COVID-19 Health Evidence Summary No.14

Kerry Millington
Liverpool School of Tropical Medicine (LSTM)
9 April 2020

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 3 hours of work and is not intended to be a comprehensive summary of evidence.

Dignity not destitution: An 'Economic Rescue Plan For All' to tackle the coronavirus crisis and rebuild a more equal world

Oxfam | 9 April 2020 | Policy Paper

https://www.oxfam.org/en/research/dignity-not-destitution

Analysis reported in this paper shows that over half a billion people could be pushed into poverty unless action is taken now. An Economic Rescue Plan For All is included requiring mobilisation of at least $2.5 trillion dollars to tackle the pandemic and prevent global economic collapse. This includes actions to help people and businesses needed now – cash grants and responsible business bail out – supported by actions including suspension and cancellation of debts, a one-off global economic stimulus by the IMF, increase in aid and adoption of emergency solidarity taxes.

Strengthening the Basics: approaches to COVID-19 care in low-resource settings

Ismail et al. | Center for Global Development | 8 April 2020 | Blog

https://www.cgdev.org/blog/strengthening-basics-approaches-covid-19-care-low-resource-settings

This blog focuses on hospital treatment for COVID-19 patients in low-resource settings given what we know about the spectrum of COVID-19 illness, healthcare capacity and a need for prioritisation of resources. Models of care from high-income settings are likely to be inappropriate where resources are scarce. The priority is to identify interventions that can be implemented at pace and maximise lives saved. This includes (1) prioritise simple hospital interventions to save the most lives; (2) align global-development-partners-supported commodity procurement with country realities to enable delivery of the highest value interventions; and (3) carry out pragmatic research to understand what works in low-resource settings in support of a learning healthcare system.

First-wave COVID-19 transmissibility and severity in China outside Hubei after control measures, and second-wave scenario planning: a modelling impact assessment

Leung, K. et al. | The Lancet | 8 April 2020 | Article

https://doi.org/10.1016/S0140-6736(20)30746-7

In four cities and ten provinces in China outside Hubei, the instantaneous reproduction number (R_t) of COVID-19 substantially decreased after massive public health control interventions were implemented across China on 23 January 2020 to contain the spread of COVID-19 and have since remained below 1. The confirmed case-fatality risk (cCFR) outside Hubei was 0.98%, but varied substantially among different provinces, probably due to heterogeneity in regional economic development and healthcare capacity. Real-time monitoring of transmissibility (R_t) and severity (cCFR) are needed as control measures are relaxed gradually so that the resulting R_t does not sustainably exceed 1, especially given the substantial risk of viral reintroduction including from overseas importation, to inform strategies to minimise a second wave and achieve optimal balance between health and economic protection.

Beware of the second wave of COVID-19

Xu, S. & Li, Y. | The Lancet | 8 April 2020 | Comment

https://doi.org/10.1016/S0140-6736(20)30845-X

This Comment on Kathy Leung and colleagues report (above) highlights that SARS-CoV-2 transmission outside Hubei until late January was mainly driven by imported cases from Hubei and after 31 January spread in these provinces was believed to be driven by local transmission. This suggests that the package of non-pharmaceutical interventions in China has the ability to contain transmission from imported cases and local transmission. This study also modelled the potential adverse consequences of relaxing interventions finding that if this is done prematurely, these decisions may lead to transmissibility exceeding 1 again and a second wave of infections. The effect of each intervention was not addressed in the study, but this information is needed to guide countries as they relax interventions. Country-specific models of the effects of travel restrictions, social distancing and alternative strategies after relaxation of these interventions, such as use of face masks, temperature checks and contact tracing, are now needed. Leung and colleagues estimated the confirmed CFR outside Hubei was 0.98% (95% CI 0.82-1.16), consistent with the report from the Chinese Center for Disease Control and Prevention, but this is in contrast to the CFR in Wuhan - up to 5.08% by 28 March 2020, possibly attributable to the difference in healthcare capacity where it was not overwhelmed in the study locations.

