



COVID-19

Health Evidence Summary No.6

Kerry Millington

Liverpool School of Tropical Medicine (LSTM)

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This daily COVID-19 Health Evidence Summary is to signpost DFID and other UK government departments to the latest relevant evidence and discourse on COVID-19 to inform and support their response. It is a result of 2-2.5 hours of work and is not intended to be a comprehensive summary of evidence.

Report 13: Estimating the number of infections and the impact of non-pharmaceutical interventions on COVID-19 in 11 European countries

Flaxman, S., Mishra, S. Gandy, A. et al. | Imperial College COVID-19 Response Team | 30 March 2020 | Report

<https://www.imperial.ac.uk/media/imperial-college/medicine/sph/ide/gida-fellowships/Imperial-College-COVID19-Europe-estimates-and-NPI-impact-30-03-2020.pdf>

Authors estimate that countries have managed to reduce their reproduction number. Across all 11 European countries and with current interventions in place to 31 March, 59 000 [95% credible interval 21 000-120 000] deaths are estimated to have been averted. By ensuring that interventions remain in place until transmission drops to low levels, many more will be averted. Between 7 and 43 million people are estimated to have been infected with SARS-CoV-2 up to 28 March, representing between 1.88% and 11.43% of the population. For most of the countries considered it remains too early to be certain that recent interventions have been effective given the lag of 2 to 3 weeks between when transmission changes occur and when their impact can be observed in trends in mortality. Estimates will change accordingly. Current interventions must remain in place and trends in cases and deaths monitored to reassure that transmission of SARS-CoV-2 is slowing.

We know how long coronavirus survives on surfaces. Here's what it means for handling money, food and more

Mackay, A.M. & Arden, K. | The Conversation | 30 March 2020 | News article

<https://theconversation.com/we-know-how-long-coronavirus-survives-on-surfaces-heres-what-it-means-for-handling-money-food-and-more-134671>

Contains a useful image on 'How long does coronavirus survive on surfaces?'

AIDS, TB and Malaria: Coronavirus threatens the endgame

Pai, M. | Forbes | 29 March 2020 |

<https://www.forbes.com/sites/madhukarpai/2020/03/29/aids-tb-and-malaria-coronavirus-threatens-the-endgame/>

Is the **SDG goal** to end the epidemics of AIDS, TB and malaria by 2030 still achievable given the coronavirus pandemic? Pai captures his interviews with several global leaders and from agencies dedicated to AIDS, TB and malaria including Peter Sands, Director of the Global Fund; Winnie Byanyima, Director of UNAIDS; Pedro Alonso, Director of the WHO Global Malaria Programme; Joanne Liu, former president of MSF; Tereza Kasaeva, Director of the WHO Global TB Programme.

Epidemic preparedness in urban settings: new challenges and opportunities

Lee et al. | 27 March 2020 | The Lancet Infectious Diseases | Comment

[https://doi.org/10.1016/S1473-3099\(20\)30249-8](https://doi.org/10.1016/S1473-3099(20)30249-8)

Includes a Table on the challenges, and opportunities for epidemic preparedness associated with characteristics of urban settings.

Q&A: Access to health services is key to halting COVID-19 and saving refugee lives

Clayton, J. | UNHCR | 27 March 2020 | News

<https://www.unhcr.org/uk/news/latest/2020/3/5e7dab2c4/qa-access-health-services-key-halting-covid-19-saving-refugee-lives.html>

The dangers of COVID-19 to refugees and internally displaced people is outlined by Ann Burton, Chief of UNHCR's Public Health Section, and she describes how the agency is working to slow its spread, reduce its impact and save lives.

A framework for rationing ventilators and critical care beds during the COVID-19 pandemic

White, D. and Lo, B. | JAMA | 27 March 2020 | Viewpoint

<https://doi.org/10.1001/jama.2020.5046>

This viewpoint considers ethical concerns when demand for ventilators and other intensive treatments outnumber supply, what criteria should guide these rationing decisions and a proposal for a "framework for making allocation decision that incorporates multiple ethically relevant considerations, whilst allowing all patients in need to be eligible for access to critical care".

