

# COVID-19

## Health Evidence Summary No.43

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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 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.*

### Clinical characteristics and management

Publication date	Title/URL	Journal/Article type	Summary
20.05.20	SARS-CoV-2 infection protects against rechallenge in rhesus macaques	Science/ article	Monkeys that had recovered from infection with the new coronavirus were protected from re-infection, although how long the protection lasts is unclear.

### Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary
20.05.20	Preliminary evaluation of COVID-19 disease outcomes, test capacities and management	preprint from medRxiv and bioRxiv (not peer reviewed)	<ul style="list-style-type: none"> <li>In this study, COVID-19 disease outcomes (confirmed cases, deaths and recoveries), testing capacities and disease management approaches among African countries were evaluated.</li> <li>Egypt, South Africa, Morocco and Algeria were clustered as countries</li> </ul>

	approaches among African countries./		<p>with highest values of COVID-19 disease outcomes on the continent during the 75-day period of observation.</p> <ul style="list-style-type: none"> <li>The study recommends that the approaches adopted by the African countries which achieved high recovery rates from COVID-19 should be integrated into healthcare management plans for the disease across the continent even as the situation unfolds.</li> </ul>
20.05.20	Individual quarantine versus active monitoring of contacts for the mitigation of COVID-19: a modelling study	The Lancet/ Article	<ul style="list-style-type: none"> <li>Under what conditions can individual quarantine more effectively control COVID-19 than active monitoring?</li> <li>This model highlights the urgent need for more data on the serial interval and the extent of presymptomatic transmission to make data-driven policy decisions regarding the cost-benefit comparisons of individual quarantine versus active monitoring of contacts. To the extent that these interventions can be implemented, they can help mitigate the spread of SARS-CoV-2.</li> </ul>

## Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary
20.05.20 <small>ic date</small>	Is Nigeria really on top of COVID-19? Message from effective reproduction number /URL	preprint from medRxiv and bioRxiv (not peer reviewed) <small>Article type</small>	Research shows that control measures are working but not effective enough to keep R(t) below one. Also, the estimated fractional reported symptomatic cases are between 10 to 50%. Our analysis has shown evidence that the existing control measures are not enough to end the epidemic and more stringent measures are needed.
19.05.20	Work-related COVID-19 transmission in six Asian countries/areas: A follow-up study	Plos One/ Article	Work-related transmission is considerable in early COVID-19 outbreaks, and the elevated risk of infection was not limited to HCW. Implementing preventive/surveillance strategies for high-risk working populations is warranted.

## Therapeutics

Publication date	Title/URL	Journal/Article type	Summary
20.05.20	How to Discover Antiviral Drugs Quickly	The New England Journal of Medicine/ Article	Molecular-dynamics simulations together with virtual high-throughput screening provide a means of quick evaluation of existing drugs for antiviral activity. The authors explain how these methods serve in the quest for drugs to treat Covid-19.

## Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary
20.05.20	COVID-19 in Uganda: Predicting the impact of the disease and public health response on disease burden	preprint from medRxiv and bioRxiv (not peer reviewed)	<ul style="list-style-type: none"> <li>The results indicate that COVID-19 impact on Uganda may be relatively light, while there is a high risk of a significant negative impact on other disease burden if the lockdown response to COVID-19 is prolonged.</li> <li>The results are likely to extend to other sub-Saharan populations, underlining the importance of tailoring COVID-19 responses according to population structure and potential disease vulnerabilities.</li> </ul>

## Comments, Editorials, Opinions, Blogs, News

20.05.20	Vitamin-D and COVID-19: do deficient risk a poorer outcome?	The Lancet Diabetes and Endocrinology/ In Focus	Fiona Mitchell
19.05.20	Septic shock presentation in adolescents with COVID-19	The Lancet Child & Adolescent Health/ Correspondence	Cecilia Dallan, Fabrizio Romano, Johan Siebert, Sofia Politi, Laurence

			Lacroix, Cyril Sahyoun
18.05.20	How covid-19 is accelerating the threat of antimicrobial resistance	BMJ/ Opinion	Jeremy Hsu
19.05.20	Coronavirus vaccine trials have delivered their first results — but their promise is still unclear	Nature/ News	Ewen Callaway
21.05.20	Africa: Let's Prepare for a Marathon Struggle Against COVID-19	All Africa	Dr Chibuzo Okonta
20.05.20	South Africa: Why Easing the Lockdown Threatens to Put Workers in South Africa At Risk	All Africa	
21.05.20	South Africa: SAMRC Scientists Harvest Live Coronavirus for Validation of Test Kits	All Africa	
21.05.20	South Sudan: Minister Makuei Tests Positive for COVID-19	All Africa	
21.05.20	Africa: COVID-19 'Is an African Governance Crisis'	All Africa	
20.05.20	Global solidarity with Africa is an imperative	UN brief	
20.05.20	How Academic Health Systems Can Move Forward Once COVID-19 Wanes	JAMA/ viewpoint	Steven D. Shapiro, Paul B. Rothman

## Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
20.05.20	<a href="#">Impact of COVID-19 in Africa</a>	UN Policy Brief	<ul style="list-style-type: none"> <li>This policy brief takes a snapshot of immediate impacts of the pandemic on health, economies, peace, security, human rights and humanitarian assistance in Africa.</li> </ul>

## Dashboards & Trackers

Cases & deaths: Global	Cases & deaths: Regional	Cases & deaths: Country	Living evidence & policy maps	Current research including trials	Diagnostics	Treatments	Vaccines
<a href="#">WHO sitreps</a>	<a href="#">WHO Africa</a>	<a href="#">Ghana</a>	<a href="#">COVID-NMA</a>	<a href="#">WHO</a>	<a href="#">FIND SARS-CoV-2 Test Tracker</a>	<a href="#">Global COVID-19 Clinical Trial Tracker</a>	<a href="#">CEPI</a>
<a href="#">WHO dashboard</a>	<a href="#">African Arguments</a>	<a href="#">Indonesia</a>	<a href="#">EPPI Centre</a>	<a href="#">WHO International Clinical Trials Registry Platform (ICTRP)</a>	<a href="#">FIND SARS-CoV-2 Diagnostic tests: performance data</a>	<a href="#">US NIH registered clinical trials</a>	<a href="#">Vaccine Centre LSHTM</a>
<a href="#">Johns Hopkins University</a>	<a href="#">European CDC</a>	<a href="#">Nigeria CDC</a>	<a href="#">Norwegian Institute of Public Health</a>	<a href="#">Cytel</a>	<a href="#">Serology-based tests for COVID-19</a>	<a href="#">Solidarity trial</a>	<a href="#">COVID-19 Oxford Vaccine Trial</a>
<a href="#">WEF</a>		<a href="#">Sierra Leone</a>	<a href="#">Oxford COVID-19 Government Response</a>	<a href="#">US NIH</a>	<a href="#">Our World in Data: COVID-19 Testing</a>	<a href="#">COVID-19 Therapeutics Accelerator</a>	

			Tracker (OxCGRT)				
Our World in Data		Singapore	Our World in Data: C19 Policy responses	COVID- evidence			
Global 5050		UK		Cochrane			
CEBM, University of Oxford		US		Clinicaltrials.gov			
Humanitari an Data Exchange				UKCDR			
Information is Beautiful							
LSHTM							
HealthMap (cases)							
The Commons Project							

## C19 Resource Hubs

Global	Regional & Country	Academic journals & Publishers	Global Health Institutes/Centres/Funders/Others	Health Topics	Social Sciences
WHO COVID-19 pandemic	Africa CDC	Annals of Internal Medicine	LSTM	Stop TB Partnership	SSHAP
WHO risk communication	African Union	BMJ	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: Handwashing in low resource settings	Coregroup IDDC
COVID-19 Solidarity Response Fund	Global Health Network Africa	Cell Press	Johns Hopkins University		Ethics, health systems & COVID-19
UN	African Academy of Sciences	Cochrane	Center for Global Development		Social Development Direct C19 blog series
UN Women	Africa Evidence Network	Elsevier	CMMID Repository		

UNOCHA	OCHA Southern and Eastern Africa COVID-19 Digest	JAMA Network	Norwegian Institute of Public Health		
UNHCR		The Lancet	Oxford Centre for Evidence-based Medicine		
UNICEF		medRxiv and bioRxiv (Preprints)	HEART		
UNESCO		NEJM	UKRI		
UN WFP		Oxford University Press	Evidence Aid		
GOARN		PLoS	NIH		
EPI-WIN		SAGE journals			
World Bank		Science			
Our World in Data		Springer Nature			
COVID-19 Narratives by David Nabarro		SSRN (Preprints)			
Reliefweb		Wiley			



Humanitarian OpenStreetMap Team					
Global Partnership for Sustainable Development Data					
WorldPop					
Flowminder					
COVID-END					
Premise COVID-19 Global Impact Study					

## Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
Available now	<a href="#">WHO Academy and WHO Info mobile applications</a>	Mobile app		WHO
Available now	<a href="#">COVID-19: Pandemics, Modelling and Policy</a>	Online learning	2 weeks   2 hours weekly study	FutureLearn UNESCO UNITWIN Complex Systems Digital Campus/Open University
11.5.2020	<a href="#">COVID-19 Contact Tracing course</a>	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

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## 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).

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