

COVID-19

Health Evidence Summary No.41

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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
18.05.2020	Psychiatric and neuropsychiatric presentations associated with severe coronavirus infections: a systematic review and meta-analysis with comparison to the COVID-19 pandemic	The Lancet Psychiatry Article	<ul style="list-style-type: none"> This SR/meta-analysis looks at the psychiatric and neuropsychiatric consequences of coronavirus infections in 3,550 patients hospitalised with SARS, MERS and COVID-19 If infection with SARS-CoV-2 follows a similar course to that with SARS-CoV or MERS-CoV, most patients should recover without experiencing mental illness SARS-CoV-2 might cause delirium in a significant proportion of patients in the acute stage Clinicians should be aware of the possibility of depression, anxiety, fatigue, post-traumatic stress disorder, and rarer neuropsychiatric syndromes in the longer term
18.05.2020	A clinical risk score to identify patients with Covid-19 at high risk of critical care	The Lancet Infectious Diseases SSRN Preprint	<ul style="list-style-type: none"> This observational cohort study of 1,157 patients acutely admitted to two London hospitals identified predictors of critical care admission and death in people admitted to hospital with COVID-19 and positive SARS-CoV-2 swab results

	admission or death : an observational cohort study		<ul style="list-style-type: none"> • These predictors were incorporated into a risk score that will inform clinical care and stratify patients for clinical trials
15.05.2020	Risks and impact of angiotensin-converting enzyme inhibitors or angiotensin-receptor blockers on SARS-CoV-2 infection in adults	Annals of Internal Medicine A Living Systematic Review	<ul style="list-style-type: none"> • High-certainty evidence suggest that ACEI or ARB use is not associated with more severe COVID-19 disease • Moderate-certainty evidence suggests no association between use of these medications and positive SARS-CoV-2 test results among symptomatic patients • It remains uncertain whether these medications increase the risk for mild or asymptomatic disease or are beneficial in COVID-19 treatment

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary
19.05.2020	Using a delay-adjusted case fatality ratio to estimate under-reporting	CMMID Real time report last update 19.05.2020 (not yet peer reviewed)	<ul style="list-style-type: none"> • Estimates of the percentage of symptomatic COVID-19 cases in different countries using case fatality ratio estimates based on data from the ECDC, correcting for delays between confirmation-and-death
18.05.2020	Susceptible supply limits the role of climate in the early SARS-CoV-2 pandemic	Science Report	<ul style="list-style-type: none"> • Using a climate-dependent epidemic model to simulate the SARS-CoV-2 pandemic outputs suggests that while variations in weather may be important for endemic infections, during the pandemic stage of an emerging pathogen the climate drives only modest changes to pandemic size • Results imply that both tropical and temperate locations should prepare for severe outbreaks of the diseases and that summertime temperatures will not effectively limit the spread of infection • Climate maybe important in the longer term where endemic cycles of the disease will likely be tied to

			climate factors and seasonal peaks may vary with latitude
15.05.2020	Inferring change points in the spread of COVID-19 reveals the effectiveness of interventions	Science Article	<ul style="list-style-type: none"> • This modelling approach allows detection and quantification of the effect of governmental interventions and forecasting future case number scenarios • Analysis highlights the importance of the precise timing and magnitude of interventions for future case numbers and the importance of including the reporting delay between the date of infection and the date of the confirmed cases in the model • The code is freely available and can be readily adapted to any country or region

Testing

Publication date	Title/URL	Journal/Article type	Summary
19.05.2020	Screening for COVID-19: Patient factors predicting positive PCR test	Infection Control & Hospital Epidemiology Article	<ul style="list-style-type: none"> • The selection of patients for SARS-CoV-2 screening remains challenging as many factors influence the decisions on which patients to screen, including test resources, test accuracy and local disease prevalence • Strategies are needed to best utilise testing resources • This retrospective study of patients screened between 12 March 2020 to 26 March 2020 in the US found that exposure to confirmed SARS-CoV-2 and recent travel were both significantly more predictive of a positive test than the presence of any symptoms suggesting a role for testing patients with these risk factors regardless of symptom presence

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary
17.05.2020	What are the effects of convalescent plasma for people with COVID-19?	Cochrane Clinical Answers	<ul style="list-style-type: none"> Reviewers identified two case studies and six small case series evaluating convalescent plasma for people with COVID-19 that included 32 participants All evidence was rated as very low certainty with a lack of higher-quality studies It remains unclear whether these results are related to convalescent plasma therapy, to the underlying natural history of COVID-19, or to other concomitant treatments

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
19.05.2020	Update on the ongoing Novel Coronavirus (COVID-19) Global Epidemic, Brief #18	Africa CDC	
18.05.2020	Planning for a COVID-19 vaccination program	JAMA Viewpoint	Sarah Schaffer DeRoo Natalie J. Pudalov Linda Y. Fu
18.05.2020	What can psychiatrists learn from SARS and MERS outbreaks?	The Lancet Psychiatry Comment	Iris E Sommer P Roberto Bakker
18.05.2020	Somalia sees “massive” rise in FGM during lockdown and Ramadan	All Africa News	Emma Batha

15.05.2020	Wrong but useful – what Covid-19 epidemiologic models can and cannot tell us	NEJM Perspective	Ingra Holmdahl Caroline Buckee
15.05.2020	Drug researchers pursue new lines of attack against COVID-19	Nature Biotechnology News	Charlotte Harrison
12.05.2020	Neglected refugees find themselves even more neglected during COVID-19	African Arguments Blog	Lucy Hovil Vittorio Capici

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
12.05.2020	Guidance on community physical distancing during COVID-19 pandemic	Africa CDC Guidance	<ul style="list-style-type: none"> Revised guidance accommodating new evidence

Dashboards & Trackers

Cases & deaths: Global	Cases & deaths: Regional	Cases & deaths: Country	Living evidence & policy maps	Current research including trials	Diagnosics	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	FIND SARS-CoV-2 Diagnostic	US NIH registered	Vaccine Centre LSHTM

				Platform (ICTRP)	Performance data	Clinical trials	
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		Cochrane			
CEBM, University of Oxford		US		Clinicaltrials.gov			
Humanitarian Data Exchange				UKCDR			
Information is Beautiful							
LSHTM							
HealthMap (cases)							

The Commons Project							
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C19 Resource Hubs

Global	Regional & Country	Academic journals & Publishers	Global Health 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		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		SSRN (Preprints)			

David Nabarro					
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	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

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	COVID-19 Diagnostics and Testing	Online learning	3 weeks 3 hours weekly study	FutureLearn FIND/LSHTM/ASLM

version will commence early June 2020				
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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