

COVID-19

Health Evidence Summary No.104

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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
30.11.2020	Olfactory transmucosal SARS-CoV-2 invasion as a port of central nervous system entry in individuals with COVID-19	Nature Neuroscience Article	<ul style="list-style-type: none"> An autopsy study which suggests that SARS-CoV-2 may enter the brain of people through the nose May help explain some of the neurological symptoms observed in COVID-19 patients and may inform diagnosis and measures to prevent infection 	Viral entry, nervous system
26.11.2020	Thoracic imaging tests for the diagnosis of COVID-19	Cochrane Diagnostic Systematic Review	<ul style="list-style-type: none"> First update of this 'living systematic review' – shows change in accuracy from initial review to this update (more and higher quality studies). This update focuses on people suspected of having COVID-19 and excludes studies with only confirmed COVID-19 participants Findings indicate that chest CT is sensitive and moderately specific for the diagnosis of COVID-19 in 	CT, diagnosis

			<p>suspected patients suggesting that CT could play a limited role in differentiating SARS-CoV-2 infection from other causes of respiratory illness</p> <ul style="list-style-type: none"> • Because of limited data, accuracy estimates of chest X-ray and ultrasound of the lungs for the diagnosis of suspected COVID-19 cases should be carefully interpreted • Includes recommendations for future diagnostic accuracy studies 	
24.11.2020	Association between ABO and Rh blood groups and SARS-CoV-2 infection or severe COVID-19 illness	Annals of Internal Medicine Original Research	<ul style="list-style-type: none"> • To determine whether ABO and Rh blood groups are associated with risk for SARS-CoV-2 infection and severe COVID-19 • Population-based cohort study of 225, 556 persons in Ontario, Canada • The O and Rh- blood groups may be associated with a slightly lower risk for SARS-CoV-2 infection and severe COVID-19 illness 	Blood group, infection, severe COVID-19

Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
27.11.2020	SARS-CoV-2 setting-specific transmission rates: a systematic review and meta-analysis	ICL Report 38	<ul style="list-style-type: none"> • Understanding the drivers of SARS-CoV-2 transmission is crucial for disease control policies but evidence of transmission rates in different settings remains limited • A systematic review to estimate the secondary attack rate (SAR) and observed reproduction number (R_{obs}) in different settings and to explore differences by age, symptom status, 	Transmission, setting-specific

			<p>duration of exposure and household size</p> <ul style="list-style-type: none"> Households showed the highest transmission rates with pooled SAR and Robs estimates of 21.1% (95% CI: 17.4-24.8%) and 0.96 (95%CI: 0.67-1.32), respectively Household SAR estimates were significantly higher where duration of household exposure exceeded 5 days compared with exposure of 5 days or less Attack rates were higher with prolonged close contacts (e.g. social events with family and friends) compared with casual contact, such as with strangers Estimates of SAR for asymptomatic index cases were approx. two thirds of those for symptomatic index Moderate evidence for less transmission both from and to individuals under 20 years of age in household context, but less evidence when examining all settings Limited data to explore transmission patterns in workplaces, schools and care-homes 	
25.11.2020	Children's role in the COVID-19 pandemic: a systematic review of susceptibility, severity, and transmissibility	ICL Report 37	<ul style="list-style-type: none"> Systematic review of early studies synthesising evidence on the susceptibility of children to SARS-CoV-2 infection, the severity and clinical outcomes in children with SARS-CoV-2 infection, and the transmissibility of 	children, susceptibility, severity, transmission

			<p>SARS-CoV-2 by children</p> <ul style="list-style-type: none"> • A final 29 studies were considered for meta-analysis that included information of symptoms and/or severity. No studies were identified that were designed to assess transmissibility in children • Children's susceptibility to infection and onward transmissibility relative to adults is still unclear and varied widely between studies • It is evidence that most children experience clinically mild disease or main asymptotically infected • More comprehensive contact-tracing studies combined with serosurveys are needed to quantify children's transmissibility relative to adults 	
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Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.11.2020	A cluster-randomised trial of hydroxychloroquine for prevention of Covid-19	NEJM Article	<ul style="list-style-type: none"> • Hydroxychloroquine has been proposed as a postexposure therapy to prevent Covid-19, but definitive evidence is lacking • Open-label, cluster-randomised trial involving 2314 healthy 	Hydroxychloroquine, prevention

