploads/2016/06/v5-Sokol-ICU-Triage-April-2020.pdf

VENTILATORS

Arulkumaran N. **Use of non-invasive ventilation for patients with COVID-19: a cause for concern?** The Lancet Respiratory Medicine. 20 April 2020. https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30181-8/fulltext

Botta M et al. Ventilation management and clinical outcomes in invasively ventilated patients with COVID-19 (PRoVENT-COVID): a national, multicentre, observational cohort study. The Lancet Respiratory Medicine. Published: October 23, 2020 DOI:https://doi.org/10.1016/S2213-2600(20)30459-8

Truog, RD, Mitchell, C & Daley, GQ. **The Toughest Triage — Allocating Ventilators in a Pandemic.** March 23, 2020 New England Journal of Medicine. https://www.nejm.org/doi/full/10.1056/NEJMp2005689

Italian Society of Anesthesia, Analgesia, Resuscitation and Intensive Care (Società Italiana di Anestesia Analgesia Rianimazione e Terapia Intensiva [SIAARTI]). Clinical ethics recommendations for the allocation of intensive care treatments, in exceptional, resource-limited circumstances.

http://www.siaarti.it/SiteAssets/News/COVID19%20-%20documenti%20SIAARTI/SIAARTI%20-%20Covid-19%20-%20Clinical%20Ethics%20Reccomendations.pdf

Zangrillo A Beretta L Scandroglio AM et al. Characteristics, treatment, outcomes and cause of death of invasively ventilated patients with COVID-19 ARDS in Milan, Italy. Crit Care Resusc. 2020; 22: 200-211. https://pubmed.ncbi.nlm.nih.gov/32900326/

CARE OF HEALTH-CARE STAFF.

Greenberg N, Weston D, Hall C *et al.* **The mental health of staff working in intensive care during COVID-19.** medRxiv Nov 05 2020.

https://www.medrxiv.org/content/10.1101/2020.11.03.20208322v2

[This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

Royal College of Psychiatrists. Covid-19: Workforce.

https://www.rcpsych.ac.uk/about-us/responding-to-covid-19/responding-to-covid-19-guidance-for-clinicians/staff-and-workforce

ICRC. COVID-19 and Violence Against Health-Care – Safer COVID-19 Response: Checklist for Health-Care Services. 16 June 2020.

https://www.icrc.org/en/publication/covid-19-and-violence-against-health-care-safer-covid-19-response-checklist-health-care

NHS. Workforce guidance for mental health, learning disabilities and autism, and specialised commissioning services during the coronavirus pandemic. 08 April 2020. https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/C0074-MHLDA-Covid-19-Guidance-Workforce-final-v1-1.pdf

Walton M, Murray E, Christian MD. **Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic** [published online ahead of print, 2020 Apr 28]. *Eur Heart J Acute Cardiovasc Care*. 2020;2048872620922795.

https://pubmed.ncbi.nlm.nih.gov/32342698/

INFECTION CONTROL

Public Health England. **COVID-19: infection prevention and control (IPC).** (Guidance on infection prevention and control for COVID-19. Sustained community transmission is occurring across the UK.) (Includes link to dental appendix). Updated 20 October 2020. https://www.gov.uk/government/publications/wuhan-novel-coronavirus-infection-prevention-and-control

ECDC. (European Centers for Disease Prevention and Control). **Infection Prevention and Control and preparedness for COVID-19 in health care settings.**Second update 31 March 2020.

https://www.ecdc.europa.eu/sites/default/files/documents/Infection-prevention-control-for-the-care-of-patients-with-2019-nCoV-healthcare-settings_update-31-March-2020.pdf

Centers for Disease Control and Prevention. **Coronavirus disease 2019 (COVID-19).** Updated 3 June 2020. https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html

Al-Tawfiq JA, Memish ZA. Guide to infection control in the healthcare setting. Covid-19, the 2019-novel coronavirus (2019-NCOV, SARS-CoV-2) Ed: Mehtar S. International Society for Infectious Diseases 2020. https://isid.org/guide/pathogens/covid19/

Chin AWH *et al.* **Stability of SARS-CoV-2 in different environmental conditions.** The Lancet Microbe. 2 April 2020

https://www.sciencedirect.com/science/article/pii/S2666524720300033?via%3Dihub

Goldman E. Exaggerated risk of transmission of COVID-19 by fomites. [Comment] The Lancet July 3, 2020 https://www.thelancet.com/pdfs/journals/laninf/PIIS1473-3099(20)30561-2.pdf

Guo Z-D et al. Aerosol and Surface Distribution of Severe Acute Respiratory Syndrome Coronavirus 2 in Hospital Wards, Wuhan, China, 2020. EID Journal 26, No 7: https://wwwnc.cdc.gov/eid/article/26/7/20-0885_article

ICRC. **COVID-19:** General Guidance for the Management of the Dead. 16 June 2020. https://www.icrc.org/en/publication/covid-19-general-guidance-management-dead

Jiang F et al. **Detection of Severe Acute Respiratory Syndrome Coronavirus 2 RNA on Surfaces in Quarantine Rooms.** Emerg Infect Dis. 2020;26(9):2162-2164. https://dx.doi.org/10.3201/eid2609.201435

Kampf G et al. Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents. Journal of Hospital Infection 104,3; March 2020. 246-251. https://www.journalofhospitalinfection.com/article/S0195-6701(20)30046-3/fulltext

Kampf G et al. Corrigendum to "Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents" [J Hosp Infect 104 (2020) 246–251] June 17, 2020DOI:https://doi.org/10.1016/j.jhin.2020.06.001

Otter JA, Donskey C, Yezli S, et al. **Transmission of SARS and MERS coronaviruses and influenza virus in healthcare settings: the possible role of dry surface contamination.** J Hosp Infect. 2016 Mar;92(3):235-50. doi: 10.1016/j.jhin.2015.08.027 Epub 2015 Oct 3. PMID: 26597631; PMCID: PMC7114921. https://pubmed.ncbi.nlm.nih.gov/26597631/

Riddell, S., Goldie, S., Hill, A. *et al.* **The effect of temperature on persistence of SARS-CoV-2 on common surfaces.** *Virol J* **17,** 145 (2020). https://doi.org/10.1186/s12985-020-01418-7

Srivatsan S et al. **Preliminary support for a "dry swab, extraction free" protocol for SARS-CoV-2 testing via RT-qPCR.** (This article is a preprint and has not been certified by peer review).

https://www.biorxiv.org/content/10.1101/2020.04.22.056283v1

van Doremalen N *et al.* Ae**rosol and surface stability of SARS-CoV-2 as compared to SARS-CoV-1.** NEJM 17 March 2020. https://www.nejm.org/doi/full/10.1056/NEJMc2004973

WHO. Infection prevention and control for the safe management of a dead body in the context of COVID-19: interim guidance, 24 March 2020. https://apps.who.int/iris/handle/10665/331538

WHO. Cleaning and disinfection of environmental surfaces in the context of COVID-19. 16 May 2020. https://www.who.int/publications-detail/cleaning-and-disinfection-of-environmental-surfaces-inthe-context-of-covid-19

PPE and Masks

Bhaskar ME, Arun S. **SARS-CoV-2 Infection Among Community Health Workers in India Before and After Use of Face Shields.** *JAMA.* Published online August 17, 2020. doi:10.1001/jama.2020.15586

https://jamanetwork.com/journals/jama/fullarticle/2769693

BMJ. Face masks for the public during the covid-19 crisis. *BMJ* 2020;369:m1435. https://www.bmj.com/content/369/bmj.m1435

Chu DK et al. Physical distancing, face masks, and eye protection to prevent person-to-person transmission of SARS-CoV-2 and COVID-19: a systematic review and meta-analysis. The Lancet. Published: June 01, 2020 https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31142-9/fulltext

ECDC (European Centre for Disease Prevention and Control). **Options for the decontamination and reuse of respirators in the context of the COVID-19 pandemic.** 8 June 2020. https://www.ecdc.europa.eu/en/publications-data/options-decontamination-and-reuse-respirators-covid-19-pandemic

ECDC. Using face masks in the community. Reducing COVID-19 transmission from potentially asymptomatic or pre-symptomatic people through the use of face masks. 8 April 2020.

https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-use-face-masks-community.pdf

ECDC. Guidance for wearing and removing personal protective equipment in healthcare settings for the care of patients with suspected or confirmed **COVID-19.** February 2020.

https://www.ecdc.europa.eu/sites/default/files/documents/COVID-19-guidance-wearing-and-removing-personal-protective-equipment-healthcare-settings-updated.pdf

Feng S et al. **Rational use of face masks in the COVID-19 pandemic.** Published: March 20, 2020 DOI: https://doi.org/10.1016/S2213-2600(20)30134-X

Ghandi M, Rutherford GW. Facial Masking for Covid-19 — Potential for "Variolation" as We Await a Vaccine. NEJM Sept 8 2020. https://www.nejm.org/doi/full/10.1056/NEJMp2026913

Howard, J. et al. Face Masks Against COVID-19: An Evidence Review. *Preprints* 2020, 2020040203 (doi: 10.20944/preprints 202004.0203.v1). https://www.preprints.org/manuscript/202004.0203/v1

Leung, N.H.L., Chu, D.K.W., Shiu, E.Y.C. *et al.* **Respiratory virus shedding in exhaled breath and efficacy of face masks.** *Nat Med* **26**, 676–680 (2020). https://doi.org/10.1038/s41591-020-0843-2

Mitze T, Kosfeld R, Rode J, Wälde K. Face masks considerably reduce COVID-19 cases in Germany. Proc Natl Acad Sci U S A. 2020 Dec 22;117(51):32293-32301. doi: 10.1073/pnas.2015954117. Epub 2020 Dec 3. PMID: 33273115; PMCID: PMC7768737. https://pubmed.ncbi.nlm.nih.gov/33273115/

Rader B, White LF, Burns MR et al. **Mask-wearing and control of SARS-CoV-2 transmission in the USA: a cross-sectional study**. The Lancet Digital Health. Published:January 19, 2021DOI:https://doi.org/10.1016/S2589-7500(20)30293-4

The Royal Society and the British Academy. Face masks and coverings for the general public: Behavioural knowledge, effectiveness of cloth coverings and public messaging. 26 June 2020. https://royalsociety.org/-/media/policy/projects/set-c/set-c-facemasks.pd [This paper is a pre-print and has not been subject to formal peer-review].

