

# COVID-19

## Health Evidence Summary No.86

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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
27.07.2020	Longitudinal analyses reveal immunological misfiring in severe COVID-19	Nature   Article unedited	<ul style="list-style-type: none"> <li>• Longitudinal immunological correlates of disease outcome remain unclear</li> <li>• Immune profiling in 113 C19 patients with moderate (non-ICU) and severe (ICU) disease identified development of a maladapted immune response profile associated with severe C19 outcome and early immune signatures that correlate with divergent disease trajectories</li> </ul>	Immune response

26.07.2020	Previous and active tuberculosis increases the risk of death and prolongs recovery in patients with COVID-19	medRxiv   pre-print (not peer-reviewed)	<ul style="list-style-type: none"> <li>• Longitudinal cohort analysis of matched C19 patients with and without TB, using C19 surveillance data in the Philippines</li> <li>• Co-infection with TB increased morbidity and mortality in C19 patients</li> </ul>	TB co-infection
24.07.2020	Presence of genetic variants among young men with severe COVID-19	JAMA   Preliminary Communication	<ul style="list-style-type: none"> <li>• A case series of 4 young male patients with severe C19</li> <li>• A rare genetic variant were identified that were associated with impaired type I and II IFN responses</li> </ul>	genetics
23.07.2020	Neonatal management and outcomes during the COVID-19 pandemic: an observation cohort study	The Lancet Child & Adolescent Health   Article	<ul style="list-style-type: none"> <li>• Perinatal transmission of C19 is unlikely to occur if correct hygiene precautions are undertaken</li> <li>• Bearing in mind the benefits of early mother-neonate bonding and breastfeeding, allowing neonates to room in with their mothers and direct breastfeeding are safe procedures when paired with effective parental education of infant protective strategies</li> </ul>	neonates

## Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
29.07.2020	Observations of the global epidemiology of COVID-19 from the prepandemic period using web-based surveillance: a cross-sectional analysis	The Lancet Infectious Diseases   Article	<ul style="list-style-type: none"> <li>• Description of the global spread of SARS-CoV-2 and characteristic of C19 cases and clusters before the characterisation of C19 as a pandemic</li> <li>• Cases with travel links to China, Italy or Iran accounted for almost two-thirds of the first reported C19 cases from affected countries</li> <li>• Where age information is available – most were among adults aged 18 years or older</li> <li>• There were many clusters of household transmission among early cases, but clusters were larger in occupational or community settings</li> <li>• This study also highlights the relatively late detection of SARS-CoV-2 in the WHO African region and remaining knowledge gaps, including paucity of case data from low-income countries</li> </ul>	Global spread, pre-pandemic
21.07.2020	Impact of self-imposed prevention measures and short-term government-imposed social distancing on mitigating the delaying a COVID-19 epidemic: A	PLOS Medicine   Article	<ul style="list-style-type: none"> <li>• This study compared the individual and combined effectiveness of self-imposed prevention measures and of short-term government-imposed social distancing in mitigating, delaying, or preventing a C19 epidemic</li> <li>• Results suggest information dissemination about proven self-imposed measures can be an effective strategy to mitigate and delay the epidemic</li> <li>• Early initiated short-term government-imposed social distancing can buy</li> </ul>	Prevention, individual, social distancing

	modelling study		time or healthcare systems to prepare for an increasing C19 burden	
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## Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
29.07.2020	SARS-CoV-2, SARS-CoV-1 and MERS-CoV viral load dynamics, duration or viral shedding and infectiousness: a living systematic review and meta-analysis	medRxiv   pre-print (not peer-reviewed)	<ul style="list-style-type: none"> <li>• Viral load kinetics and the duration of viral shedding are important determinants for disease transmission</li> <li>• Although SARS-CoV-2 RNA shedding in respiratory and stool can be prolonged, duration of viable virus is relatively short-lived</li> <li>• Detection of viral RNA cannot be used to infer infectiousness</li> <li>• No study to date has detected live virus beyond day 9 of illness despite persistently high viral loads</li> <li>• SARS-CoV-2 viral load in the upper respiratory tract appears to peak in the first week of illness, while SARS-CoV-1 and MERS-CoV peak later</li> <li>• This study highlights the importance of early case finding and isolation</li> </ul>	Infectious virus, RNA
30.07.2020	How to keep patients and staff safe from accidental COVID-19 exposure in the emergency room: Lesson from South Korea's explosive COVID-19 outbreak	Infection Control & Hospital Epidemiology   Article	<ul style="list-style-type: none"> <li>• An emergency room shutdown related to an accidental exposure to a patient with C19 who had not been isolated</li> <li>• Problematic accidental exposure and in-hospital transmission of COVID-19 can be successfully prevented through active isolation and surveillance policy and comprehensive PPE use despite longer ER stays and the presence of more severely ill patients</li> </ul>	nosocomial

			during an explosive C19 outbreak <ul style="list-style-type: none"> <li>• Paper included as a reminder to consider patient flow and nosocomial exposure</li> </ul>	
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## Testing

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.07.2020	Point-of-care serological assays for delayed SARS-CoV-2 case identification among health-care workers in the UK: a prospective multicentre cohort study	The Lancet Respiratory Medicine   Article	<ul style="list-style-type: none"> <li>• Included to highlight that variation in performance characteristics between assays highlights the urgent need for individual evaluation of the large number of commercial SARS-Co-2 serology tests that have become rapidly available</li> <li>• Identification of false-negative results among HCWs suggest caution in interpretation of serology results at this early stage in the scale up of serology testing</li> </ul>	Serology testing

## Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
23.07.2020	Hydroxychloroquine with or without Azithromycin in mild-to-moderate Covid-19	NEJM   Article	<ul style="list-style-type: none"> <li>• The use of hydroxychloroquine, alone or with azithromycin, in patients hospitalised with mild-to-moderate C19 did not improve clinical status at 15 days compared with standard care</li> </ul>	Hydroxychloroquine, azithromycin

## Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
30.07.2020	Pandemic performance: women leaders in the Covid-19 crisis	Politics & Gender	<ul style="list-style-type: none"> <li>• Analysis of data on C19 policy responses provided by the Coronavirus Government Response Tracker, combined with data on the gender of government leaders and the percentage of women in legislatures</li> <li>• There was no reliable evidence of policy difference across women and men in response to the pandemic</li> <li>• The share of women in legislatures is associated with a delay in closing schools, consistent with women policymakers placing a higher social and economic value on schools remaining open</li> </ul>	Women, leadership

## Health systems

Publication date	Title/URL	Journal/Article type	Summary	Keywords
22.07.2020	A tipping point for Yemen's health system: the impact of COVID-19 in a fragile state	MedGlobal   Report	<ul style="list-style-type: none"> <li>• 27% mortality rate of Yemenis who are confirmed to have COVID-19 – more than 5 times the global average and among the highest COVID-19 mortality rate in the world</li> <li>• Disproportionate harm to health workers – 97 health workers have died in Yemen reportedly from C19</li> <li>• This report explores how C19 is overwhelming the HS</li> <li>• Provides several recommendations based on information from health teams in Yemen</li> </ul>	Yemen

## Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal   Article type
August 2020	The indirect impact of COVID-19 on women	The Lancet Infectious Diseases   Newsdesk
30.07.2020	New SARS-CoV-2 Vaccine Results, with Peter Piot	NEJM   Audio interview
29.07.2020	COVID-19 surfaces new directions for old challenges: three lasting ways to improve global health procurement	CGD   Blog
29.07.2020	Stockpiling of drugs: should the world care?	CGD   Blog
29.07.2020	'One big wave' – why the Covid-19 second wave may not exist	The Guardian   News
29.07.2020	Roche provides an update on the phase II COVACTA trial of Actemra/RoActemra in hospitalised patients with severe COVID-19 associated pneumonia	Roche   Media release
28.07.2020	Lung fibrosis: an undervalued finding in COVID-19 pathological series	The Lancet Infectious Diseases   Correspondence
28.07.2020	The challenges of informative wastewater sampling for SARS-CoV-2 must be met: lessons from polio eradication	The Lancet Microbe   Comment
27.07.2020	Impacts of COVID-19 on childhood malnutrition and nutrition-related mortality	The Lancet   Comment
27.07.2020	Child malnutrition and COVID-19: the time to act is now	The Lancet   Comment
27.07.2020	Eliminating viral hepatitis in the COVID-19 era: weighing challenge and opportunity	The Lancet Gastroenterology & Hepatology   Editorial

27.07.2020	The impact of COVID-19 on hepatitis elimination	The Lancet Gastroenterology & Hepatology   Comment
27.07.2020	COVID-19 and heatwaves: a double whammy for Indian cities	The Lancet Planetary Health   Comment
27.07.2020	Covid-19: Deaths in Yemen are five times global average as healthcare collapses	BMJ   News
25.07.2020	COVID-19 vaccine affordability and accessibility	The Lancet   Correspondence
25.07.2020	COVID-19 and China: lessons and the way forward	The Lancet   Editorial
25.07.2020	Pandemic science and politics	The Lancet   Perspectives   Book
24.07.2020	Molecular underpinnings of severe coronavirus disease 2019	JAMA   Editorial
24.07.2020	Particle sizes of infectious aerosols: implications for infection control	The Lancet Respiratory Medicine  Viewpoint
24.07.2020	The time to do serosurveys for COVID-19 is now	The Lancet Respiratory Medicine   Comment
24.07.2020	Need for sustainable biobanking networks for COVID-19 and other diseases of epidemic potential_	The Lancet Infectious Diseases   Personal View
23.07.2020	COVID-19 response in Lebanon: Current experience and challenges in a low-resources setting	JAMA   Viewpoint
23.07.2020	Vaccine preliminary results: here is why we need to exercise caution	CGD   Blog
23.07.2020	Management of mother-newborn dyads in the COVID-19 era	The Lancet Child & Adolescent Health   Comment



21.07.2020

Can self-imposed prevention measures mitigate the COVID-19 epidemic?

PLOS Medicine | Perspective

## 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	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	COVID-19 Vaccine Tracker
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							

## 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					

GISAIID					
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## Online learning & events

Date	Title/URL	Online learning/event	Duration	Lead
30.07.2020 1440-1530 BST	<a href="#">The politics of vaccines: development and delivery</a>	Online event	1h 30	Blavatnik School of Government, University of Oxford
June 2020	<a href="#">OpenWHO, the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.</a>	Online courses	Varies	WHO
Available now	<a href="#">Standard precautions: Environmental cleaning and disinfection</a>	Online course	1 hour	WHO
Available now	<a href="#">COVID-19: Effective Nursing in Times of Crisis</a>	Online course	2 weeks – 2 hours per week	Johns Hopkins School of Nursing
Available now	<a href="#">WHO Academy and WHO Info mobile applications</a>	Mobile app		WHO
Available now	<a href="#">COVID-19: Pandemics, Modelling and Policy</a>	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, 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 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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