WHO Director-General's opening remarks at the media briefing on COVID-19 – 27 March 2020

<https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---27-march-2020>

WHO | 27 March 2020 | Media briefing

The WHO **Solidarity Trial** has enrolled its first patient in Norway and shortly in Spain. This multi-centre, adaptive, randomised, open clinical trial will evaluate and compare the safety and efficacy of four different drugs or drug combinations against COVID-19 with standard care in hospitalised patients diagnosed with COVID-19. The trial started on 26 March and will continue until November 2020 recruiting up to 700 participants. Forty-five countries are involved, and more have expressed interest. In the meantime, the WHO DG calls on individuals and countries to refrain from using therapeutics that have not been demonstrated to be effective in the treatment of COVID-19. Learning from the Ebola epidemic where some medicines thought to be effective were found not to be as effective as others when compared during a clinical trial - drug treatment must be evidence informed. Also, we need to ensure that using unproven drugs does not create a shortage of those medicines to treat diseases for which they have proven effective.

COVID-10 Research in Brief: 20 March to 27 March 2020

Carvalho T | Nature Medicine | 27 March 2020 | News

<https://doi.org/10.1038/d41591-020-00006-0>

Nature Medicine summaries COVID-19 research on clinical trials, serology, preclinical studies, viral origin and structure from this week.

Open health facility location data for Africa to support COVID-19 efforts

South A. & van der Walt A | Afrimapr | 26 March 2020 | Data

<https://afrimapr.github.io/afrimapr.website/blog/2020/healthsites-app/>

The afrimapr approach aims to improve access to the best-available health facility data for Africa to support the response to the coronavirus pandemic, for example, in **COVID Care Map**, an open source project to support health system capacity (beds, staffing, ventilators, supplies) which is currently USA-centric but intends to become globally applicable. This approach is currently drawing on two datasets – a **spatial database of health facilities managed by the public health sector in SSA** now curated by the **WHO Global Malaria Program** and a dataset from the global project **healthsites.io** – but welcome input on other potential data sources or how it would be useful to improve these tools.

Clinical characteristics of 113 deceased patients with coronavirus disease 2019: a retrospective study

Chen et al. | BMJ | 26 March 2020 | Article

<https://doi.org/10.1136/bmj.m1091>

This retrospective case series of 113 who died among a cohort of 799 patients diagnosed with COVID-19 (data collected until 28 February 2020) found that SARS-CoV-2 can cause both pulmonary and systemic inflammation, leading to multi-organ dysfunction in patients at high risk. The most common critical complications were acute respiratory distress syndrome and respiratory failure, sepsis, acute cardiac injury, and heart failure.

The effect of human mobility and control measures on the COVID-19 epidemic in China

Kraemer et al. | Science | 25 March 2020 | Article

<https://doi.org/10.1126/science.abb4218>

This study shows that the *combination* of control measures implemented in China, including travel restrictions, substantially mitigated the spread of COVID-19. Using real-time mobility data from Wuhan and detailed case data including travel history, this study shows that travel restrictions are useful in the early stage of an outbreak when it is confined to a certain area that acts as a major source but less effective once the outbreak is more widespread. It was not possible in this study to definitively determine the impact of each intervention and more work is required on how to optimally balance expected positive effect on public health with the negative effect on movement, the economy and society in general.

COVID-19 – the social science response to the pandemic

IDS | 23 March 2020 | News

<https://www.ids.ac.uk/news/covid-19-the-social-science-response-to-the-pandemic/>

A useful summary linking to opinion pieces from social scientists, including those from IDS, working to respond to COVID-19. Includes links to drawing on lessons from Ebola, SARS and the initial outbreak in Wuhan; the importance of pandemic responses from 'bottom-up'; COVID-19 and Africa; understanding the impacts on people in slums and informal settlements; impact on informal work; importance of connecting policy networks; and COVID-19 and religious practices.

