

COVID-19

Health Evidence Summary No.32

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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.

COVID-19 Preparedness and Response

Publication date	Title/URL	Journal/Article type	Summary
01.05.2020	Cardiovascular disease, drug therapy and mortality in Covid-19	NEJM Article	<ul style="list-style-type: none"> • This study of 8910 patients from 169 hospitals in Asia, Europe and North America confirms previous observations suggesting that underlying cardiovascular disease is associated with an increased risk of in-hospital death among patients hospitalised with Covid-19 • Specifically, factors independently associated with an increased risk of in-hospital death were age greater than 65 years, coronary artery disease, heart failure, cardiac arrhythmia, chronic obstructive pulmonary disease and current smoking • No increased risk of in-hospital death was associated with the use of angiotensin-converting-enzyme(ACE) inhibitors or angiotensin-receptor blockers (ARBs)– not confirming previous concerns

01.05.2020	Renin-Angiotensin-Aldosterone System Blockers and the risk of Covid-19	NEJM Article	<ul style="list-style-type: none"> • A large population-based case-control study in the Lombardy region of Italy • Although use of ACE inhibitors and ARBs was more frequent among patients with Covid-19 than among controls because of their higher prevalence of cardiovascular disease, there was no evidence that ACE inhibitors or ARBs affected the risk of COVID-19
01.05.2020	Renin-angiotensin-aldosterone system inhibitors and risk of Covid-19	NEJM Article	<ul style="list-style-type: none"> • There was no association between any of the 5 common classes of antihypertensive medications and an increased likelihood of a positive Covid-19 test • There was no association of these medications with a substantial increase in the risk of severe illness among patients who tested positive
May 2020	Lost at home: the risks and challenges for internally displaced children and the urgent actions needed to protect them	UNICEF Report	<ul style="list-style-type: none"> • Children and their families living in displacement are “ultra-vulnerable” to the spread of COVID-19 unless quick action is taken to protect them and ensure response plans consider their unique needs.
04.05.2020	Obesity could shift severe COVID-19 disease to younger ages	The Lancet Correspondence	<ul style="list-style-type: none"> • In a dataset of 265 patients (58% male) admitted to ICU at 6 university hospitals in the US, younger individuals admitted to hospital were more likely to be obese (significant inverse correlation between age and BMI). • There was no difference by sex (p=0.9) • Public messaging to younger adults, reducing the threshold for virus testing in obese individuals, and maintain greater vigilance for this at-risk population should reduce the prevalence of severe COVID-19 disease

Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary
01.05.2020	Report 19: The potential impact of the COVID-19 epidemic on HIV, TB and malaria in low- and middle-income countries	Imperial College London Report	<ul style="list-style-type: none"> • The actions that countries take in the coming weeks and months to reduce the size of the C19 epidemic will have an impact on other major health priorities • In high burden settings, HIV, TB and malaria related deaths over 5y may be increased by up to 10%, 20% and 36% respectively, compared to if there were no C19 epidemic • Impact could be a loss of life-years over 5y similar to the direct impact from C19 in places with a high burden of malaria and large HIV/TB epidemics • The greatest impact on HIV could be from interruption to ART, which may occur during a period of high or extremely high health system demand • The greatest impact on TB could be from reductions in timely diagnosis and treatment of new cases which may result from a long period of C19 suppression interventions • The greatest impact on malaria could be from reduced prevention activities including interruption of planned net campaigns, through all phases of the C19 epidemic. • Continuing critical prevention activities and healthcare services for HIV, TB and malaria could reduce the broader health impact of the C19 epidemic, especially in settings with a high burden of these diseases.
01.05.2020	Report 18: The potential public health impact of COVID-19 on malaria in Africa	Imperial College London Report	<ul style="list-style-type: none"> • Approximately 90% of malaria deaths occur in SSA • Much of the gain made in malaria control over the last 10y has been due to distribution of LLINs. Many SSA countries planned to distribute these in 2020. • Using C19 and malaria transmission models high disruption of all malaria-control activities could more than double the malaria burden in 2020 compared to the previous year depending on how the C19 epidemic