			<p>asymptomatic contacts of 672 patients with PCR-confirmed Covid-19 in Spain</p> <ul style="list-style-type: none"> • Postexposure therapy in hydroxychloroquine did not prevent SARS-CoV-2 infection or symptomatic Covid-19 in healthy persons exposed to a PCR-positive index case 	
24.11.2020	A randomized trial of convalescent plasma in COVID-19 severe pneumonia	NEJM Article	<ul style="list-style-type: none"> • Randomised, placebo-controlled trial of convalescent plasma for severe COVID-19 • Primary outcome was patient's clinical status 30 days after the intervention (n=228 CP, n=105 placebo) • No significant differences observed in clinical status or overall mortality in patients treated with convalescent plasma compared with those who received placebo • Use of convalescent plasma as a standard of care should be re-evaluated 	Convalescent plasma, severe COVID-19
21.11.2020	Prevention of severe COVID-19 in the elderly by early high-titer plasma	medRxiv pre-print (non-peer reviewed)	<ul style="list-style-type: none"> • Early evidence suggests convalescent plasma in hospitalised patients may be unsuccessful in preventing 	Convalescent plasma, mild COVID-19

			<p>progression of COVID-19</p> <ul style="list-style-type: none"> • Randomised, double-blind, placebo-controlled trial of convalescent plasma with high IgG titers against SARS-CoV-2 in 160 elderly subjects in Argentina within 72 hours of mild COVID-19 symptoms • Early administration of high-titer convalescent plasma reduced mild COVID-19 progression 	
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Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
			<ul style="list-style-type: none"> • No new articles found this week 	
			<ul style="list-style-type: none"> • <i>Refer to Comments, Editorials, Opinions, Blogs, News Section below for press releases on vaccine candidates</i> 	

Social Science

Publication date	Title/URL	Journal/Article type	Summary	Keywords
2020	COVID-19: Violence risk and income loss among	ADD International Report	<ul style="list-style-type: none"> • This report presents findings from telephone interviews with 87 members from Disabled People's Organisation (DPO) partners and 10 DPO/Self-Help Group (SHG) leaders from organisations with 1,998 members in 10 districts across 7 provinces of Cambodia to 	Persons with disabilities, Cambodia

	persons with disabilities		<p>ask about the impact of the COVID-19 pandemic on persons with disabilities</p> <ul style="list-style-type: none"> • Three patterns emerge: (1) there is a pattern of compounding vulnerability to violence; (2) a pattern of significant livelihood loss that is felt differently by disability type and gender; and (3) a link between livelihood loss and pronounced increase in economic and psychological violence against women and girls with disabilities 	
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Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
24.11.2020	WICID framework version 1.0: criteria and considerations to guide evidence-informed decision-making on non-pharmacological interventions targeting COVID-19	BMJ Global Health Original Research	<ul style="list-style-type: none"> • Decision-makers need to balance numerous and often conflicting factors when making ad hoc decisions on public health matters and health policy with insufficient consideration of relevant factors reducing acceptance, limiting effectiveness • Here authors develop a decision-making “WICID” framework that provides 11+1 criteria informed by 47 aspects, intended to support decision-making on non-pharmacological interventions to contain the global SARS-CoV-2 pandemic • Usage of the framework aims to support balanced decision-making, even if not all voices of 	EIDM, framework

			relevant stakeholders could be included in the process due to time constraints imposed by the rapid progress of the pandemic	
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Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type
30.11.2020	Covid vaccine: Moderna seeks approval in US and Europe	BBC News
30.11.2020	'Absolutely remarkable': No one who got Moderna's vaccine in trial developed severe COVID-19	Science News
28.11.2020	A tribute to some of the doctors who died from COVID-19	Lancet Obituary
28.11.2020	Maintaining the HIV response in a world shaped by COVID-19	Lancet Editorial
28.11.2020	Afghanistan braced for second wave of COVID-19	Lancet World Report
26.11.2020	Peter Doshi: Pfizer and Moderna's "95% effective" vaccines – let's be cautious and first see the full data	BMJ Opinion
26.11.2020	The place for remdesivir in COVID-19 treatment	Lancet Infectious Diseases
25.11.2020	The domestic allocation of COVID-19 vaccines in low- and middle-income countries, who goes first?	CGD Blog
25.11.2020	Why COVID-19 strengthens the case for a dedicated financing mechanism to scale up innovation in women's, children's, and adolescents' health	The Lancet Global Health Comment

25.11.2020	Certificate of COVID Vaccination: can we do better than the yellow card?	CGD Blog
24.11.2020	Preventing a “return to normal”: addressing violence against women during COVID-19	CGD Blog
24.11.2020	Remdesivir: a pendulum in a pandemic	BMJ Editorial
23.11.2020	Hydroxychloroquine for COVID-19: Balancing contrasting claims	Eur J Intern Med Commentary

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							
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 is the role of PFM in the “new normal”?	WHO & CGD Health systems Governance & Financing	1h 30	Joe Kutzin
01.12.2020	Solutions and support for the mental wellbeing of	Webinar		HSG TWG on CHWs with The George

	community health workers on the COVID-19 frontline			Institute for Global Health
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	Online courses	Varies	WHO

	courses related to COVID19.			
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	Online learning	3 hours	WHO

	for detection, 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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