

COVID-19 Health Evidence Summary No.81

Kerry Millington & Samantha Reddin Liverpool School of Tropical Medicine (LSTM) & Institute of Development Studies 06 July 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 available evidence on COVID-19 but aims to make original documents easily accessible to decision makers which, if relevant to them, they should go to before making decisions.

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
06.07.2020	Prevalence of SARS-CoV-2 in Spain (ENE-COVID): a nationwide, population-based seroepidemiological study	The Lancet Article	 This article is included as is the first nationwide (Spain) population-based study of seroprevalence estimates of antibodies against SARS-CoV-2 at national and regional levels Only approx. 5% had C19 antibodies with no differences by sex and lower seroprevalence in children younger than 10 years There was substantial 	Seroprevalence

			•	geographical variability, with higher prevalence around Madrid (>10%) and lower in coastal areas (<3%) 95% of people in Spain are still susceptible, despite one of Europe's most intense outbreaks Herd immunity through natural infection is difficult to achieve and unethical, given the collateral damage of many deaths in the susceptible population and overburdening of health systems	
04.07.2020	The projected impact of mitigation and suppression strategies on the COVID-19 epidemic in Senegal: A modelling study	medRxiv (not peer-reviewed) pre-print	•	Senegal acted promptly to contain the spread of SARS-CoV-2 and has already significantly reduced transmission from 1.9 (95% CI 1.7-2.2) to 1.3 (95% CI 1.2-1.5) but has not full interrupted transmission This study estimates that continued spread is likely to peak in October, and to overwhelm the healthcare system with an	Mitigation, public health, healthcare capacity

			estimated 77,400 deaths (95% CI 55,270- 100,700) Enhanced physical distancing measures could reduce the burden on healthcare services Rapid scale up of hospital capacity is likely to be needed	
02.07.2020	Tracking changes in SARS-CoV-2 Spike: evidence that D614G increases infectivity of the COVID-19 virus	Cell Article	 A SARS-CoV-2 variant with a change in an amino acid in the Spike protein has become the most prevalent form in the global pandemic with an increase at national, regional and municipal levels and even in local epidemics where the original form was well established This pattern was highly statistically significant, suggesting that the new variant may have a fitness advantage with possible higher upper respiratory tract viral loads, but not increased disease severity 	SARS-CoV-2 variant

	• Important mechanis understar of the viru and supp continuing surveillant Spike mutations in the developm immunologinterventic	etic ending us, ort of g ce of s to aid ment of ogical
--	---	--

Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
06.07.2020	An evaluation of COVID-19 serological assays informs future diagnostics and exposure assessment	Nature Communications Article	A detailed comparison of serological COVID-19 assays shows a wide diversity in assay performance in different scenarios and when correlated to virus neutralising antibodies	Serological assays

Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
01.07.2020	Effectiveness of government policies in response to the COVID-19 outbreak	SSRN	 Assessment of the quantitative impact of government interventions on deaths related to the C19 outbreak The greater the strength of government interventions at an early stage, the more 	Government, impact

effective these are in slowing down or reversing the growth rate of deaths	
 Informative for future C19 waves and for other future pandemics 	

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
July 2020	COVID-19 testing in Africa: lessons learnt	The Lancet Microbe Comment	Pascale Ondoa et al.
July 2020	COVID-19: a multifaceted threat to refugee camps	The Lancet Microbe News	Talha Burki
July 2020	Development of potential COVID- 19 vaccines continues to accelerate	The Lancet Microbe News	Tony Kirby
06.07.2020	The Indirect Health Effects of COVID-19: long-term costs for health systems	CGD Blog	Lydia Regan Y-Ling Chi
06.07.2020	WHO: access to HIV medicines severely impacted by COVID-19 as AIDS response stalls	WHO News	
06.07.2020	SARS-CoV-2 seroprevalence in COVID-19 hotspots	The Lancet Comment	Isabella Eckerle Benjamin Meyer
03.07.2020	Six months of coronavirus: the mysteries scientists are still racing to solve	Nature News	Ewen Callaway Heidi Ledford Smriti Mallapaty

03.07.2020	Oxygen availability in sub- Saharan African countries: a call for data to inform service delivery	The Lancet Global Health Correspondence	Sowmya Mangipudi Andrew Leather Ahmed Seedat Justine Davies
03.07.2020	Pulse oximetry in low-resource settings during the COVID-19 pandemic	The Lancet Global Health Correspondence	Nicola Starr et al.
03.07.2020	Decisive leadership is a necessity in the COVID-19 response	The Lancet Comment	Ahmed Mohammed Obaid Al Saidi et al.
01.07.2020	How to predict – and prevent – the next pandemic	The Economist Weekly podcast (24 min)	