Tuberculosis and HIV responses threatened by COVID-19

Adepoju, P. | The Lancet HIV | 8 April 2020 | Feature

https://doi.org/10.1016/S2352-3018(20)30109-0

In Africa the TB epidemic is driven by HIV which may also make these people susceptible to coronavirus. WHO and UNAIDS are compiling data and evidence to guide recommendations for the management of COVID-19 in the context of HIV-TB co-infection. COVID-19 is already though affecting control measures for TB and HIV and there is a real potential disruption to supply and transportation of TB drugs by flight cancellations and imposed travel restrictions. There are also

concerns of healthcare workers and laboratory staff in Nigeria in handling samples for TB testing due to lack of protective materials. In a TB clinic in Ibadan, Nigeria, TB patients, many of whom reply on public transportation to commute to the clinic, have not collected drug supplies for fear of discrimination. Restocking of the drug store was not possible given the time to give patients sufficient doses of their drugs to last for months. UNAIDS is working with people living with HIV and key population networks to understand the needs for information and support for COVID-19 prevention and continuity of HIV service. COVID-19 testing, surveillance and prevention in high risk settings including slums and informal settlements needs to be intensified to protect those most vulnerable.

Reconciling COVID-19 death data in the UK

Oke, J & Heneghan C | Centre for Evidence-based Medicine University of Oxford | 8 April 2020

https://www.cebm.net/covid-19/reconciling-covid-19-death-data-in-the-uk/

In England and the UK, there are three main sources of death data – PHE, NHS England and Office for National Statistics and cumulative numbers of deaths by different data sources in England differ by date reported. This piece recommends that NHS England and PHE prioritise the date of death to provide a better understanding of the peak deaths in the pandemic.

Tracking COVID-19 cases

Global

WHO COVID-19 daily situation reports

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

Johns Hopkins University COVID-19 dashboard in real time

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

WEF: Visualisation tracking confirmed cases of COVID-19 as it spreads. Updated daily.

https://wef-prod.earthtime.org/m/stories/2019_nCOV_infection

Vaccine Centre, LSHTM

https://vac-lshtm.shinyapps.io/ncov_tracker/

This site complements the WHO and Johns Hopkins University COVID-19 dashboards by including the timeline functions, the ability to overlay past outbreaks, and an emphasis on normalised counts (per 100,000 individuals).

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

http://globalhealth5050.org/covid19

Africa

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/

UK

PHE dashboard of UK COVID-19 Cases

https://www.arcgis.com/apps/opsdashboard/index.html#/f94c3c90da5b4e9f9a0b19484dd4bb14

Tools

WhatsApp coronavirus information hub

https://www.whatsapp.com/coronavirus

CMMID Repository: Effectiveness of airport screening at detecting travellers infected with COVID-19

https://cmmid-lshtm.shinyapps.io/traveller_screening/

App to model effectiveness of airport screening.

Disability Inclusive Community Action – COVID-19 Matrix

CBM | 30 March 2020 | Tool

https://www.cbm.org/news/news/news-2020/cbm-develops-disability-inclusive-community-action-covid-19-matrix/

Online learning and events

Online event: Policy modelling for COVID-19: Better data for better decision-making in low and middle-income countries

Tuesday 14 April 2020 0900-1030 ET | Center for Global Development

https://www.cgdev.org/event/policy-modelling-covid-19-better-data-better-decision-making-low-and-middle-income-countries

Moderator: Kalipso Chalkidou (CDG). Features Dan Ollendorf (CGD), Yot Teerawattananon (Thai Ministry of Public Health) and Anna Vassall (LSHTM)

Online Event: Approaching COVID-19 Risk and Response through a Gender Lens

Thursday 9 April 2020 1300-1430 ET | Center for Global Development

https://www.cgdev.org/event/approaching-covid-19-risk-and-response-through-gender-lens

Moderator Megan O'Donnell (CGD). Features Gary Barker (Promundo), Carleigh Krubiner (CGD), Amber Peterman (University of North Carolina Chapel Hill), Crystal Simeoni (FEMNET), Clare Wenham (LSE), Olabukunola Williams (Education as a Vaccine)

COVID-19 Diagnostics and Testing

FIND, LSHTM & ASLM | FutureLearn course | Starts 20 April 2020 | 3 weeks | 3 hours weekly study | Free

https://www.futurelearn.com/courses/covid-19-diagnostics-and-testing

This course is designed for professionals involved in the testing and diagnosis of COVID-19, with a focus on low- and middle-income settings. You will learn the latest recommendations on COVID-19 testing, get upt0date information on the performance of tests and how best to deploy them.

