

COVID-19

Health Evidence Summary No.40

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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.

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary
14.05.2020	The potential effects of widespread community transmission of SARS-CoV-2 infection in the WHO African Region: a predictive model	BMJ Global Health pre-print	<ul style="list-style-type: none"> • This predictive modelling study conducted by the WHO predicts that C19 will infect almost one-quarter of a billion people in Africa during the first year of the pandemic and 190,000 are likely to die unless immediate measures are taken to control the spread of the virus • Risk of exposure and transmission in the WHO African Region is lower than other areas of the world but an increase in hospital admissions and care needs and impacts on morbidity and mortality of other health conditions, will strain limited resources where health systems are not designed to mitigate against the implications of widespread community transmission of SARS-CoV-2 • Countries in the WHO African Region need to expand the capacity and especially of primary hospitals, including basic emergency care needs, to mitigate implication of widespread community spread of SARS-CoV-2

Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary
15.05.2020	Risk factors for SARS-CoV-2 among patients in the Oxford Royal College of General Practitioners Research and Surveillance Centre primary care network: a cross-sectional study	The Lancet Infectious Diseases Article	<ul style="list-style-type: none"> This observational study from 3802 people tested for C19 (including 587 positive tests) in the UK found that a positive SARS-CoV-2 test result within a primary care cohort was associated with similar risk factors as observed for severe outcomes of C19 in hospital settings, except for smoking This study provides evidence of sociodemographic factors associated with a positive test, including deprivation, population density, ethnicity, obesity and chronic kidney disease

Vaccines

Publication date	Title/URL	Journal/Article type	Summary
14.05.2020	Targets of T cell responses to SARS-CoV-2 coronavirus in humans with COVID-19 disease and unexposed individuals	Cell Article	<ul style="list-style-type: none"> Understanding adaptive immunity to SARS-CoV-2 will help vaccine design and evaluation of candidate vaccines, understand C19 pathogenesis and calibration of pandemic control measures SARS-CoV-2-specific CD4⁺ T cells and antibody responses were observed in all C19 cases, and CD8⁺ T cell responses were observed in most CD4⁺ T cell responses to spike, the main target of most vaccine efforts, were robust and correlated with the magnitude of the anti-SARS-CoV-2 IgG and IgA titers Valuable targets for candidate vaccine development were identified along with distinct specificity patterns between C19 cases and unexposed health controls

			<ul style="list-style-type: none"> SARS-CoV-2 reactive CD4⁺ T cells were detected in approx. 40 to 60% of unexposed individuals suggesting pre-existing cross-reactive T cell recognition between circulating 'common cold' coronavirus and SARS-CoV-2
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Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
18.05.2020	Early data show Moderna Covid-19 vaccine generates immune response	Statnews News	Helen Branswell
16.05.2020	Covid-19: Mental health services must be boosted to deal with "tsunami" of cases after lockdown	BMJ News	Ingrid Torjesen
15.05.2020	The sprint to solve coronavirus protein structures – and disarm them with drugs	Nature News feature	Megan Scudellari
15.05.2020	Reopening society and the need for real-time assessment of COVID-19 at the community level	JAMA Viewpoint	Frederick J. Angulo Lyn Finelli David L. Swerdlow
15.05.2020	More harm than good? The net impact of COVID-19 policies is what matters for health	CGD Blog	Damian Walker Y-Ling Chi Amanda Glassman Kalipso Chalkidou
15.05.2020	Sex workers must not be forgotten in the COVID-19 response	The Lancet Comment	Lucy Platt Jocelyn Elmes

			Luca Stevenson Victoria Holt Stephen Rolles Rachel Stuart
14.05.2020	Recommendations from Guatemala to urban municipalities responding to COVID-19 in low- and middle-income countries	ARISE Blog	Guillermo Hegel Yaimie Lopez Kim Ozano
14.05.2020	Integrating implementation science into covid-19 response and recovery	BMJ Editorial	Lisa Hirschhorn Justin D Smith Miriam F Frisch Agnes Binagwaho
13.05.2020	How COVID-19 is changing the world: a statistical perspective from international agencies	World Bank Blog	Haishan Fu
13.05.2020	How nutrition can protect people's health during COVID-19	World Bank blog	Muhammad Ali Pate Martien van Nieuwkoop
12.05.2020	Waste in covid-19 research	BMJ Editorial	Paul P Glasziou Sharon Sanders Tammy Hoffmann
11.05.2020	COVID-19 and postinfection immunity	JAMA Viewpoint	Robert D Kirkcaldy Brian A. King John T. Brooks

29.04.2020	We need global health systems to be stronger than ever: corruption is getting in the way	Health Systems Global Blog	Rachel Cooper
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Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
May 2020	Responding to COVID-19 in Africa: Using data to find a balance	Partnership for Evidence-based response to COVID-19 (PERC) Report	<ul style="list-style-type: none"> • A consortium of global public health organisations and private sector firms collected social, economic, epidemiological, population movement, and security data from AU Member States to help determine the acceptability, impact and effectiveness of public health and social measures for C19 • These findings have been developed into actionable guidance for governments and policymakers • PERC is working with governments to mitigate unintended social and economic disruptions of interventions to control C19
18.05.2020	Management of covid-19: A practical guideline for maternal and newborn health care providers in sub-Saharan Africa	J Maternal-Fetal & Neonatal Med Guideline	<ul style="list-style-type: none"> • This guideline prepares and equips clinicians working in the maternal and newborn sections in the sub-region to manage COVID-19 during pregnancy and childbirth
April 2020	Preserve essential health services during the COVID-19 pandemic	GFF series country briefs	<ul style="list-style-type: none"> • These country briefs provide data and guidance for policy makers and practitioners on preserving essential health care services in a time of crisis to help sustain progress achieved over recent years

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		Ethics, health systems & COVID-19
UN	African Academy of Sciences	Cochrane resources	Center for Global Development		Social Development Direct C19 blog series
UN Women	Africa Evidence Network	PLoS	CMMID Repository		
UNOCHA		Annals of Internal Medicine	Norwegian Institute of Public Health		
UNHCR		Wiley Health Economics	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 OpenStreetM ap 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 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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