			<p>unfolds and how it interrupts the local health system.</p> <ul style="list-style-type: none"> • Results highlight the importance in prioritising LLIN distributions before or as soon as possible into local C19 epidemics to mitigate this risk. • Continuity of other malaria prevention and treatment activities where possible will also minimise the indirect impact of the C19 epidemic
27.04.2020	The potential impact of interruptions to HIV services: A modelling case study for South Africa	medRxiv (not peer-reviewed) Article	<ul style="list-style-type: none"> • Authors model the 5y impact of three different potential hypothetical scenarios of disruption to HIV treatment and prevention services in South Africa in order to inform planning for service continuity during the COVID-19 epidemic. • Interrupting the supply of ART for 40% of those on ART for 3 months could cause a number of deaths similar to the number anticipated to be saved from COVID-19 through physical distancing measures. • In contrast, if supply and usage of ART is maintained, the increase in AIDS deaths would be limited to 1% over 5y, although there may be an increase in new HIV infections if there are reductions in VMMC, oral PrEP use, and condom availability. • Some of the negative impacts of service disruption could be reduced through policy change e.g. multi-month ART scripting as now recommended where appropriate by WHO and PEPFAR • Ultimately, ensuring the ART supply for individuals currently on treatment would minimise excess mortality among PLHIV in South Africa, and should be a key policy priority

Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Description
05.05.2020	LSHTM COVID-19 Transmission Model (version 1)	CMMID Repository	Simulate C19 epidemics in 152 countries, and see how school closures, social distancing, elderly shielding, self-isolation and lockdowns may impact cases, hospitalisations and deaths. Designed for educational purposes not medical or policy advice.
04.05.2020	Community participation is crucial in a pandemic	The Lancet Comment	Includes a panel of steps to community participation in the C19 response
01.05.2020	Statement on the third meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of coronavirus disease (COVID-19)	WHO Statement	Statement from the third meeting (teleconference) of the expanded Emergency Committee on 30 April 2020 convened by the WHO DG under the IHR (2005) regarding CoVID-19
30.04.2020	COVID-19 and the Rights of Persons with Disabilities: Guidance	UN Human Rights	
28.04.2020	COVI-PREG	CHUV	International COVID-19 and Pregnancy Registry
28.04.2020	Accessibility Campaign – COVID-19	International Disability Alliance	Call for PH information and communications around COVID-19 to be fully accessible
24.04.2020	Handwashing compendium for low resource settings: a living document (edition 1)	IDS Sanitation Learning Hub	

Ongoing	WHO Country & Technical Guidance	WHO	
Ongoing	Rapid guidelines and evidence summaries	NICE	
Ongoing	Inter-Agency Standing Committee (IASC)	IASC	

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type	Author(s)
04.05.2020	COVID-19 immunity passports and vaccination certificates: scientific, equitable, and legal challenges	The Lancet Comment	Alexandra L. Phelan
04.05.2020	Immunomodulation in COVID-19	The Lancet respiratory Medicine Comment	Nicholas E. Ingraham et al.
04.05.2020	Global pledging event raises over €7.4 billion for COVID-19 research and development	WHO News	
29.04.2020	Show evidence that apps for COVID-19 contact-tracing are secure and effective	Nature Editorial	
01.05.2020	Inhibitors of the renin-angiotensin-aldosterone systems and Covid-19	NEJM Editorial	

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)	Serology-based tests for COVID-19	US NIH registered clinical trials	Vaccine Centre LSHTM
Johns Hopkins University	European CDC	Nigeria CDC	Norwegian Institute of Public Health	Cytel		Solidarity trial	
WEF		Sierra Leone	Oxford C19 Government Response Tracker (OxCGRT)	US NIH		COVID-19 Therapeutics Accelerator	
Our World in Data		Singapore		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/ Other	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	Coregroup IDDC

				resource settings	
COVID-19 Solidarity Response Fund	Global Health Network Africa	Cell Press	Johns Hopkins University		Rings HSG Resyst Reach Wellcome
UN	African Academy of Sciences	Cochrane resources	Center for Global Development		Social Development nt Direct C19 blog series
UN Women	Africa Evidence Network	PLoS	CMMID Repository		
UNOCHA		Annals of Internal Medicine	Norwegian Institute of Public Health		
UNHCR			Oxford Centre for Evidence-based Medicine		
UNICEF			HEART		
UNESCO		Wiley Health Economics	UKRI		
UN WFP		Pre-prints medRxiv and bioRxiv	Evidence Aid		
GOARN					

EPI-WIN					
World Bank					
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
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
20 April 2020	COVID-19 Diagnostics and Testing	Online learning	3 weeks 3 hours	FutureLearn FIND/LSHTM/ASLM

			weekly study	
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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