COVID-19 Critical Care: Understanding and Application

University of Edinburgh & Royal College of Physicians of Edinburgh | FutureLearn course | Starts 6 April 2020 | 5 weeks | 1 hour weekly study | Free

https://www.futurelearn.com/courses/covid-19-critical-care-education-resource

Designed for frontline clinical staff to learn the principles and practice of critical care to treat and care for critically ill patients during the COVID-19 pandemic. You will learn (1) how to apply the current and evolving principles of PPE in the care of COVID-19; (2) apply evidence-based principles of advanced organ support and monitoring to the COVID-19 critically ill patients; (3) apply evidence-based daily practices to care of the critically ill patient; and (4) develop a range of specialised self-caring practices.

Note that this resource has been created in response to the COVID-19 emergency and does not correspond to the classic structure of a FutureLearn course. You do not have to follow the week by week approach and can select the materials most relevant to your work.

Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control

WHO | Free | 3 hours duration

https://openwho.org/courses/introduction-to-ncov

A general introduction to enable you to describe the fundamental principles of emerging respiratory viruses, including novel coronaviruses, and how to effectively respond to an outbreak. Intended for public health professionals, incident managers and personnel working for the UN, international organisations and NGOs.

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).

Resource Hubs

Resources on coronavirus and disability

https://asksource.info/covid-resources/search

ODI Coronavirus: latest research and analysis on the implications of the coronavirus pandemic worldwide

https://www.odi.org/our-work/coronavirus

International Disability and Development Consortium and CORE Group: Repository of resources on disability inclusion and COVID-19

https://docs.google.com/document/d/1IVP1u6yHfLuN9qNyLEct5-vtC0aqLKtKr-o-faAjves/edit

US NIH online platform of all registered, ongoing clinical trials globally

https://clinicaltrials.gov/ct2/results?cond=COVID-19

COVID-19 Narratives by Dr David Nabarro

https://www.4sd.info/covid-19-narratives/

These narratives are being written by David Nabarro, Co-Director of the Imperial College Institute of Global Health Innovation at Imperial College London, Strategic Director for 4SD and one of six Special Envoys to the WHO DG Special Envoy on COVID-19, and peers to share with those who want more information about the situation and to help raise the awareness and readiness of all actors. Please visit WHO website for official guidance.

Reliefweb COVID-19

https://reliefweb.int/topics/covid-19

Coronavirus global health emergency

https://www.un.org/coronavirus

Norwegian Institute of Public Health: Live map of COVID-19 evidence

https://www.fhi.no/en/qk/systematic-reviews-hta/map/

Overview of scientific publications on COVID-19 categorised into subgroups to provide quick access to specific topic-relevant publications to help decision makers and research navigate the research and help identify research gaps.

Vaccine Centre at LSHTM: COVID-19 vaccine development pipeline tracker

https://vac-lshtm.shinyapps.io/ncov_vaccine_landscape/

COVID-19 Research Project Tracker by UKCDR & GloPID-R

https://www.ukcdr.org.uk/funding-landscape/covid-19-research-project-tracker/

A live database of funded research projects across the world related to COVID-19 mapped against the priorities identified in the WHO Coordination Global Research Roadmap: 2019 Novel Coronavirus.

WHO Q&A on COVID-19

https://www.who.int/news-room/q-a-detail/q-a-coronaviruses

Note that this resource includes Q&A on COVID-19; COVID-19, pregnancy, childbirth and breastfeeding; COVID-19, HIV and antiretrovirals; similarities and differences COVID-19 and influenza; mass gatherings and COVID-19; IPC for healthcare workers; COVID-19 and food and agriculture; smoking and COVID-19; malaria and COVID-19.

COVID-19: Resources and research on epidemics and pandemics

https://steps-centre.org/covid-19-coronavirus-resources-research-epidemics-pandemics/

Stop TB Partnership TB and COVID-19

http://www.stoptb.org/covid19.asp

EPI-WIN: WHO information network for epidemics: COVID-19 public health emergency

https://www.who.int/teams/risk-communication

COVID-19: Research ethics

https://ethicsresource.ringsgenderresearch.org/covid-19-resources/

LSTM: COVID-19

https://www.lstmed.ac.uk/covid-19

LSHTM: COVID-19

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

International Disability Alliance: COVID 19 and the disability movement

http://www.internationaldisabilityalliance.org/content/covid-19-and-disability-movement

Africa Centres for Disease Control and Prevention (Africa CDC)

https://africacdc.org/covid-19/

UNICEF: Latest news and updates on coronavirus disease 2019 (COVID-19)

https://www.unicef.org/coronavirus/covid-19

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.htmlThe Global Health Network Coronavirus outbreak knowledge hub

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

Suggested citation

About this report