Shakleton R, Sirull R. **Why we must continue wearing masks and social distancing.** IHME August 18, 2020. http://www.healthdata.org/acting-data/why-we-must-continue-wearing-masks-and-social-distancing

WHO **Mask use in the context of Covid-19**. 1 December 2020. <a href="https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak

WHO. Infection prevention and control during health care when Covid-19 is suspected. 19th March 2020. https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125

Zhao M et al. Household Materials Selection for Homemade Cloth Face Coverings and Their Filtration Efficiency Enhancement with Triboelectric Charging. Nano Lett. 2020, 20, 7, 5544–5552. Publication Date:June 2, 2020 https://doi.org/10.1021/acs.nanolett.0c02211

LOW INCOME SETTINGS

Massinga Loembé, M., Tshangela, A., Salyer, S.J. *et al.* **COVID-19 in Africa: the spread and response**. *Nat Med* (2020). https://doi.org/10.1038/s41591-020-0961-x

Refugees and refugee camps

Ayebare RR. Adoption of COVID-19 triage strategies for low income settings. Lancet Respir Med 2020;8:e11-e12.

https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(20)30114-4/fulltext

Cranfield University. **Protecting refugees during COVID-19.** 8 April 2020. https://www.cranfield.ac.uk/press/news-2020/protecting-refugees-during-covid-19

Dahab N et al. **COVID-19 control in low-income settings and displaced populations: what can realistically be done?** 30 March 2020 (update 2 April 2020)

https://www.lshtm.ac.uk/newsevents/news/2020/covid-19-control-low-incomesettings-and-displaced-populations-what-can

IASC. Interim guidance: Scaling-up COVID-19 outbreak readiness and response operations in humanitarian situations including camps and camp-like settings (Version 1.1, March 2020).

https://reliefweb.int/report/world/interim-guidance-scaling-covid-19-outbreak-readiness-and-response-operations

IASC. Interim Guidance on Public Health and Social Measures for COVID-19 Preparedness and Response Operations in Low Capacity and Humanitarian Settings. 6 May 2020. https://interagencystandingcommittee.org/health/interim-quidance-public-health-and-social-measures-covid-19-preparedness-and-response

IASC. IASC Guidance on Operational considerations for Multisectoral Mental Health and Psychosocial Support Programmes during the COVID-19 Pandemic. 29 May 2020. https://interagencystandingcommittee.org/iasc-reference-group-mental-health-and-psychosocial-support-emergency-settings/iasc-guidance

The Lancet Editorial. **Humanitarian crises in a global pandemic**. The Lancet 396, ISSUE 10249, P447, Aug 15, 2020. DOI: https://doi.org/10.1016/S0140-6736(20)31749-9

Refugees International. **COVID-19 and the displaced: addressing the threat of the novel coronavirus in humanitarian emergencies. 30 March 2020.**https://www.refugeesinternational.org/reports/2020/3/29/covid-19-and-the-displaced-addressing-the-threat-of-the-novel-coronavirus-in-humanitarian-emergencies

Truelove S et al. The potential impact of COVID-19 in refugee camps in Bangladesh and beyond: a modeling study. *PLoS Med.* 2020; **17**e1003144 https://doi.org/10.1371/journal.pmed.1003144

UNSW Sydney, Kaldor Centre for International Refugee Law. **Considering the impact of COVID-19 on refugees.**

https://www.kaldorcentre.unsw.edu.au/news/considering-impact-covid-19-refugees

Sphere

Sphere. **Covid-19 guidance based on humanitarian standards.** https://spherestandards.org/coronavirus

THE VIRUS

General

Amendola A, Bianchi S, Gori M, Colzani D, Canuti M, Borghi E, et al. **Evidence of SARS-CoV-2 RNA in an oropharyngeal swab specimen, Milan, Italy, early December 2019.** Emerg Infect Dis. 2021 Feb https://doi.org/10.3201/eid2702.204632

Bryner J. **The coronavirus did not escape from a lab. Here's how we know.** Live Science 23 March 2020.

https://www.livescience.com/coronavirus-not-human-made-in-lab.html?fbclid=lwAR1tWkfVZv8c19U5EyWjfFbQ5ibTlhwHLRoF6M5mSLxfFz7ysysWMDUzXV4

Cash, R., Patel, V. Has COVID-19 subverted global health? The Lancet. VOLUME 395, ISSUE 10238, P1687-1688, MAY 30, 2020. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)31089-8/fulltext

Calisher C. et al. **Statement in support of the scientists, public health professionals and medical professionals of China combatting COVID-19**.19 February 2020. Lancet. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30418-9/fulltext

Lancet Editorial. **COVID-19: the worst may be yet to come.** The Lancet 396; 71. July 11 2020 https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31517-8.pdf

Wölfel, R., Corman, V.M., Guggemos, W. *et al.* **Virological assessment of hospitalized patients with COVID-2019.** *Nature* (2020). https://doi.org/10.1038/s41586-020-2196-x

Epidemiology

Adam, D.C. *et al.* Clustering and superspreading potential of SARS-CoV-2 infections in Hong Kong. *Nat Med* (2020). https://doi.org/10.1038/s41591-020-1092-0

Althouse BM et al. **Stochasticity and heterogeneity in the transmission dynamics of SARS-CoV-2.** Cornell University. <u>arXiv:2005.13689</u> [q-bio.PE] [e-prints posted on arXiv are not peer-reviewed by arXiv; they should not be relied upon without context to guide clinical practice or health-related behaviour and should not be reported in news media as established information without consulting multiple experts in the field]

Armstrong RA, Kane AD, Kursumovic E et al. **Mortality in patients admitted to intensive care with COVID-19: an updated systematic review and meta-analysis of observational studies.** Anaesthesia. 1 Feb 2021.

https://doi.org/10.1111/anae.15425

Bilinski A, Emanuel EJ. **COVID-19 and Excess All-Cause Mortality in the US and 18 Comparison Countries.** *JAMA*. Published online October 12, 2020. doi:10.1001/jama.2020.20717

https://jamanetwork.com/journals/jama/fullarticle/2771841

Casalegno JS, Ottmann M, Duchamp MB. et al. **Rhinoviruses delayed the circulation of the pandemic influenza A (H1N1) 2009 virus in France.** Clin Microbiol Infect. 2010 Apr;16(4):326-9. Epub 2010 Jan 28. PMID: 20121829. DOI: 10.1111/j.1469-0691.2010.03167.x

Cavanaugh AM, Thoroughman D, Miranda H, Spicer K. Suspected Recurrent SARS-CoV-2 Infections Among Residents of a Skilled Nursing Facility During a Second COVID-19 Outbreak — Kentucky, July–November 2020. MMWR Morb Mortal Wkly Rep 2021;70:273–277.

DOI: http://dx.doi.org/10.15585/mmwr.mm7008a3external icon.

Challen R, Brooks-Pollock E, Read JM et al. Risk of mortality in patients infected with SARS-CoV-2 variant of concern 202012/1: matched cohort study.

BMJ 2021; 372:n579 (Published 10 March 2021) doi: https://doi.org/10.1136/bmj.n579

Chan J F-W et al. A familial cluster of pneumonia associated with the 2019 novel coronavirus indicating person-to-person transmission: a study of a family cluster. Lancet VOLUME 395, ISSUE 10223, P514-523, FEBRUARY 15, 2020 DOI:https://doi.org/10.1016/S0140-6736(20)30154-9

Chen N et al. Epidemiological and clinical characteristics of 99 cases of 2019 novel coronavirus pneumonia in Wuhan, China: a descriptive study. The Lancet 30 Jan 2020. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30211-7/fulltext

Choi EM. et al. In-flight transmission of severe acute respiratory syndrome coronavirus 2. Emerg Infect Dis. 2020 Nov [date cited]. https://doi.org/10.3201/eid2611.203254

Clark A et al. Global, regional, and national estimates of the population at increased risk of severe COVID-19 due to underlying health conditions in 2020: a modelling study. The Lancet Global Health. 15 June 2020. https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30264-3/fulltext

Cowger TL et al., Comparison of Weighted and Unweighted Population Data to Assess Inequities in Coronavirus Disease 2019 Deaths by Race/Ethnicity Reported by the US Centers for Disease Control and Prevention. *JAMA Netw Open.* 2020;3(7):e2016933.

https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2768722

Davies, N.G., Klepac, P., Liu, Y. et al. **Age-dependent effects in the transmission and control of COVID-19 epidemics**. Nat Med (2020). https://doi.org/10.1038/s41591-020-0962-9