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
01.05.2020	COVID-19 considerations for home and community care	SSHAP	 This review gives an overview of existing guidance and models for home and community-based care for C19, with an emphasis on LMICs Gaps in the guidance are assessed and ways these may be addressed suggested. This includes highlighting innovative examples and drawing on knowledge of past outbreaks Recommendations are aimed at governments, NGOs and relevant community-based organisations

Dashboards & Trackers

Cases & deaths:	Cases & deaths:	Cases & deaths:	Living evidence & policy maps	Current research including trials	Diagnostics	Treatments	Vaccines
WHO sitreps	WHO Africa	Ghana	COVID- NMA		FIND SARS-CoV- 2 Test Tracker	Global COVID-19 Clinical Trial Tracker	CEPI
WHO dashboard	African Arguments	Indonesia	EPPI Centre	Clinical Trials Registry Platform	FIND SARS-CoV- 2 Diagnostics: performance data		Vaccine Centre LSHTM
Johns Hopkins University	European CDC	Nigeria CDC	Norwegian Institute of Public Health	Cytel	Serology- based tests for COVID- 19	Solidarity trial	COVID- 19 Oxford Vaccine Trial
WEF		Sierra Leone	Oxford C19 Government Response Tracker (OxCGRT)			COVID-19 Therapeutics Accelerator	COVID- 19 Vaccine Tracker
Our World in Data		Singapore	Our World in Data: C19 Policy responses	COVID- evidence			
Global 5050		UK	IFPRI COVID-19 Policy Response Portal	Cochrane			
CEBM, University of Oxford		US	COVID-19 Primer	Clinicaltrials.gov			

Humanitarian Data Exchange		NIH LitCovid	UKCDR		
Information is Beautiful		WHO COVID-19 Database			
LSHTM					
HealthMap (cases)					
The Commons Project					

C19 Resource Hubs

Global	Regional & Country	Academic journals & Publishers	Institutes/Centres /Funders/Other	Health Topics	Social Sciences
WHO COVID- 19 pandemic	Africa CDC	Annals of Internal Medicine	LSTM	Stop TB Partnership	SSHAP
WHO risk communication	African Union	ВМЈ	LSHTM		IDA
WHO Q&A	Nigeria CDC	Bulletin of the WHO	ICL MRC Centre for Global Infectious Disease Analysis	Global Menstrual Collective	Disability and inclusion
WHO Global research	GeoPoll: SSA	Cambridge University Press	ODI	SLH: Handwashin g in low resource settings	Coregroup IDDC

COVID-19 Solidarity Response Fund	Global Health Network Africa	Cell Press	Johns Hopkins University	RBM Partnership	Ethics, health systems & COVID-19
UN	African Academy of Sciences	Cochrane	Center for Global Development	Epidemic Preparedne ss Innovations	Social Development Direct C19 blog series
UN Women	Africa Evidence Network	Elsevier	CMMID Repository		
UNOCHA	OCHA Southern and Eastern Africa COVID-19 Digest	Health Policy and Planning	Norwegian Institute of Public Health		
UNHCR	South African Government	JAMA Network	Oxford Centre for Evidence-based Medicine		
UNICEF		The Lancet	HEART		
UNESCO		medRxiv and bioRxiv (Preprints)	UKRI		
UN WFP		NEJM	Evidence Aid		
GOARN		Oxford University Press	NIH		
EPI-WIN		PLoS	IFPRI Resources and Analyses of C19 Impact		

World Bank	SAGE journals	Prevent Epidemics	
Our World in Data	Science		
COVID-19 Narratives by David Nabarro	Springer Nature		
Reliefweb	SSRN (Preprints)		
Humanitarian OpenStreetMap Team	Wiley		
Global Partnership for Sustainable Development Data			
WorldPop			
Flowminder			
COVID-END			
Premise COVID-19 Global Impact Study			
GISAID			

Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
07.07.2020 1300-1430 BST	Fifth Annual Health Financing Forum (AHFF): Health Financing Resilience and Sustainability	Online event	1h 30	JLN, WB, USAID, GFF, GFF, CGD
30.06.2020 1000 BST	Clinical update: dexamethasone and hydroxychloroquine for treatment of severe COVID-19	Webinar		African Academy of Sciences
26.06.2020 0900 to 1030 EDT	Monitoring and mitigating the collateral effects of COVID-19	Online event	1h 30	CGD
13 July 3:00 PM – 6:00 PM BST	2020 UCL-Lancet Lecture: Global Health Preparedness by Dr Muhammad Pate, Global Director for Health, Nutrition and Population at the World Bank Group	Online Lecture	2 hour lecture, 1 hour panel discussion	UCL, The Lancet
June 2020	OpenWHO, the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.	Online courses	Varies	WHO
24- 25.06.2020	Africa's leadership role in COVID-19 vaccine development and access	Zoom webinar		African Union & Africa CDC

