

# COVID-19

## Health Evidence Summary No.103

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*This weekly COVID-19 health evidence summary (HES) is based on 3.5 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.*

### Clinical characteristics and management

Publication date	Title/URL	Journal/Article type	Summary	Keywords
19.11.2020	Antibodies to SARS-CoV-2 are associated with protection against reinfection	medRxiv   pre-print (not peer-reviewed)	<ul style="list-style-type: none"> <li>Investigation of incidence of SARS-CoV-2 PCR-positive results in seropositive and seronegative 12,219 healthcare workers attending asymptomatic and symptomatic staff testing at Oxford University Hospitals, UK</li> <li>Prior SARS-CoV-2 infection that generated antibody responses offered protection from reinfection for most people in the six months following infection</li> <li>Further work required to determine longer-term protection and correlates of post-infection immunity</li> </ul>	Antibody protection
Oct 2020	Establishment of a high-dependency unit in Malawi	BMJ Global Health  Practice	<ul style="list-style-type: none"> <li>Description of a participatory approach to design and implement a sustainable high-dependency unit for low-income SSA setting (tertiary referral centre)</li> </ul>	Participatory approach, high-dependency unit

			<p>serving Malawi's Southern region)</p> <ul style="list-style-type: none"> <li>• This included: prospective agreement on remit, alignment with existing services, refurbishment of a dedicated physical space, recruitment and training of specialist nurses, development of context-sensitive clinical standard operating procedures, purchase of appropriate and durable equipment and creation of digital clinical information systems</li> <li>• Description includes acceleration of the opening of the unit and how it responded to the COVID-19 demand</li> </ul>	
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## Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
19.11.2020	SARS-CoV-2, SARS-CoV, and MERS-CoV viral load dynamics, duration of viral shedding, and infectiousness: a systematic review and meta-analysis	The Lancet Microbe   Systematic Review and meta-analysis	<ul style="list-style-type: none"> <li>• SR and MA of viral load kinetics and duration of viral shedding in various body fluids, important determinants for disease transmission</li> <li>• Although SARS-coV-2 RNA shedding in respiratory and stools samples can be prolonged, duration of viable infectious virus is relatively short-lived</li> <li>• SARS-CoV-2 titres in the upper respiratory tract peak in the first week of illness</li> <li>• Early case finding and isolation, public education on the spectrum of illness and period of infectiousness are key to containing spread well</li> </ul>	infectiousness

## Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
20.11.2020	Physical interventions to interrupt or reduce the spread of respiratory viruses	Cochrane   Systematic Review	<ul style="list-style-type: none"> <li>This updated SR assessed the effectiveness of physical interventions to interrupt or reduce the spread of acute respiratory viruses</li> <li>Note does not include results from studies from the current COVID-19 pandemic</li> <li>The high risk bias in the trials variation in outcome measurement, and relatively low compliance with the interventions during the studies prevent firm conclusions being drawn and generalising findings to the COVID-19 pandemic</li> <li>Authors state that there is a need for large, well-designed RCTs addressing effectiveness of many of these interventions in multiple settings and populations and especially in those most at risk of acute respiratory infections</li> </ul>	Physical interventions

## Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
19.11.2020	Routine laboratory testing to determine if a patient has	Cochrane   Systematic Review	<ul style="list-style-type: none"> <li>Specific diagnostic tests to detect SARS-CoV-2 and resulting disease are not always available and take time to obtain results</li> <li>This SR assesses the diagnostic accuracy of routine laboratory testing as a triage test to determine if a person has COVID-19</li> </ul>	Triage, routine laboratory testing

	COVID-19		<ul style="list-style-type: none"> <li>• None of the tests investigated are useful for accurately ruling in or out COVID-19 on their own</li> <li>• Studies done were in specific hospitalised populations and future studies could consider evaluation of these tests in non-hospital settings to see how these tests would perform in people with milder symptoms</li> </ul>	
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## Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
18.11.2020	Safety and immunogenicity of ChAdOx1 nCoV-19 vaccine administered in a prime-boost regimen in young and old adults (COV002) a single-blind, randomised, controlled, phase 2/3 trial	The Lancet   Article	<ul style="list-style-type: none"> <li>• Older adults (aged <math>\geq 70</math>y) are at increased risk of severe disease and death if they develop COVID-19 symptoms and are therefore a priority for an effective COVID-19 vaccine but immunogenicity of vaccines is often worse in older adults as a result of immunosenescence</li> <li>• Safety and immunogenicity of ChAdOx1 nCoV-19 in a phase 2 component of a single-blind, randomised, controlled, phase 2/3 trial (COV002) in healthy adults enrolled in an age-escalation manner (18-55y, 56-69y and 70years plus) at two UK sites - a wider range of participants than previously reported</li> <li>• Results show that ChAdOx1 nCoV-19 appears to be better tolerated in</li> </ul>	Oxford vaccine, safety, immunogenicity, older adults

