

COVID-19

Health Evidence Summary No.60

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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.

Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
04.06.20	The natural history and transmission potential of asymptomatic SARS-CoV-2 infection	Clinical infectious diseases	<ul style="list-style-type: none"> • A massive coronavirus testing campaign in Vietnam has found evidence that infected people who never show any symptoms can pass the virus to others. • Early in the global COVID-19 outbreak, Vietnam began to repeatedly test people at high risk of infection. Those who tested positive were admitted to a hospital until they either recovered or tested negative. • Of roughly 14,000 people tested between mid-March and early April, 49 were infected. Le Van Tan at the Oxford University Clinical Research Unit in Ho Chi Minh City, Vietnam, and his colleagues monitored 30 of the 49 individuals and found that 13 developed no 	testing

			symptoms during their hospital stay	
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Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
10.06.20	Generation of a Broadly Useful Model for COVID-19 Pathogenesis Vaccination, and Treatment	Cell Article	<ul style="list-style-type: none"> It is critical that vaccines and therapeutics be developed very rapidly. Mice, the ideal animal for assessing such interventions, are resistant to SARS-CoV-2. Article describes a murine model of broad and immediate utility to investigate COVID-19 pathogenesis, and to evaluate new therapies and vaccines. 	mouse model, pathogenesis, therapeutics, vaccine
10.06.20	Neuropilin-1 facilitates SARS-CoV-2 cell entry and provides a possible pathway into the central nervous system	bioRxiv Preprint (not peer reviewed)	<ul style="list-style-type: none"> Researchers have found a second protein that SARS-CoV-2 uses to enter human cells, potentially offering a new target for vaccines and drugs. The SARS-CoV-2 protein called Spike is known to attach to a human protein called ACE2, which allows the virus to enter cells. Two teams of 	vaccine

			<p>researchers have now found that the human protein neuropilin-1 (NRP1) also aids viral invasion.</p> <ul style="list-style-type: none"> • Peter Cullen and Yohei Yamauchi at the University of Bristol, UK, and their colleagues showed that a fragment of the Spike protein can bind to NRP1 	
05.06.20	Neuropilin-1 is a host factor for SARS-CoV-2 infection	bioRxiv Preprint (not peer reviewed)	<ul style="list-style-type: none"> • This team found that in mice, NRP1 assists the entry of virus-sized particles into the central nervous system. • The two studies suggest that blocking the interaction between the virus and NRP1 could provide a way to combat coronavirus infection. 	Vaccine

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
11.06.2020	Socio-demographic and epidemiological consideration of Africa's COVID-19 response: what is the possible pandemic course?	Nature Medicine Comment	Bamba Gaye et al.
09.06.20	Update Alert: Epidemiology of and Risk Factors for Coronavirus Infection in Health Care Workers	Annals of Internal Medicine Letter	Roger Chou, Tracy Dana, David I.

			Buckley, Shelley Selph,
09.06.20	When the Dust Settles: Preventing a Mental Health Crisis in COVID-19 Clinicians	Annals of Internal Medicine Ideas and opinions	Stephanie B. Kiser, Rachelle E. Bernacki,
09.06.20	The Impact of COVID-19 on Food Security and Nutrition	UN Policy Brief	
10.06.20	The Importance of Proper Death Certification During the COVID-19 Pandemic	JAMA Viewpoint	James R. Gill, Maura E. DeJoseph, DO
10.06.20	Hydroxychloroquine side-effects raise concerns for rheumatology patients	Lancet Rheumatology News	Brian Owens

Dashboards & Trackers

Cases & deaths: Global	Cases & deaths: Regional	Cases & deaths: Country	Living evidence & policy maps	Current research including trials	Diagnostics	Treatments	Vaccines
WHO sitreps	WHO Africa	Ghana	COVID-NMA	WHO	FIND SARS-CoV-2 Test Tracker	Global COVID-19 Clinical Trial Tracker	CEPI
WHO dashboard	African Arguments	Indonesia	EPPI Centre	WHO International Clinical Trials Registry Platform (ICTRP)	FIND SARS-CoV-2 Diagnostics: performance data	US NIH registered clinical trials	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)	US NIH	Our World in Data: C19 Testing	COVID-19 Therapeutics Accelerator	
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	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	RBM Partnership	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	JAMA Network	Norwegian Institute of Public Health		

	COVID-19 Digest				
UNHCR	South African Government	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	IFPRI Resources and Analyses of C19 Impact		
World Bank		Science	Prevent Epidemics		
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	Standard precautions: Environmental cleaning and disinfection	Online course	1 hour	WHO
16.06.2020	Africa beyond COVID-19	Virtual event	1h 30 hours	ODI
15.06.2020	Poverty monitoring in the context of Covid-19	Virtual event	1h 15	ODI
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	Online learning	Multiple self-paced course	WHO

	coronavirus disease outbreak			
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

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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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