Davies NG, Jarvis CI CMMID COVID-19 Working Group *et al.* **Increased hazard of death in community-tested cases of 4 SARS-CoV-2 Variant of Concern 202012/01.** medRxiv preprint doi: https://doi.org/10.1101/2021.02.01.21250959 this version posted February 3, 2021 (Preliminary – not peer reviewed)

Davies NG, Jarvis CI, CMMID COVID-19 Working Group, et al. **Increased mortality in community-tested cases of SARS-CoV-2 lineage B.1.1.7** medRxiv 05 March 2021 https://www.medrxiv.org/content/10.1101/2021.02.01.21250959v3

Davies NG, Abbott S, Barnard RC et al. Estimated transmissibility and impact of SARS-CoV-2 lineage B.1.1.7 in England. Science 03 March 2021 https://science.sciencemag.org/content/early/2021/03/03/science.abg3055

Deslandes A et al. **SARS-COV-2** was already spreading in France in late **December 2019.** International Journal of Antimicrobial Agents 3 May 2020 https://www.sciencedirect.com/science/article/pii/S0924857920301643

Faust JS, del Rio C. **Assessment of Deaths From COVID-19 and From Seasonal Influenza.** *JAMA Intern Med.* Published online May 14, 2020. doi:10.1001/jamainternmed.2020.2306 https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2766121

Fisher DA, Carson G. **Back to basics: the outbreak response pillars.** The Lancet. August 17, 2020DOI: https://doi.org/10.1016/S0140-6736(20)31760-8

Frieden TR, Lee CT. Identifying and Interrupting Superspreading Events—Implications for Control of Severe Acute Respiratory Syndrome Coronavirus 2. Emerg Infect Dis. 2020;26(6):1059-1066. https://dx.doi.org/10.3201/eid2606.200495

Furuse Y et al. Clusters of Coronavirus Disease in Communities, Japan, January–April 2020. EID Journal, Volume 26, Number 9-September 2020 (Early release). https://wwwnc.cdc.gov/eid/article/26/9/20-2272 article

Ganyani T et al. Estimating the generation interval for coronavirus disease (COVID-19) based on symptom onset data, March 2020. Euro Surveill. 2020; 25(17): pii=2000257. https://doi.org/10.2807/1560-7917.ES.2020.25.17.2000257

Gatalo O et al. **Associations between phone mobility data and COVID-19 cases The Lancet Infectious Diseases**. Published:September 15, 2020DOI:https://doi.org/10.1016/S1473-3099(20)30725-8

Giordano, G., Blanchini, F., Bruno, R. *et al.* **Modelling the COVID-19 epidemic and implementation of population-wide interventions in Italy.** *Nat Med* (2020). https://doi.org/10.1038/s41591-020-0883-7

Gudbjartsson DF et al. **Spread of SARS-CoV-2 in the Icelandic Population.** New England Journal of Medicine.14 April 2020 https://www.nejm.org/doi/full/10.1056/NEJMoa2006100
He, X., Lau, E.H.Y., Wu, P. *et al.* **Temporal dynamics in viral shedding and transmissibility of COVID-19.** *Nat Med* **26**, 672–675 (2020). https://doi.org/10.1038/s41591-020-0869-5

Hodcroft EB et al. Emergence and spread of a SARS-CoV-2 variant through Europe in the summer of 2020. medRxiv November 27, 2020 doi: https://doi.org/10.1101/2020.10.25.20219063

[This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.]

Jarvis CI et al. Quantifying the impact of physical distance measures on the transmission of COVID-19 in the UK. (Non-peer reviewed preprint.) 3 April 2020. medRxiv 2020.03.31.20049023; doi: https://doi.org/10.1101/2020.03.31.20049023

Jeffrey-Smith A, Dun-Campbell K, Janarthanan R 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 Vol 3. 25 Feb 2021
DOI:https://doi.org/10.1016/j.lanepe.2021.100038

Jing Q-L et al. Household secondary attack rate of COVID-19 and associated determinants in Guangzhou, China: a retrospective cohort study. The Lancet Infectious Diseases. 17 June 2020.

https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30471-0/fulltext

Kearns C, Kearns N. The role of comics in public health communication during the COVID-19 pandemic. J Vis Commun Med. 2020 Jul;43(3):139-149. doi: 10.1080/17453054.2020.1761248. Epub 2020 Jul 9. PMID: 32643470. https://pubmed.ncbi.nlm.nih.gov/32643470/

Kearns C, Fisher D, Chong YS. **The infective nurture of pandemic comics**. The Lancet Correspondence. Published:December 10, 2020 DOI:https://doi.org/10.1016/S0140-6736(20)32550-2

Kim D, Quinn J, Pinsky B et al. **Rates of Co-infection Between SARS-CoV-2 and Other Respiratory Pathogens.** *JAMA.* 2020;323(20):2085-2086. doi:10.1001/jama.2020.6266 https://jamanetwork.com/journals/jama/fullarticle/2764787

Nicolelis M et al. How super-spreader cities, highways, hospital bed availability, and dengue fever influenced the COVID-19 epidemic in Brazil. medRxiv doi: https://doi.org/10.1101/2020.09.19.20197749 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice.]

Pedro N, Silva CN, Magalhaes et al. **Dynamics of a dual SARS-CoV-2 strain co-infection on a prolonged viral shedding COVID-19 case: insights into clinical severity and disease duration.** *Microorganisms* 2021, 9, 300. https://doi.org/10.3390/microorganisms9020300

Pietri L, Giorgi R, Begu A et al. Excess body weight is an independent risk factor for severe forms of COVID-19. Metabolism 117. April 2021. https://www.sciencedirect.com/science/article/pii/S0026049521000032

Pekar J, Worobey M, Moshiri N et al. **Timing the SARS-CoV-2 index case in Hubei province.** *Science* 18 Mar 2021: DOI: https://doi.org/10.1126/science.abf8003

Popkin BM et al. Individuals with obesity and COVID-19: A global perspective on the epidemiology and biological relationships. Obesity Reviews 26 August 2020. https://doi.org/10.1111/obr.13128

Prather KA, Wang CC, Schooley RT. Reducing transmission of SARS-CoV-2. Science 27 May 2020.

https://science.sciencemag.org/content/early/2020/05/27/science.abc6197

Pung R et al. Investigation of three clusters of COVID-19 in Singapore: implications for surveillance and response measures. 16 March 2020. https://www.thelancet.com/journals/lanpub/article/PIIS0140-6736(20)30528-6/fulltext

Qin J et al. Estimation of incubation period distribution of COVID-19 using disease onset forward time: A novel cross-sectional and forward follow-up study. Science Advances 14 Aug 2020: Vol. 6, no. 33, eabc1202 DOI: 10.1126/sciadv.abc1202

https://advances.sciencemag.org/content/6/33/eabc1202#:~:text=Such%20a%20met hod%20enhances%20the,CI%3A%2013.64%20to%2014.90).

Sakurai A et al. **Natural History of Asymptomatic SARS-CoV-2 Infection**. N Engl J Med 12 June 2020. https://www.nejm.org/doi/full/10.1056/NEJMc2013020
Tillet RL et al. **Genomic evidence for reinfection with SARS-CoV-2: a case study.** The Lancet Infectious Diseases. Published:October 12 2020, https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30764-7/fulltext#%20

Swadi T, Geoghegan JL, Devine T, McElnay C, Sherwood J, Shoemack P, et al. **Genomic evidence of in-flight transmission of SARS-CoV-2 despite predeparture testing**. Emerg Infect Dis. 27; No 3. 2021 https://doi.org/10.3201/eid2703.204714

Volz E, Mishra S, Chand M et al. **Transmission of SARS-CoV-2 Lineage B.1.1.7 in England: Insights from linking epidemiological and genetic data.** medRxiv.31 Dec 2020.https://virological.org/t/transmission-of-sars-cov-2-lineage-b-1-1-7-in-england-insights-from-linking-epidemiological-and-genetic-data/576

Williamson, E.J., Walker, A.J., Bhaskaran, K. et al. **OpenSAFELY: factors associated with COVID-19 death in 17 million patients**. Nature (2020). https://doi.org/10.1038/s41586-020-2521-4

Worobey M *et al.* **The emergence of SARS-CoV-2 in Europe and North America.** *Science* 10 Sep 2020: eabc8169 DOI: 10.1126/science.abc8169 https://science.sciencemag.org/content/early/2020/09/11/science.abc8169

Yan, L., Zhang, H., Goncalves, J. *et al.* **An interpretable mortality prediction model for COVID-19 patients**. *Nat Mach Intell* 2, 283–288 (2020). https://doi.org/10.1038/s42256-020-0180-7

SARS-CoV-2 Seroprevalence

Eckerle I, Meyer B. Comment. SARS-CoV-2 seroprevalence in COVID-19 hotspots. The Lancet 6 July 2020.

https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31482-3.pdf

Pollan M et al. Prevalence of SARS-CoV-2 in Spain (ENE-COVID): a nationwide, population-based seroepidemiological study. The Lancet. 6 July 2020. DOI:https://doi.org/10.1016/S0140-6736(20)31483-5

Stringhini S. et al. Seroprevalence of anti-SARS-CoV-2 IgG antibodies in Geneva, Switzerland (SEROCoV-POP): a population-based study. The Lancet 11 June 2020. DOI:https://doi.org/10.1016/S0140-6736(20)31304-0

Uyoga S et al. Seroprevalence of anti-SARS-CoV-2 IgG antibodies in Kenyan blood donors.

medRxiv 2020.07.27.20162693; doi: https://doi.org/10.1101/2020.07.27.20162693 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.].