			older adults than in younger adults and has similar immunogenicity across all age groups after a boost dose	
17.11.2020	Safety, tolerability, and immunogenicity of an inactivated SARS-CoV-2 vaccine in healthy adults aged 18-59 years: a randomised, double-blind, placebo-controlled, phase1/2 clinical trial	The Lancet Infectious Diseases   Article	<ul style="list-style-type: none"> <li>• Randomised, double-blind, placebo controlled, phase1/2 clinical trial, in healthy adults in China of an inactivated vaccine candidate CoronaVac (Sinovac Life Sciences) to screen safety of two doses and two vaccination schedules in a small cohort before expanding to a larger cohort to explore immunogenicity</li> <li>• Data on safety, immunogenicity, and production capacity support assessment of the 3ug dose of CoronaVac in phase 3 clinical trials already ongoing in Brazil, Indonesia and Turkey</li> </ul>	CoronaVac, safety, tolerability, immunogenicity
			<ul style="list-style-type: none"> <li>• <i>Refer to Comments, Editorials, Opinions, Blogs, News Section below for press releases on vaccine candidates</i></li> </ul>	

## Social Science

Publication date	Title/URL	Journal/Article type	Summary	Keywords
2020	Vaccine Hesitancy and Building Confidence in COVID-19 Vaccination	SSHAP   Rapid Review	<ul style="list-style-type: none"> <li>• Drawing on social science literature and informal interviews with experts, this brief highlights the complexity of and context-specific reasons for vaccine hesitancy reflecting not just exposure to misinformation or anti-vaccine campaigners but also diverse, everyday anxieties</li> <li>• Strategies are proposed to guide policy makers, public health officials, vaccine developers, health workers, researchers, advocates, communicators, media actors and other involved in vaccine development, communication and deployment to increase confidence in COVID-19 vaccines</li> <li>• This brief is part of a series on vaccines</li> </ul>	Vaccine hesitancy
2020	Risk Communications and Community Engagement to Overcome COVID-19 Fatigue in Eastern Mediterranean, Middle East and North Africa	SSHAP   Evidence Review	<ul style="list-style-type: none"> <li>• A focus on social and cultural influences for sustained COVID-19 prevention and risk reduction behaviours in the MENA region to overcome fatigue or complacency about measures designed to protect</li> <li>• A brief synthesis of UNICEF's comprehensive review of the evidence to inform the development of risk communication and community engagement strategies and regional</li> </ul>	RCCE, MENA

			<p>guidance and tools as the COVID-19 crisis evolves</p> <ul style="list-style-type: none"> <li>Operational considerations based on the findings are given</li> </ul>	
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## Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal   Article type
23.11.2020	<a href="#">Oxford University breakthrough on global COVID-19 vaccine</a>	University of Oxford   News
23.11.2020	<a href="#">Launching an interactive webtool to analyse the COVID-19 vaccine portfolio</a>	CGD   Blog
22.11.2020	<a href="#">COVID-19 vaccine predictions: the interactive tool</a>	CGD   Tool
21.11.2020	<a href="#">FDA authorizes monoclonal antibodies for treatment of COVID-19</a>	FDA   News
20.11.2020	<a href="#">Policy makers must act on incomplete evidence in responding to COVID-19</a>	Cochrane   Editorial
20.11.2020	<a href="#">Ethical and scientific considerations regarding the early approval and deployment of a COVID-19 vaccine</a>	Annals Internal Medicine   Ideas and Opinions
20.11.2020	<a href="#">Pfizer and BioNTech to submit emergency use authorization request today to the U.S. FDA for COVID-19 vaccine</a>	Pfizer   News
20.11.2020	<a href="#">WHO Guideline Development Groups advises against use of remdesivir for COVID-19</a>	BMJ   News
20.11.2020	<a href="#">Lessons from around the world on fighting COVID's second wave</a>	The Conversation   Jimmy Whitworth

