

COVID-19

Health Evidence Summary No.39

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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
14.05.2020	Pulmonary arterial thrombosis in COVID-19 with fatal outcome: results from a prospective single-center, clinicopathologic case series	Annals of Internal Medicine Article	<ul style="list-style-type: none"> • COVID-19 predominantly involved the lungs in 11 deceased patients with COVID-19 in this small prospective autopsy study, causing diffuse alveolar damage (DAD) and acute respiratory insufficiency • Death may be caused by the thrombosis observed in segmental and subsegmental pulmonary arterial vessels despite the use of prophylactic anticoagulation
13.05.2020	Multiorgan and renal tropism of SARS-CoV-2	NEJM Correspondence	<ul style="list-style-type: none"> • In this autopsy series of 27 patients, authors found SARS-CoV-2 had a organotropism beyond the respiratory tract, including the kidneys, heart, liver and brain • Authors speculate that tropism influences the course of COVID-19 disease and

			possibly aggravates pre-existing conditions
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Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary
11.05.2020	Prevalence of COVID-19 symptoms, risk factors, and health behaviours in host and refugee communities in Cox's Bazar: a representative panel study	Bulletin of WHO Article	<ul style="list-style-type: none"> • A phone-based survey was administered to a sample of 909 households in Cox's Bazar drawn from a household panel representative of Rohingya refugees and the host population • 24.6% of camp residents and 13.4% of those in host communities reported at least one common symptom of COVID-19 • Among those seeking treatment 42.3% in camps and 69.6% in host communities did so at a pharmacy • 76.7% of those in camps and 52.2% of those in the host community had attended a communal prayer in the previous week and another 47.4% in camps and 34.4% in the host community had attended a non-religious social gathering • COVID-19 symptoms are highly prevalent in Cox's Bazar, especially in refugee camps. Religious and social events threaten efforts to reduce transmission. Pharmacies and religious leaders could help disseminate COVID-19 messaging

Testing

Publication date	Title/URL	Journal/Article type	Summary
13.05.2020	Towards effective diagnostic assays for COVID-19: A review	J Clin Pathol. Review	<ul style="list-style-type: none"> Summary of evidence for diagnoses of cases and to aid laboratories and healthcare workers to select the best assays and procedures

Therapeutics

Publication date	Title/URL	Journal/Article type	Summary
14.04.2020	Proteomics of SARS-CoV-2-infected host cells reveals therapy targets	Nature Article	<ul style="list-style-type: none"> This study identifies the host cell pathways modulated by SARS-CoV-2 infection and show that inhibition of these pathways prevent viral replication in human cells
14.05.2020	Hydroxychloroquine in patients with mainly mild to moderate coronavirus disease 2019: open label, randomised controlled trial	BMJ Article	<ul style="list-style-type: none"> Hospitalised adult patients with mainly mild to moderate persistent COVID-19 who received hydroxychloroquine plus standard of care did not clear the virus more quickly than those receiving standard of care alone in this multicentre, open label randomised controlled trial in China, 11 to 29 February 2020 Adverse events were high in hydroxychloroquine recipients than in non-recipients

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
15.05.2020	Health inequity during the COVID-19 pandemic: a cry for ethical global leadership	The Lancet Correspondence	David Chiriboga Juan Garay Paulo Buss Rocio Saenz Madrigal Laetitia Charmaine Rispel
14.05.2020	Global coordination on cross-border travel and trade measures crucial to COVID-19 response	The Lancet Comment	Kelley Lee Catherine Z Worsnop Karen A Grepin Adam Kamradt-Scott
14.05.2020	An appeal for practical social justice in the COVID-19 global response in low-income and middle-income countries	The Lancet Global Health Comment	Maureen Kelley Rashida A Ferrand Kui Muraya Simukai Chigudu Sassy Molyneus Madhukar Pai et al.
14.05.2020	Leveraging Africa's preparedness towards the next phase of the COVID-19 pandemic	The Lancet Global Health Comment	Madikay Senghore Merveille K Savi Benedicte Gnanon

			William P Hanage Iruka N Okeke
14.05.2020	COVID-19 response in the Middle East and north Africa: challenges and paths forward	The Lancet Global Health Comment	Mohammad Karamouzian Navid Madani
14.05.2020	Dozens of coronavirus drugs are in development – what happens next?	Nature News	Heidi Ledford
14.05.2020	Machine learning can help get COVID-19 aid to those who need it most	Nature World View	Joshua Blumenstock
13.05.2020	Health in a time of COVID-19 – how and where do we start strengthening health systems?	Health Policy and Planning Blog	Fiona Samuels Ana B. Amaya Dina Balabanova
13.05.2020	How COVID-19 is changing the world: a statistical perspective from international agencies	World Bank Blog	Haishan Fu
12.05.20	Impact of international travel dynamics on domestic spread of 2019-nCoV in India: origin-based risk assessment in importation of infected travellers	Globalization and Health Commentary	Sachin S. Gunthe Satya S. Patra

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
13.05.2020	COVID-19 and the need for action on mental health	UN Policy Brief	<ul style="list-style-type: none"> • Rapid implementation of three recommended actions will be essential to ensure people and societies are better protected from the mental health impact of COVID-19 • A study in Ethiopia in April 2020 reported a 3-fold increase in the prevalence of symptoms of depression compared to estimates from before the epidemic
April 2020	Considerations and principles for shielding people at high risk of severe outcomes from COVID-19	SSHAP Brief	<ul style="list-style-type: none"> • Provides an overview of proposed approaches to shielding individuals at high risk of severe disease or death from COVID-19 in LMICs and considers feasibility, challenges and ways to mitigate them • Decisions on shielding must consider local socio-economic context, involve local actors and adapt in response to new evidence about the approach's effectiveness, characteristics of COVID-19 and outbreak trajectories

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 Diagnostic tests: 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		Cochrane			
CEBM, University of Oxford		US		Clinicaltrials.gov			
Humanitarian 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	The Lancet	LSTM	Stop TB Partnership	SSHAP
WHO risk communication	African Union	NEJM	LSHTM		IDA
WHO Q&A	Nigeria CDC	Elsevier	ICL MRC Centre for Global Infectious Disease Analysis	Global Menstrual Collective	Disability and Inclusion
WHO Global research	GeoPoll : SSA	BMJ	ODI	SLH: Handwashing in low resource settings	Coregroup IDDC
COVID-19 Solidarity Response Fund	Global Health Network Africa	Cell Press	Johns Hopkins University		Rings HSG Resyst Reach Wellcome
UN	African Academy of	Cochrane	Center for Global Development		Social Development Direct

	Science s	resource s			C19 blog series
UN Women	Africa Evidenc e Network	PLoS	CMMID Repository		
UNOCHA		Annals of Internal Medicine	Norwegian Institute of Public Health		
UNHCR		Wiley Health Economi cs	Oxford Centre for Evidence- based Medicine		
UNICEF		Pre- prints medRxiv and bioRxiv	HEART		
UNESCO		SAGE journals	UKRI		
UN WFP		JAMA	Evidence Aid		
GOARN		Bulletin of the WHO	NIH		
EPI-WIN					
World Bank					
Our World in Data					
COVID-19 Narratives by					

David Nabarro					
Reliefweb					
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

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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