Immunology

Aleksova A. et al. COVID-19 and renin-angiotensin system inhibition: role of angiotensin converting enzyme 2 (ACE2) - Is there any scientific evidence for controversy? Journal of Internal Medicine 27 May 2020. https://doi.org/10.1111/joim.13101

Bastard P. et al. **Auto-antibodies against type I IFNs in patients with life-threatening COVID-19.** *Science* 24 Sep 2020: eabd4585 DOI: 10.1126/science.abd4585 https://science.sciencemag.org/content/early/2020/09/23/science.abd4585

Braun J et al. SARS-CoV-2-reactive T cells in healthy donors and patients with

COVID-19. *Nature* (2020). https://doi.org/10.1038/s41586-020-2598-9
Dee K, Goldfarb DM, Haney J et al. Human rhinovirus infection blocks SARS-CoV-2 replication within the respiratory epithelium: implications for COVID-19

epidemiology. *The Journal of Infectious Diseases*, 23 March 2021 iiab147, https://doi.org/10.1093/infdis/jiab147

Diao B et al. Reduction and Functional Exhaustion of T Cells in Patients With Coronavirus Disease 2019 (COVID-19). Front. Immunol., 01 May 2020 https://doi.org/10.3389/fimmu.2020.00827

Dorward DA. et al. **Tissue-specific tolerance in fatal Covid-19.** medRxiv **doi:** https://doi.org/10.1101/2020.07.02.20145003

[This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

Fachetti F. et al. SARS-CoV2 vertical transmission with adverse effects on the newborn revealed through integrated immunohistochemical, electron microscopy and molecular analyses of Placenta. The Lancet EBioMedicine Volume 59, 102951, September 01, 2020 https://www.thelancet.com/journals/ebiom/article/PIIS2352-3964(20)30327-3/fulltext

Garvin MR et al. A mechanistic model and therapeutic interventions for COVID-19 involving a RAS-mediated bradykinin storm. eLife July 7 2020. https://elifesciences.org/articles/59177

Giamarellos-Bourboulis EJ at al. Complex Immune Dysregulation in COVID-19 Patients with Severe Respiratory Failure. (In Press – corrected proof) Cell Host & Microbe 2020. https://doi.org/10.1016/j.chom.2020.04.009

Huo, J., Le Bas, A., Ruza, R.R. *et al.* **Neutralizing nanobodies bind SARS-CoV-2 spike RBD and block interaction with ACE2.** *Nat Struct Mol Biol* (2020). https://doi.org/10.1038/s41594-020-0469-6

Joyner MJ, Carter RE, Senefeld JW et al. **Convalescent Plasma Antibody Levels and the Risk of Death from Covid-19**. NEJM. Jan 13 2021. https://www.nejm.org/doi/full/10.1056/NEJMoa2031893

Khamsi R. Rogue antibodies could be driving severe COVID-19. Nature News Feature. 19 January 2021. https://www.nature.com/articles/d41586-021-00149-1

Korber B. et al. Tracking changes in SARS-CoV-2 Spike: evidence that D614G increases infectivity of the COVID-19 virus. Cell. 3 July 2020. https://doi.org/10.1016/j.cell.2020.06.043

Lee J et al. (2020). Immunophenotyping of COVID-19 and influenza highlights the role of type I interferons in development of severe COVID-19. Science Immunology. 5. eabd1554. 10.1126/sciimmunol.abd1554. sciencemag.org/content/5/49/eabd1554 https://immunology.sciencemag.org/content/5/49/eabd1554

Le Bert N *et al.* SARS-CoV-2-specific T cell immunity in cases of COVID-19 and SARS, and uninfected controls. *Nature* (2020). https://doi.org/10.1038/s41586-020-2550-z

Lumley SF, Wei J, O'Donnell D et al. **The duration, dynamics and determinants of SARS-CoV-2 antibody responses in individual healthcare workers.** medRxiv 4 Nov 2020. https://www.medrxiv.org/content/10.1101/2020.11.02.20224824v1 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

Mackey K et al. Risks and Impact of Angiotensin-Converting Enzyme Inhibitors or Angiotensin-Receptor Blockers on SARS-CoV-2 Infection in Adults: A Living Systematic Review. Ann Intern Med 2020 Aug 4;173(3):195-203. doi: 10.7326/M20-1515. Epub 2020 May 15 https://pubmed.ncbi.nlm.nih.gov/32422062/

Nagarkatti P et al. **Cannabinoids as novel anti-inflammatory drugs.** Future Med Chem. 2009 Oct; 1(7): 1333–1349. doi: 10.4155/fmc.09.93

Pierce CA et al. Immune responses to SARS-CoV-2 infection in hospitalized pediatric and adult patients. *Science Translational Medicine* 21 Sep 2020: eabd5487 DOI: 10.1126/scitranslmed.abd5487 https://stm.sciencemag.org/content/early/2020/09/21/scitranslmed.abd5487

Poston D, Weisblum Y, Wise H, et al **Absence of SARS-CoV-2** neutralizing activity in pre-pandemic sera from individuals with recent seasonal coronavirus infection. medRxiv [Preprint]. 2020: 2020.10.08.20209650. doi: https://doi.org/10.1101/2020.10.08.20209650 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.]

Risitano, A.M., Mastellos, D.C., Huber-Lang, M. et al. Complement as a target in COVID-19?. Nat Rev Immunol (2020). https://doi.org/10.1038/s41577-020-0320-7

Robbiani DF et al. Convergent Antibody Responses to SARS-CoV-2 Infection in Convalescent Individuals. bioRxiv preprint. 22 May 2020. [This article is a preprint and has not been certified by peer review] https://www.biorxiv.org/content/10.1101/2020.05.13.092619v2

Roche JA, Roche R. **A hypothesized role for dysregulated bradykinin signaling in COVID-19 respiratory complications.** FASEB J. 2020 May 2: 10.1096/fj.202000967.doi: 10.1096/fj.202000967 [Epub ahead of print]

Seow. J et al. Longitudinal evaluation and decline of antibody responses in SARS-CoV-2 infection. medRxiv. doi: https://doi.org/10.1101/2020.07.09.20148429 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice].

Takahashi T et al. **Sex differences in immune responses to SARS-CoV-2 that underlie disease outcomes.** medRxiv

https://www.medrxiv.org/content/10.1101/2020.06.06.20123414v2

[This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.]

Toelzer C et al. Unexpected free fatty acid binding pocket in the cryo-EM structure of SARS-CoV-2 spike protein. *Science* 21Sep 2020: eabd3255 https://science.sciencemag.org/content/early/2020/09/18/science.abd3255

Wang X et al. SARS-CoV-2 infects T lymphocytes through its spike protein-mediated membrane fusion. 7 April 2020 Nature Cellular and Molecular Immunology. https://www.nature.com/articles/s41423-020-0424-9

Ward H et al. (for the REACT study team). **Declining prevalence of antibody positivity to SARS-CoV-2: a community study of 365,000 adults.** https://www.imperial.ac.uk/media/imperial-college/institute-of-global-health-innovation/MEDRXIV-2020-219725v1-Elliott.pdf

Wibmer CK, Ayres F, Hermanus T et al. **SARS-CoV-2 501Y.V2 escapes neutralization by South African COVID-19 donor plasma.** bioRxiv 19 January 2021. https://www.biorxiv.org/content/10.1101/2021.01.18.427166v1 [These are preliminary reports that have not been peer-reviewed. They should not be regarded as conclusive, guide clinical practice/health-related behaviour, or be reported in news media as established information].

Zhang Q. et al. Inborn errors of type I IFN immunity in patients with life-threatening COVID-19. Science 24 Sep 2020: eabd4570 DOI: 10.1126/science.abd4570 https://science.sciencemag.org/content/early/2020/09/25/science.abd4570

Zhu F-C et al. Immunogenicity and safety of a recombinant adenovirus type-5-vectored COVID-19 vaccine in healthy adults aged 18 years or older: a randomised, double-blind, placebo-controlled, phase 2 trial.

Lancet. 2020; (published online July 20.) https://doi.org/10.1016/S0140-6736(20)31605-6

Drug & other interactions

de Castro MJ, Pardo-Seco J, Martinón-Torres F. **Nonspecific (Heterologous) Protection of Neonatal BCG Vaccination Against Hospitalization Due to Respiratory Infection and Sepsis.** Clin Infect Dis. 2015 Jun 1;60(11):1611-9. doi: 10.1093/cid/civ144. Epub 2015 Feb 27

https://www.ncbi.nlm.nih.gov/pubmed/25725054

Li J et al. Association of Renin-Angiotensin System Inhibitors With Severity or Risk of Death in Patients With Hypertension Hospitalized for Coronavirus Disease 2019 (COVID-19) Infection in Wuhan, China. *JAMA Cardiol.* Published online April 23, 2020. doi:10.1001/jamacardio.2020.1624 https://jamanetwork.com/journals/jamacardiology/fullarticle/2765049

Mancia G et al. Renin–Angiotensin–Aldosterone System Blockers and the Risk of Covid-19. New England Journal of Medicine. 1 May 2020. https://www.nejm.org/doi/full/10.1056/NEJMoa2006923

Miller A et al. Correlation between universal BCG vaccination policy and reduced morbidity and mortality for COVID-19: an epidemiological study. doi: https://doi.org/10.1101/2020.03.24.20042937

Reynolds HR et al. **Renin–Angiotensin–Aldosterone System Inhibitors and Risk of Covid-19.** New England Journal of Medicine. 1 May 2020. medR_xiv May 2020 https://www.nejm.org/doi/full/10.1056/NEJMoa2008975

VACCINES, TESTS & TREATMENTS

Vaccines

Bar-Zeev N, Moss WJ. **Encouraging results from phase 1/2 COVID-19 vaccine trials**. The Lancet <u>396, Issue10249</u>, P448-449, August 15, 2020. DOI:https://doi.org/10.1016/S0140-6736(20)31611-1

Blumenthal KG, Robinson LB, Camargo Jr CA et al. **Acute Allergic Reactions to mRNA COVID-19 Vaccines.** *JAMA*. Published online March 8, 2021. doi:10.1001/jama.2021.3976.

https://jamanetwork.com/journals/jama/fullarticle/2777417#:~:text=In%20this%20prospective%20cohort%20of,2.47%20per%2010%20000%20vaccinations.

