

# COVID-19

## Health Evidence Summary No.121

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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
22.04.2021	High-dimensional characterization of post-acute sequelae of COVID-19	Nature  Article <b>(unedited version)</b>	<ul style="list-style-type: none"> <li>A large study in the US explored long term (~6months) clinical outcomes for patients with COVID-19 which may support global discussion on the post-acute manifestations of COVID-19, and further support health system planning and strategies.</li> <li>The study analyses data from the Veteran Health Administration including data from 73 435 people with COVID-19 who survived at least 30 days after diagnosis and were not hospitalised and 4,990, 835 people without COVID-19 and were not hospitalised. Analysis showed that people with COVID-19 who survived at least 30 days after illness had an increased risk of death.</li> </ul>	post-acute sequelae, US cohort study, post COVID-19

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|  |  |  | <ul style="list-style-type: none"><li>• A high dimensional approach identified sequelae including : respiratory conditions, diseases of the nervous system, mental health, metabolic disorders, cardiac conditions, gastrointestinal disorders, malaise, fatigue, musculoskeletal pain and anaemia, indicating increased health care utilisation and greater burden of ill health.</li><li>• A comparative evaluation in a cohort of hospitalised patients with COVID-19 (13 654) and those hospitalised with seasonal flu (13 997) was also conducted.<ul style="list-style-type: none"><li>○ People with COVID-19 who survived at least 30 days after illness had increased risk of death; excess death was estimated at 28.79 (19.52, 36.85) per 1000 persons at 6-months. Those with COVID-19 exhibited a higher risk of outpatient care encounter.</li><li>○ In comparison to the flu cohort, they also experienced great sequelae.</li></ul></li><li>• The authors discuss that the mechanisms for post-acute and chronic manifestations are unclear and may be a</li></ul> |  |
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			driven by direct and indirect mechanisms.	
24.04.2021	Expanding our understanding of post COVID-19 condition: report of a WHO webinar - 9 February 2021	WHO  Report	<ul style="list-style-type: none"> <li>• WHO in collaboration with others hosted a webinar entitled 'Expanding our understanding of Post COVID-19 condition'. This webinar was attended by over 700 participants. The webinar was divided into three sessions: 1. Post COVID-19 condition: scene setting and lessons learnt; 2. Observations on Post-Covid-19 condition: what we know; and Working groups to develop clinical definition and research gaps.</li> <li>• Post COVID-19 condition: scene setting and lessons learnt: this included a series of presentations on 1. Learning from past pandemics 2. Learnings from global forums 3. Exploring mechanisms 4. WHO update on Post-covid codes, clinical management guidelines and clinical case record form.</li> </ul>	Post-Covid-19, long Covid, Post-Covid-19 codes

			<ul style="list-style-type: none"> <li>• Observations on Post-Covid-19 condition show cased findings from research including a multi-country cohort (56 countries), and cohort studies in China, Italy, Brazil and India.</li> <li>• Working groups identified that there has been a lack of harmonisation across the studies; a need to characterise and define Post-COVID-19, and then develop diagnostics to support; they also identified research gaps, such as drug trials for symptom management, and a need to understand the pathophysiology that lead to Post-Covid-19 conditions. Outcomes from the working groups are now being used to inform a Delphi process.</li> </ul>	
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## Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
21.04.2021	The proportion and effect of corticosteroid therapy in patients with COVID-19 infection: A systematic review and meta-analysis	PLOS One  Article	<p>A systematic review and meta-analysis was conducted to explore corticosteroid therapy in patients with COVID-19. 52 trials were included (15710 participants). These included 18 multicentre trials and 35 single-centre trials.</p> <ul style="list-style-type: none"> <li>• The meta-analysis showed that less patients received corticosteroids (35.19%) than did not (64.49%). There was no significant different</li> </ul>	Meta-analysis, corticosteroid therapy, viral clearance, mortality