20.11.2020	Strengthening pandemic preparedness and response begins with answering the question: where are the women?	BMJ   Opinion
19.11.2020	Tocilizumab treatment in critically ill COVID-19 patients	@rempa_cap   Twitter thread
18.11.2020	Age and frailty in COVID-19 vaccine development	The Lancet   Comment
18.11.2020	Ensuring access to essential sexual and reproductive health products during COVID-19: challenges and future directions	Health Policy and Planning Debated   Blog
18.11.2020	The syndemic of COVID-19 and gender-based violence in humanitarian settings: leveraging lessons from Ebola in the Democratic Republic of Congo	BMJ Global Health   Commentary
18.11.2020	A platform to support the researchers and decision-makers generating and using health economics research to tackle COVID-19	CGD   Blog
18.11.2020	A proposed framework and timeline of the spectrum of disease due to SARS-CoV-2 infection	JAMA   Viewpoint
17.11.2020	A look inside laboratories responding to COVID-19	WHO   Blog
16.11.2020	India's syndemic of tuberculosis and COVID-19	BMJ Global Health   Editorial



## Guidelines, Statements & Tools

Publication Date	Title/URL	Source	Summary
20.11.2020	Therapeutics and COVID-19: living guideline	WHO   Guideline	<ul style="list-style-type: none"><li>Update to a living guideline on clinical care for COVID-19 with a conditional recommendation against the use of remdesivir in hospitalised patients, regardless of disease severity, as there is no evidence that remdesivir improves survival and other outcomes in these patients</li></ul>
04.11.2020	Considerations for implementing and adjusting public health and social measures in the context of COVID-19	WHO   Interim guidance	<ul style="list-style-type: none"><li>Update to 16 April interim guidance on public health social measures, including non-pharmaceutical individual and societal interventions to control COVID-19</li></ul>

## 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	<a href="#">COVID-19 Oxford Vaccine Trial</a>
WEF		Sierra Leone	Oxford C19 Government Response Tracker (OxCGRT)	US NIH	Our World in Data: C19 Testing	COVID-19 Therapeutics Accelerator	<a href="#">COVID-19 Vaccine Tracker</a>

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							
SeroTracker							

## 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	Epidemic Preparedness Innovations	Social Development Direct C19 blog series
UN Women	Africa Evidence Network	Elsevier	CMMID Repository		

UNOCHA	OCHA Southern and Eastern Africa COVID-19 Digest	Health Policy and Planning	Norwegian Institute of Public Health		
UNHCR	South African Government	JAMA Network	Oxford Centre for Evidence-based Medicine		
UNICEF		The Lancet	HEART		
UNESCO		medRxiv and bioRxiv (Preprints)	UKRI		
UN WFP		NEJM	Evidence Aid		
GOARN		Oxford University Press	NIH		
EPI-WIN		PLoS	IFPRI Resources and Analyses of C19 Impact		
World Bank		SAGE journals	Prevent Epidemics		
Our World in Data		Science			
COVID-19 Narratives by David Nabarro		Springer Nature			

Reliefweb		SSRN (Preprints)			
Humanitarian OpenStreetMap Team		Wiley			
Global Partnership for Sustainable Development Data					
WorldPop					
Flowminder					
COVID-END					
Premise COVID-19 Global Impact Study					
GISAID					

## Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
04.12.2020	COVID-19, supply chain resilience and global trade	Webinar	1h	CGD
03.12.2020	More money for health services: What	WHO & CGD Health systems	1h 30	Joe Kutzin

	is the role of PFM in the “new normal”?	Governance & Financing		
19.11.2020	Looking at the pandemic with a gender lens	Live Twitter conversation		SSHAP
16.11.2020	HIFA and WHO collaborate to promote sharing of experience and expertise around the maintenance of essential health services during (and after) the pandemic	4-week discussion starting 16 Nov		HIFA
10.11.2020	COVID-19 vaccine predictions part 2: estimating the time before we approve efficacious COVID-19 vaccines	Online event	1h30	CGD
16.10.2020	Financing a Global Public Health Response	Online event	1h30	CGD
02.10.2020	Understanding and Improving COVID-19 Vaccine Portfolio	Online event	1h30	CGD
21.09.2020	Mitigating the Economic and Health Impact of COVID-19 across Africa	Online event	1h30	CGD, GF, AU
June 2020	OpenWHO, the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.	Online courses	Varies	WHO

Available now	Standard precautions: Environmental cleaning and disinfection	Online course	1 hour	WHO
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
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
Available now	Emerging respiratory viruses, including COVID-19: methods for detection,	Online learning	3 hours	WHO



	prevention, response and control			
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 weekly 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 “South Asia” OR “Developing” OR “low-income” OR “low income” OR “lower-middle income” OR “low and middle income” OR “LMIC” OR “LIC” OR “global south”) OR (“poverty”) OR (“equity” OR “equities”), 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 weekly COVID-19 health evidence summary (HES) is based on 3.5 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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