Folegatti PM et al. Safety and immunogenicity of the ChAdOx1 nCoV-19 vaccine against SARS-CoV-2: a preliminary report of a phase 1/2, single-blind, randomised controlled trial. The Lancet. Published:July 20, 2020 DOI:https://doi.org/10.1016/S0140-6736(20)31604-4

Kim YI, Kim D, Yu KM, et al. **Development of spike receptor-binding domain nanoparticles as a vaccine candidate against SARS-CoV-2 infection in ferrets.** mBio. 2021 Mar 2; 2(2): e00230-21. doi: 10.1128/mBio.00230-21. PMID: 33653891; https://mbio.asm.org/content/12/2/e00230-21.long

Krammer, F. **SARS-CoV-2 vaccines in development.** *Nature* **586,** 516–527 (2020). https://doi.org/10.1038/s41586-020-2798-3

Mehrotra DV et al. Clinical Endpoints for Evaluating Efficacy in COVID-19 Vaccine Trials. Annals of Internal Medicine. Research and Reporting Methods 22 October 2020. https://doi.org/10.7326/M20-6169

National Academies of Sciences, Engineering and Medicine. **A Framework for Equitable Allocation of Vaccine for the Novel Coronavirus.** 1st Sept 2020. https://www.nationalacademies.org/our-work/a-framework-for-equitable-allocation-of-vaccine-for-the-novel-coronavirus

Ramasamy MN, Minassian AM, Ewer KJ et al. Safety and immunogenicity of ChAdOx1 nCoV-19 vaccine administered in a prime-boost regimen in young and old adults (COV002): a single-blind, randomised, controlled, phase 2/3 trial. The Lancet volume 396, issue 10267, p1979-1993, December 19, 2020. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)32466-1/fulltext

Rinott E, Youngster I, Lewis YE. Reduction in COVID-19 Patients Requiring Mechanical Ventilation Following Implementation of a National COVID-19 Vaccination Program — Israel, December 2020–February 2021. MMWR Morb Mortal Wkly Rep. ePub: 26 February 2021.

DOI: http://dx.doi.org/10.15585/mmwr.mm7009e3external icon.

Sorensen B, Susrud A, Dalgleish AG. **Biovacc-19: A Candidate Vaccine for Covid-19 (SARS-CoV-2) Developed from Analysis of its General Method of Action for Infectivity.** Published online by Cambridge University Press: 02 June 2020 DOI: https://doi.org/10.1017/grd.2020.8

Spencer AJ, McKay PF, Belij-Rammerstorfer S *et al.* Heterologous vaccination regimens with self-amplifying RNA and Adenoviral COVID vaccines induce superior immune responses than single dose vaccine regimens in mice. bioRxiv 29 January 2021. (Preliminary – not peer Reviewed) https://www.biorxiv.org/content/10.1101/2021.01.28.428665v1

Than Le T et al. **The COVID-19 vaccine development landscape**. Nature 9 April 2020. https://www.nature.com/articles/d41573-020-00073-5

Swissmedic. Side effects of COVID-19 vaccines in Switzerland – update. 26 Feb 2021. https://www.swissmedic.ch/swissmedic/en/home/news/coronavirus-covid-19/nebenwirkungen-covid-19-impfungen-ch-update.html#:~:text=The%20known%2C%20non-serious%20and,body%20dealing%20with%20the%20vaccine.

Vaccines and Related Biological Products Advisory Committee Meeting February 26, 2021. FDA Briefing Document. Janssen Ad26.COV2.S Vaccine for the Prevention of COVID-19. https://www.fda.gov/media/146217/download

Voysey M et al. Safety and efficacy of the ChAdOx1 nCoV-19 vaccine (AZD1222) against SARS-CoV-2: an interim analysis of four randomised controlled trials in Brazil, South Africa, and the UK. The Lancet. Open Access Published:December 08, 2020 DOI:https://doi.org/10.1016/S0140-6736(20)32661-1

Voysey M, Costa Clemens SA, Madhi SA 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. The Lancet February 19, 2021 DOI:https://doi.org/10.1016/S0140-6736(21)00432-3

WHO. **Draft landscape of COVID-19 candidate vaccines**. 09/06/2020. https://www.who.int/publications/m/item/draft-landscape-of-covid-19-candidate-vaccines

Zhu Feng-Cai et al. Immunogenicity and safety of a recombinant adenovirus type-5-vectored COVID-19 vaccine in healthy adults aged 18 years or older: a randomised, double-blind, placebo-controlled, phase 2 trial. The Lancet. July 20, 2020DOI:https://doi.org/10.1016/S0140-6736(20)31605-6

Therapeutics

Beigel JH et al. **Remdesivir for the Treatment of Covid-19 — Preliminary Report**. New England Journal of Medicine 22 May 2020 https://www.nejm.org/doi/10.1056/NEJMoa2007764

Beigel JH. et al. Remdesivir for the Treatment of Covid-19 — Final Report. NEJM Oct 8 2020. https://www.nejm.org/doi/full/10.1056/NEJMoa2007764

CDC. Information for clinicians on Investigational Therapeutics for Patients with COVID-19. 13 April 2020. https://www.cdc.gov/coronavirus/2019-ncov/hcp/therapeutic-options.html

Chen L et al. **Convalescent plasma as a potential therapy for COVID-19**. 27 February 2020. Lancet. https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(20)30141-9/fulltext

Duan K et al. Effectiveness of convalescent plasma therapy in severe COVID-19 patients. PNAS 18 March 2020.

https://www.pnas.org/content/early/2020/04/02/2004168117

Fernandez-Cruz A et al. **Impact of Glucocorticoid treatment in SARS-CoV-2.** 26 May 2020. medRxiv preprint. [This article is a preprint and has not been certified by peer review [what does this mean?]. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice].

https://www.medrxiv.org/content/10.1101/2020.05.22.20110544v1

Mehta P, McAuley DF, Brown M, et al. **COVID-19: consider cytokine storm syndromes and immunosuppression.** Lancet 2020 Mar 28;395(10229): 1033-1034. https://doi.org/10.1016/S0140-6736(20)30628-0

Norrie JD. Remdesivir for COVID-19: challenges of underpowered studies. The Lancet 29 April 2020. DOI: https://doi.org/10.1016/S0140-6736(20)31023-0

The Recovery Collaborative Group. **Dexamethasone in Hospitalized Patients with Covid-19 — Preliminary Report.** NEJM. July 17, 2020

DOI: 10.1056/NEJMoa2021436

https://www.nejm.org/doi/full/10.1056/NEJMoa2021436

Salazar E. et al. **Treatment of Coronavirus Disease 2019 (COVID-19) Patients with Convalescent Plasma.** The American Journal of Pathology. Published:May 26, 2020DOI:https://doi.org/10.1016/j.ajpath.2020.05.014

Wang Y et al. Remdesivir in adults with severe COVID-19: a randomised, double-blind, placebo-controlled, multicentre trial. The Lancet 29 April 2020. DOI:https://doi.org/10.1016/S0140-6736(20)31022-9

Wang I., Zhang Y., Zhang S. Cardiovascular Impairment in COVID-19: Learning From Current Options for Cardiovascular Anti-Inflammatory Therapy. Frontiers in Cardiovascular Medicine, April 2020. DOI. 10.3389/fcvm.2020.00078

WHO Solidarity trial consortium, Pan H et al. **Repurposed antiviral drugs for COVID-19 – interim WHO SOLIDARITY trial results.** <u>medRxiv</u>

doi: https://doi.org/10.1101/2020.10.15.20209817

[This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.]