			<p>in the proportion of severe and non-severe cases treated with corticosteroids.</p> <ul style="list-style-type: none"><li>• 5 trials compared viral clearance. The pooled estimates showed that corticosteroid treatment significantly delayed the viral clearance time, however the authors note that there was significant heterogeneity amongst the studies.</li><li>• 15 trials explored effect on mortality. The authors report that the meta-analysis demonstrated no significant difference for patients who received corticosteroids and died or survived. Again the authors highlight the heterogeneity among the trials.</li><li>• The authors conclude therefore that 'corticosteroids should be used with extreme caution in the treatment of COVID-19. Nevertheless, further multicentre, larger, randomized, controlled clinical trials are needed to verify this conclusion' (page 18).</li></ul>	
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## Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
21.04.2021	Evaluation of COVID-19 vaccination strategies with a delayed second dose	PLOS Biology (uncorrected proof)	<ul style="list-style-type: none"> <li>Vaccine dosing protocols for two vaccines which require 2 doses are modelled. The research involved modelling different vaccine strategies in the US.</li> <li>Results indicate that a delay of a least 9 weeks for Moderna vaccines, could maximize vaccination program effectiveness and avert at least an additional 17.3 infections, 0.69 hospitalizations, and 0.34 deaths per 10,000 population compared to the recommended 4-week interval between the 2 doses.</li> <li>Delaying to 9 weeks for second dose for Pfizer-BioNTech vaccines averted an additional 0.60 hospitalizations and 0.32 deaths per 10,000 population compared to the 3-week recommended schedule between doses. However, the authors summaries that 'there was no clear advantage of delaying the second dose with Pfizer-BioNTech vaccines in reducing infections, unless the efficacy of the first dose did not wane over time'.</li> </ul>	Dosing protocols, Moderna, Pfizer-BioNTech
19.04.2021	Disability considerations for COVID-19	WHO & UNICEF  Policy brief	<ul style="list-style-type: none"> <li>People with disabilities are disproportionately affected by COVID-19. This report was developed through a rapid scoping review of the literature, and an expert</li> </ul>	Vaccine priority groups, disability

vaccination  
WHO &  
UNICEF Policy  
Brief

consultation process  
amongst WHO and  
UNICEF with feedback  
from NGOs.

- People with disabilities are a diverse group, and therefore the risks, barriers and impacts with vary by context, age, gender, ethnicity, sexual orientation, migration status and type of disability.
- People with disabilities are at greater risk of contracting COVID-19 due to barriers implementing basic hygiene measures, physical distancing, physical environmental barriers and communication challenges. They may be at greater risk of severe disease/death due to underlying health conditions and barriers to accessing care.
- The report outline actions for Persons with disabilities and their support networks, Governments, Health service providers delivering vaccinations, Organizations of persons with disabilities, Disability service providers, Residential institutions and long-term care facilities and Community.

## Leadership and governance

Publication date	Title/URL	Journal/Article type	Summary	Keywords
23.04.2021	ACT now, ACT together 2020-2021 Impact Report	WHO  Report	<ul style="list-style-type: none"> <li>• 'Access to COVID-19 Tools (ACT) Accelerator was founded on a belief in global collaboration and solidarity and a shared commitment to ensure all people get access to the tools needed to defeat COVID-19'. It was launched in April 2020. This report outlines key achievements since this time and current priorities, including diagnostics, therapeutics and vaccines. This reports calls for more funding to address global inequities in all three pillars. ACT identifies a funding gap of US\$19 billion.</li> <li>• Dr Tedros Adhanom Ghebreyesus highlights <i>'The inequitable distribution of tools is not just a moral outrage, it is also economically and epidemiologically self-defeating. The more transmission, the more variants. And the more variants that emerge, the more likely it is that they could evade diagnostics, vaccines and even therapeutics. And as long as the virus is circulating anywhere, the longer the global recovery will take.'</i></li> <li>• Diagnosis: The report highlights that in 2020 less than 1 in 5 health facilities across Africa had access to tests. Less invasive/self tests are needed. Current</li> </ul>	Global collaboration, solidarity, vaccine equity, 'test, treat and isolate',



