

COVID-19

Health Evidence Summary No.116

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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
12.03.2021	Association of acute symptoms of COVID-19 and symptoms of depression in adults	JAMA Research Letter	<ul style="list-style-type: none"> Survey of 3,904 COVID-19 survivors between May 2020 and January 2021 in the US found that 52.4% met the criteria for moderate or greater symptoms of major depression These symptoms were more likely among younger compared with older respondents; among men compared with women and among those with more severe COVID-19 illness compared with lower severity Authors highlight the importance of considering strategies that might mitigate the elevated risk of depressive symptoms following acute infection 	COVID-19, depression

11.03.2021	COVID-19 and its cardiovascular effects: a systematic review of prevalence studies	Cochrane Systematic Review	<ul style="list-style-type: none"> • People who have diabetes, high blood pressure or pre-existing heart problems are at greater risk of developing complications if they get COVID-19 • This systematic review wanted to find out, in cases of confirmed or suspected COVID-19, what are the most common pre-existing heart and blood vessel problems and what are the most common complications affected the heart and blood vessels in different settings • Cardiometabolic comorbidities are common in people who are hospitalised with a COVID-19 infection, and cardiovascular complications are frequent • The studies were very different from each other, did not always reports results in the same way or use the most reliable methods • This review will be updated with a formal meta-analysis of outcomes based on a more homogeneous selected subsample of high-certainty studies 	COVID-19, cardiovascular
10.03.2021	What is the recovery rate and risk of long-term consequences following a diagnosis of COVID-19? A harmonised,	BMJ Open Protocol	<ul style="list-style-type: none"> • The assessment of risk factors for longer term consequences of COVID-19 requires a longitudinal study linked to data on pre-existing conditions and care received during the acute phase of illness 	Long-term COVID-19, protocol

	global longitudinal observational study protocol		<ul style="list-style-type: none"> • An international open access prospective, observational protocol to characterise physical and psychological sequelae in patients post-COVID-19 hospital discharge • The open access follow-up survey can be used by other follow-up studies to facilitate standardised, multisite data collection to forward knowledge into long-term consequences of COVID-19 	
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Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
10.03.2021	Risk of mortality in patients infected with SARS-CoV-2 variant of concern 202012/1: matched cohort study	BMJ Research	<ul style="list-style-type: none"> • The SARS-CoV-2 VOC-202012/1, first detected in SE England in autumn 2020 and now spread to 100+ countries, is more transmissible than previously circulating variants and is known to increase mortality but before this study, unbiased estimates of the mortality were not available • Cohort study of 54,906 matched pairs of participants who tested positive for SARS-CoV-2 in community testing centres in UK between 1 October 2020 and 29 January 2021, followed-up until 12 February 2021 • Individuals infected with SARS-CoV-2 VOC-202012/1, were between 32% to 104% (central estimate 64%) more likely to die than matched individuals 	UK variant, mortality

			<p>with previously circulating SARS-CoV-2 variants</p> <ul style="list-style-type: none"> • Absolute risk of death in this largely unvaccinated population remains low, but clinicians and public health officials should be aware that a higher mortality rate is likely if the response remains unchanged 	
09.03.2021	Prevalence of SARS-CoV-2 in six districts in Zambia in July, 2020: a cross-sectional cluster sample survey	The Lancet Global Health Article	<ul style="list-style-type: none"> • Number of SARS-CoV-2 infections in Zambia are likely to be higher than confirmed cases counts (20,000 laboratory-confirmed cases between March and December 2020) because many infected have mild or no symptoms and due to limited testing capacity and surveillance systems • Here, a population-based household survey was used to estimate SARS-CoV-2 prevalence in six districts of Zambia in July 2020 • 4258 people from 1866 households participated • An estimated 454,708 SARS-CoV-2 infections (95% CI 312,705 to 596,713) occurred in the six districts between March and July 2020, much higher when compared with 4917 laboratory-confirmed cases reported in official statistics from the Zambia National Public Health Institute 	SARS-CoV-2 prevalence, population-based household survey, Zambia
08.03.2021	Serological evidence of human infection with SARS-CoV-2: a systematic review and meta-analysis	The Lancet Global Health Article	<ul style="list-style-type: none"> • Meta-analysis of 404 published and preprint serological studies from across the globe • A higher prevalence of SARS-CoV-2-specific antibodies was observed in close contacts (18.0%) and high-risk health care workers (17.1%) than in low-risk health care workers (4.3%) and the general population (8.0%) – far from herd immunity 	serology