Antimalarials & other drugs

BMJ Editorial. **Chloroquine and hydroxychloroquine in covid-19.** 8 April 2020. *BMJ* 2020; 369 doi: https://doi.org/10.1136/bmj.m1432

Boulware DR et al. A Randomized Trial of Hydroxychloroquine as Postexposure Prophylaxis for Covid-19. NEJ Med. 3 June 2020 https://www.nejm.org/doi/full/10.1056/NEJMoa2016638#article_citing_articles

Caly, L et al. The FDA-approved drug ivermectin inhibits the replication of SARS-CoV-2 in vitro. Antiviral Research Volume 178, June 2020, 104787 https://doi.org/10.1016/j.antiviral.2020.104787

Chaccour C, Casellas A, Blanco-Di Matteo A et al. The effect of early treatment with ivermectin on viral load, symptoms and humoral response in patients with non-severe COVID-19: A pilot, double-blind, placebo-controlled, randomized clinical trial. The Lancet EClinicalMedicine 19 Jan 2021. DOI:https://doi.org/10.1016/i.eclinm.2020.100720

Cohen MS. Hydroxychloroquine for the Prevention of Covid-19 — Searching for Evidence. NEJ Med 3 June 2020 https://www.nejm.org/doi/full/10.1056/NEJMe2020388

Cortegiani A, Ingoglia G, Ippolito M, Giarratano A, Einav S. A systematic review on the efficacy and safety of chloroquine for the treatment of COVID-19. *J Crit Care*. 2020;57: 279-283. doi: 10.1016/j.jcrc.2020.03.005

D'Alessandro S, Scaccabarozzi D, Signorini L, et al. **The Use of Antimalarial Drugs against Viral Infection.** *Microorganisms*. 2020;8(1):85. Published 2020 Jan 8. https://pubmed.ncbi.nlm.nih.gov/31936284/

Gautret P et al. Hydroxychloroquine and azithromycin as a treatment of COVID-19: Results of an open-label non-randomized clinical trial. Int J Antimicrob Agents 2020; Mar 20. DOI: 10.1016/j.ijantimicag.2020.105949

Geleris J et al. Observational Study of Hydroxychloroquine in Hospitalized Patients with Covid-19. N Engl J Med 2020; 382:2411-2418 https://www.nejm.org/doi/full/10.1056/nejmoa2012410

Jaffe S. Regulators split on antimalarials for COVID-19. 11 April 2020. Lancet. https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30817-5/fulltext

Joseph M et al. Outcomes of hydroxychloroquine usage in United States veterans hospitalized with Covid-19 (Preprint not certified by peer review) doi: https://doi.org/10.1101/2020.04.16.20065920

Kelleni MT. **Nitazoxanide/azithromycin combination for COVID-19: A suggested new protocol for early management.** <u>Pharmacological Research Volume 157</u>, 2020, 104874. https://doi.org/10.1016/j.phrs.2020.104874

Lane J.C.E. et al. Safety of hydroxychloroquine, alone and in combination with azithromycin, in light of rapid wide-spread use for COVID-19: a multinational, network cohort and self-controlled case series study. (Preprint not certified by peer review) medRxiv doi: 10.1101/2020.04.08.20054551

Mayla GSB et al. Chloroquine diphosphate in two different dosages as adjunctive therapy of hospitalized patients with severe respiratory syndrome in the context of coronavirus (SARS-CoV-2) infection: Preliminary safety results of a randomized, double-blinded, phase IIb clinical trial (CloroCovid-19 Study). (Preprint not certified by peer review) medRxiv doi: 10.1101/2020.04.07.20056424

Million M et al. Early treatment of COVID-19 patients with hydroxychloroquine andazithromycin: A retrospective analysis of 1061 cases in Marseille, France.(In Press) Travel Medicine and Infectious Disease, May 2020 https://doi.org/10.1016/j.tmaid.2020.101738

Mitja O et al., A Cluster-Randomized Trial of Hydroxychloroquine as Prevention of Covid-19 Transmission and Disease

medRxiv 2020.07.20.20157651; doi: https://doi.org/10.1101/2020.07.20.20157651 [This article is a preprint and has not been peer-reviewed. It reports new medical research that has yet to be evaluated and so should *not* be used to guide clinical practice.]

The Pharmaceutical Journal. **Could chloroquine be effective against COVID-19?** 3 April 2020. https://www.pharmaceutical-journal.com/news-and-analysis/opinion/correspondence/could-chloroquine-be-effective-against-covid-19/20207868.article?firstPass=false

Principi N, Esposito S. Chloroquine or hydrochloroquine for prophylaxis of COVID-19. Lancet Infectious Diseases. April 17, 2020DOI:https://doi.org/10.1016/S1473-3099(20)30296-6

The RECOVERY Collaborative Group. **Effect of Hydroxychloroquine in Hospitalized Patients with Covid-19**. NEJM Oct 8 2020. https://www.nejm.org/doi/full/10.1056/NEJMoa2022926

Silva Borba MG et al. Effect of high vs low doses of chloroquine diphosphate as adjunctive therapy for patients hospitalised with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) infection. A randomized clinical trial. JAMA Netw Open 2020;3(4.23):2e208857 https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2765499

Touret F, de Lamballerie X. **Of chloroquine and COVID-19.** Antiviral Res. 2020 Mar 5;177. https://www.ncbi.nlm.nih.gov/pubmed/32147496

Tucker R. Chloroquine in severe COVID-19: reviewing the evidence. Hospital HealthCare Europe. 6 May 2020. https://hospitalhealthcare.com/covid-19/chloroquine-in-severe-covid-19-reviewing-the-evidence/

University of Oxford News. PRINCIPLE trial finds antibiotics azithromycin and doxycycline not generally effective treatments for COVID-19. 25 Jan 2021. https://www.ox.ac.uk/news/2021-01-25-principle-trial-finds-antibiotics-azithromycin-and-doxycycline-not-generally

Tests & Testing

Andersson M. et al. Rapid roll out of SARS-CoV-2 antibody testing—a concern BMJ 2020;369:m2420 doi: https://doi.org/10.1136/bmj.m2420 (Letter to BMJ Published 24 June 2020)

(Rapid response to the above letter):

Rapid roll out of SARS-CoV-2 antibody testing—a concern

BMJ 2020;369:m2420 doi: https://doi.org/10.1136/bmj.m2420 (Published 24 June 2020)

Bullard J et al. **Predicting infectious SARS-CoV-2 from diagnostic samples.** 22 May 2020. Clinical Infectious Diseases. https://doi.org/10.1093/cid/ciaa638

CIDRAP. Antibody tests may hold clues to COVID-19 exposure, immunity – but it's complicated. CIDRAP News 15 April 2020. https://www.cidrap.umn.edu/news-perspective/2020/04/antibody-tests-may-hold-clues-covid-19-exposure-immunity

FIND. **SARS-CoV-2 diagnostic pipeline.** (An overview of all SARS-CoV-2 tests commercially available or in development for the diagnosis of COVID-19). https://www.finddx.org/covid-19/pipeline/

Hou YJ et al., SARS-CoV-2 Reverse Genetics Reveals a Variable Infection Gradient in the Respiratory Tract, Cell (2020), https://doi.org/10.1016/j.cell.2020.05.042

Johns Hopkins, Bloomberg School of Public Health. **Serology-based tests for COVID-19.** 15 April 2020. https://www.centerforhealthsecurity.org/resources/COVID-19/serology/Serology-based-tests-for-COVID-19.html

Kennedy-Shaffer, Lee, Michael Baym, and William Hanage. **Perfect as the Enemy of the Good: Using Low-Sensitivity Tests to Mitigate SARS-CoV-2 Outbreaks** (2020). https://dash.harvard.edu/handle/1/37363184

Pilarowski G, Marquez C, Rubio L et al. Field performance and public health response using the BinaxNOW TM Rapid SARS-CoV-2 antigen detection assay during community-based testing. Clin Infect Dis. 2020 Dec 26:ciaa1890. doi: 10.1093/cid/ciaa1890. Epub ahead of print. PMID: 33367619. https://pubmed.ncbi.nlm.nih.gov/33367619/

Sethuraman N et al. **Interpreting Diagnostic Tests for SARS-CoV-2.** *JAMA*. Published online May 6, 2020. doi:10.1001/jama.2020.8259

Takahashi S., Greenhouse B., Rodriguez-Barraquer I. **Are SARS-CoV-2 seroprevalence estimates biased?** OSFPREPRINTS. https://osf.io/y3fxt/

UK Government. **COVID-19:** guidance for sampling and for diagnostic laboratories. (Information for clinical diagnostic laboratories regarding safety, sampling and packaging specimens associated with COVID-19). Updated 16 July 2020. <a href="https://www.gov.uk/government/publications/wuhan-novel-coronavirus-guidance-for-clinical-diagnostic-laboratories?utm_campaign=11461808_COVID-19%20webinars%20w%2Fc%207%20April&utm_medium=email&utm_source=BioIndustry%20Association&dm_i=1TUV,6TNZK,TC908Y,RC8E6,1

UK Government. Guidance. How tests and testing kits for coronavirus (COVID-19) work (Updated 23 December 2020

https://www.gov.uk/government/publications/how-tests-and-testing-kits-for-coronavirus-covid-19-work

WHO. WHO lists two COVID-19 tests for emergency use.

7 April 2020. https://www.who.int/news-room/detail/07-04-2020-who-lists-two-covid-19-tests-for-emergency-use

MISCELLANEOUS

Environment, Animals

Briz-Redon A, Serrano-Aroca A. The effect of climate on the spread of the COVID-19 pandemic: A review of findings, and statistical and modelling techniques. Progress in Physical Geography: Earth and Environment. 4 August 2020. https://doi.org/10.1177/0309133320946302

Conticini E et al. Can atmospheric pollution be considered a co-factor in extremely high level of SARS-CoV-2 lethality in Northern Italy. Science Direct. 4 April 2020. https://doi.org/10.1016/j.envpol.2020.114465

Dbouk T, Drikakis D. **Fluid dynamics and epidemiology: Seasonality and transmission dynamics.** Physics of Fluids 33, 021901 (2021); https://doi.org/10.1063/5.0037640

Lam, T.T., et al. Identifying SARS-CoV-2-related coronaviruses in Malayan pangolins. *Nature* 583, 282–285 (2020). https://doi.org/10.1038/s41586-020-2169-0

Netherlands Government. **COVID-19 on Mink Farms.** https://www.government.nl/latest/news/2020/05/19/new-results-from-research-into-covid-19-on-mink-farms

NghiemLD, et al. **The COVID-19 pandemic: Considerations for the waste and wastewater services sector.** Case Studies in Chemical and Environmental Engineering Volume 1, May 2020, 100006. https://www.sciencedirect.com/science/article/pii/S2666016420300049