Available now	Standard precautions: Environmental cleaning and disinfection	Online course	1 hour	WHO
Available now	COVID-19: Effective Nursing in Times of Crisis	Online course	2 weeks – 2 hours per week	Johns Hopkins School of Nursing
Available now	WHO Academy and WHO Info mobile applications	Mobile app		WHO
Available now	COVID-19: Pandemics, Modelling and Policy	Online learning	2 weeks 2 hours weekly study	FutureLearn UNESCO UNITWIN Complex Systems Digital Campus/Open University
12.05.2020	COVID-19 and maintaining quality essential health services	Webinar	1 hour	WHO & ISQua – Dr Shams Syed, Dr Peter Lachman, Dr Teri Rynolds & Dr Ed Kelley
11.5.2020	COVID-19 Contact Tracing course	Online learning	5 hours	Johns Hopkins Bloomberg School of Health
7-28 May 2020	Virtual Evidence Weeks	5 sessions	1h 30	International Initiative for Impact Evaluation (3ie)
Tuesdays at 1700 CEST (Geneva time) & Thursdays 0830 CEST (Geneva time)	COVID-19 Open online brief with Dr David Nabarro	Event	1h	4SD

30.04.2020	Professor Chris Whitty's Gresham lecture on COVID-19	Event	1h 20	Gresham College
Available now	Emerging respiratory viruses, including COVID-19: methods for detection, prevention, response and control	Online learning	3 hours	WHO
Available now	Responding to COVID- 19: Real-time training for the coronavirus disease outbreak	Online learning	Multiple self-paced course	WHO
25 May 2020	COVID-19: Tackling the Novel Coronavirus	Online learning	3 weeks 4 hours weekly study	FutureLearn LSHTM/UK PHRST
Available online now without mentors. Updated version will commence early June 2020	COVID-19 Diagnostics and Testing	Online learning	3 weeks 3 hours weekly study	FutureLearn FIND/LSHTM/ASLM
6 April 2020	COVID-19 Critical Care: Understanding and Application	Online learning	5 weeks 1 hour weekly study	FutureLearn University of Edinburgh & Royal College of Physicians of Edinburgh
Available now	COVID-19 supporting online courses	Online learning	Multiple self-paced course	BMJ Learning

Suggested citation

Millington, K.A. and Reddin, S. (2020). *COVID-19 Health Evidence Summary No.81*. K4D Evidence Summary. Brighton, UK: Institute of Development Studies.

Rapid review methodology

The rapid daily search for peer-reviewed literature is carried out through a PubMed search with the following keywords ("COVID-19" OR "severe acute respiratory syndrome coronavirus 2" OR "2019-nCoV" OR "SARS-CoV-2" OR "2019nCoV" OR "coronavirus") AND ("Africa") OR ("equity" OR "equities") OR ("poverty"), restricted to articles published in the previous 2 to 3 days, in English. This is complemented by a search of the homepage of the following high-impact global health journals: The Lancet journals, New England Journal of Medicine, Nature, JAMA, Annals of Internal Medicine, Cochrane Reviews, BMJ Global Health, the PLoS journals and a Twitter search of their Twitter pages. A search also of preprints from bioRxiv and medRxiv. Please note that papers that have not been peer-reviewed are highlighted in red. All primary research papers that relate to the primary and secondary impacts of the COVID-19 response in LMICs, and disease control and health system responses are included. Articles related to tackling the secondary impacts on other sectors are not included. Additional commentaries, opinions, and commissioned pieces are selected based on relevance.

The search for dashboards, guidelines, tools, editorials, comments, blogs, opinions and news is through the academic journals listed above, C19 resource hubs and following lead academics and professionals on Twitter.

About this report

This daily COVID-19 health evidence summary (HES) is based on 3 hours of desk-based research. The summary is not intended to be a comprehensive summary of available evidence on COVID-19 but aims to make original documents easily accessible to decision makers which, if relevant to them, they should go to before making decisions. The HES are not intended to replace medical or professional advice and the researcher or the K4D consortium cannot be held responsible for any decisions made about COVID-19 on the basis of the HES alone. K4D services are provided by a consortium of leading organisations working in international development, led by the Institute of Development Studies (IDS), with Education Development Trust, Itad, University of Leeds Nuffield Centre for International Health and Development, Liverpool School of Tropical Medicine (LSTM), University of Birmingham International Development Department (IDD) and the University of Manchester Humanitarian and Conflict Response Institute (HCRI).

This evidence summary was prepared for the UK Government's Department for International Development (DFID) and its partners in support of pro-poor programmes. It is licensed for non-commercial purposes only. K4D cannot be held responsible for errors, omissions or any consequences arising from the use of information contained in this health evidence summary. Any views and opinions expressed do not necessarily reflect those of DFID, K4D or any other contributing organisation.



© DFID - Crown copyright 2020.