			<ul style="list-style-type: none"> • Seroprevalence of general populations varied across WHO regions – highest in the South-West Asia region (19.6%) and the lowest in Western Pacifica region (1.7%) • Young (<20 years) and older (>=65y) were less likely to be seropositive than those aged 20-64y • No significant difference between men and women • Authors call for international collaborations to standardise serological survey and laboratory methods given the general low quality of studies • Accompanying commentary (see below) notes that waning of antibodies suggest seroprevalence data may underestimate true number of infections and antibody tests don't measure all immunity – like T cells. 	
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Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
10.03.2021	Convalescent plasma in patients admitted to hospital with COVID-19 (RECOVERY): a randomised, controlled, open-label platform trial	medRxiv preprint (not peer reviewed)	<ul style="list-style-type: none"> • Convalescent plasma has been widely used to treat COVID-19 but without reliable evidence of effectiveness • Randomised, controlled, open-label, platform trial to evaluate the safety and efficacy of convalescent plasma in patients admitted to hospital with COVID-19 • Among patients hospitalised with COVID-19, high-titre convalescent plasma did not improve 	Convalescent plasma

			survival at 28-days or other prespecified clinical outcomes	
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Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
11.03.2021	ChAdOx1 nCoV-19 (AZD1222) protects against SARS-CoV-2 B.1.351 and B.1.1.7	bioRxiv preprint (not peer reviewed)	<ul style="list-style-type: none"> Investigation of ChAdOx1 nCoV-19 (AZD1222) vaccine efficacy against SARS-CoV-2 VoC B.1.1.7 and B.1.351 in Syrian hamsters, in which protection against SARS-CoV-2 disease and pneumonia in hamsters vaccinated with a single dose of ChAdOx1 nCoV-19 has been shown Lack of disease in hamsters vaccinated with ChAdOx1 nCoV-19 when infected with B1.1.7 or B.1.351 demonstrate the effectiveness of the ChAdOx1 nCoV-19 vaccine against clinical disease caused by these variants 	Oxford-AstraZeneca vaccine, efficacy, UK variant, South African variant, hamsters
09.03.2021	Epidemiological and evolutionary considerations of SARS-CoV-2 vaccine dosing regimes	Science Research Article	<ul style="list-style-type: none"> Various vaccine deployment strategies are being proposed due to vaccine dose shortages and logistical challenges Two critical issues: how will timing of delivery of the second does affect immunity and evolution of viral immune escape from a build-up of partially immune individuals Here, building on an existing immune-epidemiological 	Vaccine deployment strategies

			<p>model, short-term outcome is that one dose generally decreases infections but longer-term outcomes depend on relative immune robustness</p> <ul style="list-style-type: none"> • Exploring three scenarios, a one-dose policy may increase the potential for antigenic evolution under certain conditions of partial population immunity 	
08.03.2021	<p>Safety and immunogenicity of an inactivated SARS-CoV-2 vaccine, BBV152: interim results from a double-blind, randomised, multicentre, phase 2 trial, and 3-month follow-up of a double-blind, randomised phase 1 trial</p>	<p>The Lancet Infectious Diseases Article</p>	<ul style="list-style-type: none"> • Report on interim findings of the phase 2 trial on the immunogenicity and safety of BBV152, a whole-virion inactivated SARS-CoV-2 vaccine, with first dose administered on day 0 and the second dose on day 28 • In the phase 1 trial, BBV152 induced high neutralising antibody responses which remained elevated in all participants 3 months after the second dose • In the phase 2 trial, BB152 showed better reactogenicity and safety outcomes and enhanced immunity compared with the phase 1 trial • This vaccine candidate (6ug with Algel-IMDG formulation) is now in a phase 3 efficacy trial 	<p>BBV152 vaccine candidate</p>

Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary	Keywords
14.03.2021	Small and sick newborn care during the COVID-19 pandemic: global survey and thematic analysis of healthcare providers' voices and experiences	BMJ Global Health Original research	<ul style="list-style-type: none"> • Disruptions to maternity care caused by the COVID-19 pandemic have been surveyed but not those related to vulnerable small newborns • Using a widely disseminated online survey in three languages, this study reached out to neonatal healthcare providers worldwide, undertook thematic analysis of healthcare providers' experiences and proposed mitigation strategies • Analysis of 1120 responses from 62 countries, mainly LMICs • Newborn care providers are stressed and compromised and there is a lack of clarity and guidelines regarding care of small newborns during the pandemic • Life-saving interventions, such as KMC, must be urgently protected 	Newborn care
09.03.2021	Violence Against Women Prevalence Estimates, 2018	WHO Report	<ul style="list-style-type: none"> • Data from the largest study to-date, conducted by WHO on behalf of a special working group of the UN, of the prevalence of violence against women • Based on data from 2000 to 2018 – a update on previous estimates released in 2013 • Numbers though do not reflect ongoing impact of the COVID-19 pandemic which has further increased women's exposure to violence due to non-pharmaceutical interventions such as 	Violence against women

			lockdowns and disruptions to vital services	
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Health systems

Publication date	Title/URL	Journal/Article type	Summary	Keywords
10.03.2021	On the importance of primary and community healthcare in relation to global health and environmental threats: lessons from the COVID-19 crisis	BMJ Global Health Analysis	<ul style="list-style-type: none"> • Analysis of the role and weaknesses of primary and community healthcare worldwide • This paper proposes that primary and community healthcare should (i) support local problem-solving efforts and serve as a partner in innovative approaches to safeguarding community well-being; and (ii) understand the local environment and health risks in the context of the global health perspective 	Primary and community healthcare

Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal Article type
15.03.2021	German, France and Italy suspend Oxford Covid vaccine	The Guardian News
March 2021	Measles: the long walk to elimination drawn out by COVID-19	The Lancet Global Health Comment
15.03.2021	Regular booster vaccines are the future in battle with COVID-19 virus, expert says	Reuters News
12.03.2021	Ghana's COVID-19 response: the Black Star can do even better	BMJ Global Health Commentary

12.03.2021	COVID antibody treatments show promise for preventing severe disease	Nature News
12.03.2021	Long Covid more likely in working-age women than in men – study	The Guardian News
11.03.2021	Is Covid-19 reshaping our approach to development research?	IDS Opinion (Peter Taylor)
11.03.2021	COVID-19 cases in Africa to top 4 million, vaccine rollout underway	WHO Africa News
11.03.2021	Redressing the impact of COVID-19 on medical education in Africa: the need for collective action	BMJ Global Health Commentary
10.03.2021	Deadly pig disease could have led to Covid spillover to humans, analysis suggests	The Guardian News
09.03.2021	Mitigating gender-based violence risk in the context of COVID-19: lessons from humanitarian crises	BMJ Global Health Commentary
09.03.2021	3 medical innovations fueled by COVID-19 that will outlast the pandemic	The Conversation
09.03.2021	Understanding the impact of COVID-19 on the private health sector in Africa	BMJ Global Health Blog
08.03.2021	COVID-19 serosurveys for public health decision making	The Lancet Global Health Commentary
08.03.2021	A moral failure in pandemic response	CGD Blog
08.03.2021	Financing for Global Health Security and pandemic preparedness: taking stock and what's next	CGD Blog
05.03.2021	Overcoming the gender gap in Covid experience	IDS News
04.03.2021	Covid-19: A stress test for trust?	IDS Briefing

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			Our World in Data: COVID-19 vaccinations
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	Southern Voice	Covid Collective

					Research Platform
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 OpenStreetM ap 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
18 March 2021	Africa taking charge of its future: prioritizing gender equality in the path to recovery	Webinar	1h 30	CGD
10 March 2021	Equity and scale in global immunization: new evidence from Nigeria on cash transfers for vaccination	Webinar	1h 15	CGD
9 March 2021	COVID-19 vaccines and Africa: where do we stand in the race for vaccines?	Virtual conference webinar	1h	AHAIC
8 March 2021	Chronic Respiratory Diseases in the COVID era	Webinar		GARD, WHO
February 2021	COVID-19 vaccination training for health workers	Online training	3h	WHO
14.01.2021	Evidence to impact in crisis: how have we measured up during the COVID-19 pandemic?	Webinar	1h 30	CGD
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 community health workers on the COVID-19 frontline	Webinar		HSG TWG on CHWs with The George 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 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, 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

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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

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