Ogen Y. Assessing nitrogen dioxide (NO₂) levels as a contributing factor to coronavirus (COVID-19) fatality. <u>Sci Total Environ.</u> 2020 Apr 11;726:138605. doi: 10.1016/j.scitotenv.2020.138605. [Epub ahead of print]. https://www.ncbi.nlm.nih.gov/pubmed/32302812

OIE (World Organisation for Animal Health). **Considerations for sampling, testing, and reporting of SARS-CoV-2 in animals.** Version 1 7 May 2020. https://www.oie.int/fileadmin/Home/eng/Our scientific expertise/docs/pdf/COV-19/Sampling Testing and Reporting of SARS-CoV-2 in animals final 7May 2020.pdf

Pahuja S, Madan M, Mittal S, et al. **Weather Parameters and COVID-19: A Correlational Analysis**. J Occup Environ Med. 2021 Jan 1;63(1):69-73. doi: 10.1097/JOM.0000000000002082. PMID: 33177471; PMCID: PMC7773164. https://pubmed.ncbi.nlm.nih.gov/33177471/

Shuai L et al. Replication, pathogenicity, and transmission of SARS-CoV-2 in minks, *National Science Review*, , nwaa291, https://doi.org/10.1093/nsr/nwaa291

WHO, FAO, OIE. A Tripartite Guide to Addressing Zoonotic Diseases in Countries. https://extranet.who.int/sph/docs/file/3853

Mass Gatherings

WHO. Critical preparedness, readiness and response actions for COVID-19 (Interim Guidance). Geneva, 4 November 2020 https://www.who.int/publications-detail/critical-preparedness-readiness-and-response-actions-for-covid-19

WHO. How to use WHO risk assessment and mitigation checklist for Mass Gatherings in the context of COVID-19. 13 July 2020. https://www.who.int/publications/i/item/how-to-use-who-risk-assessment-and-mitigation-checklist-for-mass-gatherings-in-the-context-of-covid-19

WHO. Mass Gatherings risk assessment COVID-19: Key considerations. Geneva, 20 March 2020 https://www.who.int/who-documents-detail/mass-gathering-risk-assessment-covid-19-key-considerations

WHO. **Decision tree for risk assessment for mass gathering.** Geneva 8 April 2020 https://www.who.int/who-documents-detail/decision-tree-for-risk-assessment-for-mass-gathering

WHO. **Public Health for Mass Gatherings: Key Considerations**. Geneva, 2015 https://www.who.int/ihr/publications/WHO HSE GCR 2015.5/en/

WHO. Considerations for Mass Gatherings in the context of COVID-19. Annex: Considerations in adjusting public health and social measures in the context of COVID-19. Geneva 14 May 2020.

https://apps.who.int/iris/bitstream/handle/10665/332079/WHO-2019-nCoV-Adjusting PH measures-Mass gatherings-2020.1-eng.pdf?sequence=1&isAllowed=y

WHO. Key planning recommendations for mass gatherings in the context of the current COVID-19 outbreak. Interim Guidance. 29 May 2020. https://www.who.int/publications/i/item/10665-332235

Treatment, Health Care etc.

Ahmad A et al. What does it mean to be vulnerable in the era of COVID-19. The Lancet 27 April 2020. DOI: https://doi.org/10.1016/S0140-6736(20)30979-X

BSGM. (The British Society for Genetic Medicine). **BSGM Guidance on Shielding for vulnerable patients.** 14 April 2020. https://www.bsgm.org.uk/news/bsgm-guidance-on-shielding-for-vulnerable-patients/

Burki T. **Prisons are "in no way equipped" to deal with COVID-19.** The Lancet VOLUME 395, ISSUE 10234, P1411-1412, MAY 02, 2020. DOI:https://doi.org/10.1016/S0140-6736(20)30984-3

Cennimo DJ. Coronavirus Disease 2019 (COVID-19) Treatment & Management. Updated Jan 04 2021. https://emedicine.medscape.com/article/2500114-treatment

Flaxman, S., Mishra, S., Gandy, A. *et al.* **Estimating the effects of non-pharmaceutical interventions on COVID-19 in Europe**. *Nature* (2020). https://doi.org/10.1038/s41586-020-2405-7

The Lancet Editorial. **Redefining vulnerability in the era of COVID-19. The Lancet.** VOLUME 395, ISSUE 10230, P1089, APRIL 04, 2020. DOI:https://doi.org/10.1016/S0140-6736(20)30757-1

WHO. Pulse survey on continuity of essential health services during the COVID-19 pandemic: interim report, 27 August 2020. https://www.who.int/publications/i/item/WHO-2019-nCoV-EHS continuity-survey-2020.1

Nutrition

Kohlmeier M. Avoidance of vitamin D deficiency to slow the COVID-19 pandemic. BMJ Nutrition, Prevention & Health. 2020. http://dx.doi.org/10.1136/bmjnph-2020-000096 Lanham-New SA, Webb AR, Cashman KD, et al. **Vitamin D and SARS-CoV-2 virus/COVID-19 disease.** BMJ Nutrition, Prevention & Health 15 May 2020 http://dx.doi.org/10.1136/bmjnph-2020-000089

IHL & other Legal

ICRC. COVID-19: How IHL provides crucial safeguards during pandemics. 31 March 2020. https://www.icrc.org/en/document/covid-19-how-ihl-provides-crucial-safeguards-during-pandemics?utm_campaign=DP_FORUM%20-%20%20COVID-

<u>19%20response%20in%20conflict%20zones%20hinges%20on%20respect%20for%</u> <u>20international%20humanitarian%20law&utm_source=hs_email&utm_medium=email&utm_content=86397599& hsenc=p2ANq</u>

ICRC. COVID-19 response in conflict zones hinges on respect for international humanitarian law. 16 April 2020. <a href="https://blogs.icrc.org/law-and-policy/2020/04/16/covid-19-response-respect-international-humanitarian-law/?utm_campaign=DP_FORUM%20-%20%20%20COVID-19%20response%20in%20conflict%20zones%20hinges%20on%20respect%20for%20international%20humanitarian%20law&utm_source=hs_email&utm_medium=email&utm_content=86397599&

Taxonomy & genetics

Aksenova AY. Von Willebrand factor and endothelial damage: a possible association with COVID-19. Ecological Genetics 18; No 2, 2020.135-138 https://journals.eco-vector.com/ecolgenet/article/view/33973

Andersen, K.G., Rambaut, A., Lipkin, W.I. *et al.* **The proximal origin of SARS-CoV-2**. *Nat Med* **26**, 450–452 (2020). https://doi.org/10.1038/s41591-020-0820-9

Caspar I van der Made et al. **Presence of Genetic Variants Among Young Men With Severe COVID-19.** *JAMA*. 2020;324(7):663-673. doi:10.1001/jama.2020.13719 https://jamanetwork.com/journals/jama/fullarticle/2768926

Daniloski Z et al. **The Spike D614G mutation increases SARS-CoV-2 infection of multiple human cell types.** bioRxiv 07/07/2020 [This article is a preprint and has not been certified by peer review]

doi: https://doi.org/10.1101/2020.06.14.151357

Ellinghaus D. et al. **Genomewide Association Study of Severe Covid-19 with Respiratory Failure**. N Engl J Med. 17 June 2020. https://www.nejm.org/doi/full/10.1056/NEJMoa2020283

EurekaAlert. A genetic variant inherited from Neanderthals reduces the risk of severe COVID-19. Okinawa Institute of Science and Technology (oist) Graduate University16 Feb 2021. https://www.eurekalert.org/pub releases/2021-02/oios-agv021621.php#:~:text=16-Feb-2021-

,A%20genetic%20variant%20inherited%20from%20Neanderthals%20reduces%20the%20risk%20of,a%20new%20PNAS%20study%20finds.&text=Credit%3A%20Bjorn%20Oberg%2C%20Karolinska%20Institutet.

Gorbalenya A. et al. **Severe acute respiratory syndrome-related coronavirus:** The species and its viruses – a statement of the Coronavirus Study Group. https://www.biorxiv.org/content/10.1101/2020.02.07.937862v1.full.pdf

Grubaugh et al., Making Sense of Mutation: What D614G Means for the COVID-19 Pandemic Remains Unclear, Cell (2020), https://doi.org/10.1016/j.cell.2020.06.040

Greaney AJ, Starr TN, Gilchuk P et al. Complete Mapping of Mutations to the SARS-CoV-2 Spike Receptor-Binding Domain that Escape Antibody Recognition. Cell Host & Microbe. Volume 29, Issue 1, 13 January 2021, Pages 44-57.e9. https://www.sciencedirect.com/science/article/pii/S1931312820306247

Korber B et al., Tracking Changes in SARS-CoV-2 Spike: Evidence that D614G Increases Infectivity of the COVID-19 Virus' Cell. 3 July 2020. https://doi.org/10.1016/j.cell.2020.06.043

Latinne A et al. **Origin and cross-species transmission of bat coronaviruses in China.** *BioRxiv pre-print.* 31 May 2020. https://www.biorxiv.org/content/10.1101/2020.05.31.116061v1

Pairo-Castineira, E., Clohisey, S., Klaric, L. *et al.* **Genetic mechanisms of critical illness in Covid-19.** *Nature* (2020). https://doi.org/10.1038/s41586-020-03065-y

Phelan J. et al. Controlling the SARS-CoV-2 outbreak, insights from large scale whole genome sequences generated across the world. *BioRxiv pre-print*. DOI: 10.1101/2020.04.28.066977