			<p>plans include ramping up genomic sequencing capacity and monitoring.</p> <ul style="list-style-type: none"> <li>• Therapeutics: Many clinical trials are ongoing analysing effectiveness of therapeutics.</li> <li>• Vaccines: COVAX is aiming to supply at least 2 billion vaccines. The task force is also working to support manufacturing. African leaders are working to establish 5 vaccine manufacturing hubs over the next 10-15 years.</li> </ul>	
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## Health systems

Publication date	Title/URL	Journal/Article type	Summary	Keywords
15.04.2021	COVID-19 response: mitigating negative impacts on other areas of health	BMJ  Analysis	<ul style="list-style-type: none"> <li>• Due to lockdowns and associated measures, access and provision of healthcare which is impacting on health including non-communicable diseases, infectious diseases, sexual and reproductive health, new-born and child health and gender-based violence.</li> <li>• Baseline vulnerabilities such as lack of safe housing, water and health care further perpetuate these impacts. This is particularly significant for LMICs and social groups such as women, children, elderly, people with disabilities, migrant workers, ethnic and religious minorities, refugees and IDP and</li> </ul>	Health system strengthening, social vulnerabilities, health impacts, vertical response

people living in conflict-affected areas.

- An equitable and socially justice response is needed which addressed COVID-19 alongside other health conditions. This requires inclusive priority setting, resource allocation, programme design and monitoring and implementation. Short term action should feed into longer-term strategies which strengthen health systems, expand universal health coverage and address social determinants.
- This analysis was conducted as a rapid evidence assessment by the Social Science and Humanitarian Action Platform.
- The authors conclude 'this paper calls for more holistic approaches to health in the context of COVID-19, but also beyond it, and urge action to mitigate tragedy in both the short- and long-term' (page 8).

## Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal   Article type
May 2021	COVID-19 vaccines: building and maintaining confidence	The Lancet Haematology  Editorial
24.04.2021	Statelessness in the COVID-19 pandemic	The Lancet  World Report
24.04.2021	Global health and its discontents	The Lancet  Correspondence
23.04.2021	COVID-19 continues to disrupt essential health services in 90% of countries	WHO  News
23.04.2021	Covid-19: Infections fell by 65% after first dose of AstraZeneca or Pfizer vaccine, data show	The BMJ  News
22.04.2021	Covid-19: India looks to import oxygen as cases surge, overwhelming hospitals	The BMJ  News
22.04.2021	A conceptual framework to accelerate the clinical impact of evolving research into long COVID	The Lancet Infectious Diseases  Comment
21.04.2021	Covid-19 new variants—known unknowns	The BMJ  Opinion
21.04.2021	Covid-19: Unusual blood clots are “very rare side effect” of Janssen vaccine, says EMA	The BMJ  News
20.04.2021	Covid-19: Spike in cases in Chile is blamed on people mixing after first vaccine shot	The BMJ  News
20.04.2021	COVID-19: The therapeutic landscape	Med  Commentary
19.04.2021	Leave no one behind: ensuring access to COVID-19 vaccines for refugee and displaced populations	Nature  Comment
19.04.2021	Saliva as a gold-standard sample for SARS-CoV-2 detection	The Lancet Respiratory Medicine  Comment

19.04.2021	Statement on the seventh meeting of the International Health Regulations (2005) Emergency Committee regarding the coronavirus disease (COVID-19) pandemic	WHO  News
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## 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			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	Health systems Global		
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
13.05.2021	Covid and mental health	Webinar	2h 15	BMJ
15.04.2021	How can evaluation work support greater vaccine equity for COVID-19?	Webinar	1h	Itad
12.04.2021	COVID-19: Vaccines Safety Webinar - Understanding the Facts & Myths	Webinar	1.5h	Asia Pacific Association of Allergy, Asthma and Clinical Immunology

07.04.2021	Public webinar 'The RECOVERY Trial: one year on'	Webinar	1h	Nuffield Department of Population Health
25 March 2021	UK Public Health Rapid Support Team: Latest research & scientific insights	Webinar	1h	LSHTM
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	Online courses	Varies	WHO

	emergencies, now offers 10 online 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	Online learning	3 hours	WHO

	COVID-19: methods 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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