1. Tracking COVID-19 cases

Global

WHO COVID-19 daily situation reports

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports>

An interactive web-based dashboard to track COVID-19 in real time

<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Live data tracker: sex-disaggregated COVID-19 data from the 25 most-affected countries

<http://globalhealth5050.org/covid19>

Africa

Africa Centres for Disease Control and Prevention (Africa CDC)

<http://www.africacdc.org/covid-19-and-resources>

Coronavirus in Africa Tracker: How many covid-19 cases & where?

<https://africanarguments.org/2020/03/23/coronavirus-in-africa-tracker-how-many-cases-and-where-latest/>

South African Government COVID-19

<https://www.gov.za/Coronavirus>

UK

COVID-19: PHE track coronavirus cases in the UK

<https://www.gov.uk/government/publications/covid-19-track-coronavirus-cases>

UK case tracing infographic

<https://www.arcgis.com/apps/opdashboard/index.html#/f94c3c90da5b4e9f9a0b19484dd4bb14>

2. Online course

Responding to COVID-19: Real-time training for the coronavirus disease outbreak

WHO | Available now | multiple self-paced courses

<https://openwho.org/channels/covid-19>

Note that courses are available in English and other languages including French, Portuguese and Spanish.

COVID-19: Tackling the Novel Coronavirus

LSHTM | FutureLearn course | Starts 23 March 2020 | 3 weeks | 4 hours weekly study | Free

<https://www.futurelearn.com/courses/covid19-novel-coronavirus>

A reminder that this course is currently running. On this course you will learn what is known about the outbreak of COVID-19 (week 1); what the practical implications for responding to COVID-19 are (week 2); and what we need to find out about COVID-19 (week 3).

3. Resource Hubs

Coronavirus: the science explained

<https://coronavirusexplained.ukri.org/en/>

Social Science in Humanitarian Action: Updates on the novel COVID-19 outbreak

<https://www.socialscienceinaction.org/update-novel-covid-19-outbreak/>

Special Collection: Coronavirus (COVID-19): evidence relevant to critical care

<https://www.cochrane.org/news/special-collection-coronavirus-covid-19-evidence-relevant-critical-care>

NICE UK: Rapid guidelines and evidence reviews

<https://www.nice.org.uk/covid-19>

Imperial College London MRC Centre for Global Infectious Disease Analysis COVID-19 reports

<https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/news--wuhan-coronavirus/>

Global research on COVID-19

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019/global-research-on-novel-coronavirus-2019-ncov>

WHO R&D Blueprint

<https://www.who.int/blueprint/priority-diseases/key-action/novel-coronavirus/en/>

WHO: Coronavirus disease (COVID-19) outbreak resources

<https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

Latest information and advice from the UK Government

<https://www.gov.uk/guidance/coronavirus-covid-19-information-for-the-public>

CDC COVID-19 Resources

<https://www.cdc.gov/coronavirus/2019-ncov/index.html>

The Lancet COVID-19 Resource Centre

<https://www.thelancet.com/coronavirus>

Elsevier's Novel Coronavirus Information Center

<https://www.elsevier.com/connect/coronavirus-information-center>

Cell Press Coronavirus Resource Hub

<https://www.cell.com/2019-nCoV>

Cochrane Special Collections - COVID-19: infection control and prevention measures

<https://www.cochranelibrary.com/collections/doi/SC000040/full>

The BMJ Coronavirus (covid-19): Latest news and resources

https://www.bmj.com/coronavirus?int_source=wisepops&int_medium=wisepops&int_campaign=DAA_CoronaVirus_Jan24

Johns Hopkins Coronavirus Resource Centre

<https://coronavirus.jhu.edu>

Global Partnership for Sustainable Development – COVID-19 resources

<http://www.data4sdgs.org/resources/covid-19-resources>

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