Rambaut A, Loman N, Pybus O *et al.* **Preliminary genomic characterisation of an emergent SARS-CoV-2 lineage in the UK defined by a novel set of spike mutations.** Dec 2020. https://virological.org/t/preliminary-genomic-characterisation-of-an-emergent-sars-cov-2-lineage-in-the-uk-defined-by-a-novel-set-of-spike-mutations/563

Rochman ND, Wolf YI, Faure G et al. **Ongoing Global and Regional Adaptive Evolution of SARS-CoV-2.** bioRxiv 02 March 2021. **doi:** https://doi.org/10.1101/2020.10.12.336644

Starr TN, Greaney AJ, Addetia A, et al. **Prospective mapping of viral mutations that escape antibodies used to treat COVID-19.** Science 19 Feb 2021. https://science.sciencemag.org/content/371/6531/850.long

Tchesnokova V, Kulakesara H, Larson L et al. **Acquisition of the L452R mutation** in the ACE2-binding interface of Spike protein triggers recent massive expansion of SARS-Cov-2 variants. bioRxiv 22 Feb 2021.

https://www.biorxiv.org/content/10.1101/2021.02.22.432189v1

[This is a preliminary report that has not been peer-reviewed. It should not be regarded as conclusive, guide clinical practice/health-related behaviour, or be reported in news media as established information]

Van Dorp L et al. **Emergence of genomic diversity and recurrent mutations in SARS-CoV-2.** Infect Genet Evol. 2020 May 5 : 104351. doi: 10.1016/j.meegid.2020.104351 [Epub ahead of print]

WHO. **SARS-CoV-2 Variants**. Disease Outbreak News 31 Dec 2020. https://www.who.int/csr/don/31-december-2020-sars-cov2-variants/en/

Yao H et al. **Patient-derived mutations impact pathogenicity of SARS-CoV-2.** (Please note this is a preprint and has not been certified by peer review. It reports new medical research that has yet to be evaluated and so should not be used to guide clinical practice)

https://www.medrxiv.org/content/10.1101/2020.04.14.20060160v2

Yong Jia et al. Analysis of the mutation dynamics of SARS-CoV-2 reveals the spread history and emergence of 2 RBD mutant with lower ACE2 binding affinity. doi: https://doi.org/10.1101/2020.04.09.034942 [This article is a preprint and has not been certified by peer review]

Zeberg, H., Pääbo, S. **The major genetic risk factor for severe COVID-19 is inherited from Neanderthals**. *Nature* (2020). https://doi.org/10.1038/s41586-020-2818-3

Other pathogens

Fricke LM, Glockner S, Drier M, Lange B. Impact of non-pharmaceutical interventions targeted at COVID-19 pandemic on influenza burden – a systematic review. Journal of Infection. Published:December 02, 2020 DOI:https://doi.org/10.1016/j.jinf.2020.11.039

Stochino C et al., **Clinical characteristics of COVID-19 and active tuberculosis co-infection in an Italian reference hospital.** European Respiratory Journal 2020; https://erj.ersjournals.com/content/early/2020/05/29/13993003.01708-2020

WHO. **Tailoring malaria interventions in the COVID-19 response** https://www.who.int/malaria/publications/atoz/tailoring-malaria-interventions-in-the-covid-19-response/en/

WHO. Information Note. **Tuberculosis and COVID-19.** 4 April 2020. https://www.who.int/tb/COVID 19considerations tuberculosis services.pdf

WHO. Scientific Brief. **Bacille Calmet-Guérin (BCG) vaccination and COVID-19.** 12 April 2020. https://www.who.int/news-room/commentaries/detail/bacille-calmette-guérin-(bcg)-vaccination-and-covid-19

Press & publications

NHS Providers. **Confronting Coronavirus in the NHS**. https://nhsproviders.org/confronting-coronavirus-in-the-nhs

The New Humanitarian (formerly IRIN News): https://www.thenewhumanitarian.org The New York Times. Hoping Llamas Will Become Coronavirus Heroes. 6 May 2020. https://www.nytimes.com/2020/05/06/science/llama-coronavirus-antibodies.html

ODI Newsletter – weekly. To sign up: https://www.odi.org/newsletter-sign-up WHO. **Q & A on coronaviruses (COVID-19).** 8 April 2020. https://www.who.int/news-room/q-a-detail/q-a-coronaviruses

Levitan R. **The Infection that's Silently Killing Coronavirus Patients** (Silent Hypoxia). New York Time Op Ed. 20 April 2020. https://www.nytimes.com/2020/04/20/opinion/coronavirus-testing-pneumonia.html

Nature News. **Coronavirus blood-clot mystery intensifies.** 8 May 2020. https://www.nature.com/articles/d41586-020-01403-8

Saplakoglu Y. Recovered patients who tested positive for COVID-19 likely not reinfected. LiveScience May 2020. https://bit.ly/3fjZ7hE

Woodruff Swan B et al. **Poop could help stop the pandemic. Really.** Politico May 2020. https://www.politico.com/news/2020/05/01/cdc-human-waste-coronavirus-222253

ON-LINE COURSES, WEBINARS, BLOGS & BOOKS

Courses

Royal College of Physicians and Surgeons of Glasgow. **Covid-19 Resource pages**. **Training and Assessment updates**. https://rcpsg.ac.uk/covid-19

SGUL. Managing COVID-19 in Primary Care.

https://www.futurelearn.com/courses/management-of-covid-19-in-general-practice

WHO. Coronavirus disease (COVID-19) training: Online training. https://www.who.int/emergencies/diseases/novel-coronavirus-2019/training/online-training

Courses include:

• Severe Acute Respiratory Infection (SARI) Treatment Facility Design

- COVID-19: Operational Planning Guidelines and COVID-19 Partners Platform to support country preparedness and response
- Infection Prevention and Control (IPC) for novel coronavirus (COVID-19)
- Introduction to emerging respiratory viruses, including novel coronavirus
- Clinical Care Severe Acute Respiratory Infection
- WHO-ICRC Basic Emergency Care: approach to the acutely ill and injured
- WHO Medical Emergency Checklist
- Resuscitation Area Designation Tool
- Health and safety briefing for respiratory diseases ePROTECT

Blogs

NDORMS. (Nuffield Department of Orthopaedics, Rheumatology and Muscuolskeletal Sciences). **OxImmuno Literature Blog - Covid-19 research papers explained simply**. https://www.ndorms.ox.ac.uk/news/blog/oximmuno-literature-blog

World Extreme Medicine. Blog. https://worldextrememedicine.com/blog/tag/covid-19/

Webinars

RSM. **COVID-19 Series.** (This webinar series is dedicated to give healthcare workers on the frontlines, regular and easy-to-access updates from healthcare leaders on COVID-19). https://www.rsm.ac.uk/resources/rsm-live/?cldee=bWFyaW9uLmJpcmNoMkBidGludGVybmV0LmNvbQ%3d%3d&recipie <a href="https://doi.org/10.1016/nd.1

UNIVERSITIES Etc.

Birmingham University. **COVID-19 research.** https://www.birmingham.ac.uk/research/coronavirus/index.aspx

Cambridge University. Research Covid-19. https://www.cam.ac.uk/topics/covid-19

Glasgow University. **Centre for Virus Research.** https://www.gla.ac.uk/researchinstitutes/iii/cvr/researchprogrammes/covid/

Liverpool University & Liverpool School of Tropical Medicine. **CEIDR and HPRU EZI COVID-19 research programme.** https://www.liverpool.ac.uk/centre-of-excellence-infectious-diseases-research/covid-19/
https://www.lstmed.ac.uk/covid-19

Manchester University. **Biology Medicine and Health**. **Covid-19 research rapid response group**. https://www.manchester.ac.uk/coronavirus-response/bmh-coronavirus-projects/

Oxford University. **Coronavirus research.**https://www.research.ox.ac.uk/Area/coronavirus-research

Royal College of Surgeons of England. **COVID-19 Research Group**. https://www.rcseng.ac.uk/coronavirus/rcs-covid-research-group/

London University

Imperial College. MRC Centre for Global Infectious Disease Analysis. https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/covid-19/covid-19-reports/

Kings College. **Research Portal**. https://kclpure.kcl.ac.uk/portal/en/search.html?searchall=covid-19

LSHTM.COVID-19. https://www.lshtm.ac.uk/research/research-action/covid-19

UCL. COVID-19 Research at UCL. https://www.ucl.ac.uk/covid-19-research/

BOOKS

Arnold C. Pandemic 1918: The Story of the Deadliest Influenza in History. Michael O'Mara Books Ltd. 2018

Cartwright FF, Biddiss M. **Disease and History**. (3rd Edition). 2014. Thistle Publishing.

Dobson M. Murderous Contagion. A Human History of Disease. Quercus 2015.

Honigsbaum M. The Pandemic Century. A History of Global Contagion from the Spanish Flu to Covid-19. Penguin Books

Kelman L. **Disaster by Choice**. OUP 2020 https://global.oup.com/academic/product/disaster-by-choice-9780198841340?cc=gb&lang=en&

Kucharski A. **The Rules of Contagion: Why Things Spread - and Why They Stop.** Profile Books. Wellcome Collection 2020. https://profilebooks.com/the-rules-of-contagion.html

Oldstone MBA. Viruses Plagues and History. Oxford University Press 2010.

Spinney L. Pale Rider: The Spanish Flu of 1918 and How it Changed the World. Vintage (Penguin Random House) 2017.

Zeigler P. **The Black Death**. The History Press 2010.