

# COVID-19

## Health Evidence Summary No.115

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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
02.03.2021	Increased risk of hospitalisation associated with infection with SARS-CoV-2 lineage B.1.1.7 in Denmark	SSRN   pre-print (not peer reviewed)	<ul style="list-style-type: none"> <li>Using national health register-data, this observational cohort study found that infection with lineage B.1.1.7 was associated with an increased risk of hospitalisation compared with other lineages</li> <li>This may have serious public health impact in countries with spread of B.1.1.7 and can support hospital preparedness and modelling of projected impact of the epidemic</li> </ul>	B.1.1.7 variant, hospitalisation

## Epidemiology and modelling

Publication date	Title/URL	Journal/Article type	Summary	Keywords
03.03.2021	Estimated transmissibility and impact of SARS-CoV-2 lineage B.1.1.7 in England	Science   Research Article	<ul style="list-style-type: none"> <li>• Here the novel SARS-CoV-2 variant, VOC 202012/01 (lineage B.1.1.7) is estimated to have a 43-90% (95% CrI 38-130%) higher reproduction number than pre-existing variants</li> <li>• Transmission modelling shows that VOC 202012/01 will lead to large resurgences of COVID-19 cases</li> <li>• In England, without stringent control measures, including limited closure of educational institutions and a greatly accelerated vaccine roll-out, COVID-19 hospitalisations and deaths in 2021 will exceed those in 2020 with a similar transmission increase (59-74%) in Denmark, Switzerland and the United States</li> </ul>	B.1.1.7 variant, transmissibility

## Infection Prevention and Control

Publication date	Title/URL	Journal/Article type	Summary	Keywords
05.03.2021	An early warning approach to monitor COVID-19	Science   Research Article	<ul style="list-style-type: none"> <li>• Until effective vaccines are widely deployed, a COVID-19 early warning system is vital in controlling COVID-19 with carefully timed nonpharmaceutical interventions (NPIs)</li> <li>• It is observed here that increases in digital data stream</li> </ul>	COVID-19 early warning system

	activity with multiple digital traces in near real time		<p>activity anticipate increases in confirmed cases and deaths by 2 to 3 weeks</p> <ul style="list-style-type: none"> <li>Confirmed cases and deaths also decrease 2 to 4 weeks after NPI implementation, measured by anonymised, phone-derived human mobility data</li> <li>Authors proposed that combining disparate health and behavioural data may help identify disease activity changes weeks before observation using traditional epidemiological monitoring</li> </ul>	
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## Therapeutics

Publication date	Title/URL	Journal/Article type	Summary	Keywords
08.03.2021	Antibody resistance of SARS-CoV-2 variants B.1.351 and B.1.1.7	Nature   Article	<ul style="list-style-type: none"> <li>VOC B.1.1.7 is resistant to neutralisation by most monoclonal antibodies to the N-terminal domain (NTD) of the spike and relatively resistant to a few monoclonal antibodies to the receptor-binding domain (RBD). It is not more resistant to convalescent plasma or vaccinee sera</li> <li>VOC B.1.351 is resistant to neutralisation by most monoclonal antibodies to the NTD of the spike and to multiple individual monoclonal antibodies to the RBD – largely owing to an E484K mutation. It is also more resistant to convalescent plasma and vaccinee sera</li> <li>B.1.351 and emergent variants with similar spike mutations offer new challenges for monoclonal antibody therapy and threaten current vaccines efficacy</li> </ul>	B.1.1.7 variant, B.1.351 variant, monoclonal antibody therapy

04.03.2021	Azithromycin for community treatment of suspected COVID-19 in people at increased risk of an adverse clinical course in the UK (PRINCIPLE): a randomised, controlled, open-label, adaptive platform trial	The Lancet   Article	<ul style="list-style-type: none"> <li>• Azithromycin is an antibiotic with potential antiviral and anti-inflammatory properties and has been used to treat COVID-19 but evidence from community trials is lacking</li> <li>• The effectiveness of azithromycin to treat suspected COVID-19 among people in the community who had an increased risk of complications was assessed in this UK-based, primary care, open-label, multi-arm, adaptive platform randomised trial</li> <li>• Findings do not justify the routine use of azithromycin for reducing time to recovery or risk of hospitalisation for people with suspected COVID-19 in the community</li> <li>• This has important antibiotic stewardship implications</li> </ul>	azithromycin
04.03.2021	Tocilizumab plus standard care versus standard care in patients in India with moderate to severe COVID-19-associated cytokine release syndrome (COVINTOC): an open-label, multicentre, randomised, controlled, phase 3 trial	The Lancet Respiratory Medicine   Article	<ul style="list-style-type: none"> <li>• First open-label, multicentre, randomised controlled, phase 3 trial of tocilizumab entirely in a lower-middle-income country</li> <li>• Trial conducted in 12 public and private hospitals across India in 180 adults <math>\geq 18</math>y admitted to hospital with moderate to severe COVID-19 with positive SARS-CoV-2 PCR test result</li> <li>• Findings do not support routine tocilizumab in patients admitted to hospital with moderate to severe COVID-19</li> <li>• Post-hoc evidence suggests tocilizumab may still be effective in</li> </ul>	tocilizumab

			patients with severe COVID-19	
04.03.2021	Sarilumab in patients admitted to hospital with severe or critical COVID-19: a randomised, double-blind, placebo-controlled, phase 3 trial	The Lancet Respiratory Medicine   Article	<ul style="list-style-type: none"> <li>60-day, randomised, double-blind, placebo-controlled, multinational phase 3 trial at 45 hospitals of safety and efficacy of sarilumab, an IL-6 receptor inhibitor, in severe (requiring supplemental oxygen by nasal cannula or face mask) or critical (requiring greater supplemental oxygen, mechanical ventilation, or extracorporeal support) COVID-19</li> <li>Sarilumab was not efficacious in patients admitted to hospital with severe COVID-19</li> <li>Authors suggest adequately powered trials of targeted immunomodulatory therapies assessing survival as a primary endpoint in critical COVID-19</li> </ul>	sarilumab

## Vaccines

Publication date	Title/URL	Journal/Article type	Summary	Keywords
03.03.2021	Delayed large local reactions to mRNA-1273 vaccine against SARS-CoV-2	NEJM   Correspondence	<ul style="list-style-type: none"> <li>Report on a series of 12 patients with large local reactions to the mRNA-1273 vaccines, median onset on day 8 (range 4 to 11) after first dose</li> <li>Not all patients had a recurrence of large local reactions after second dose</li> <li>Authors encourage additional reporting and communication regarding the epidemiologic characteristics, causes and implications of these delayed cutaneous</li> </ul>	Local cutaneous reactions, vaccine

			reactions which may reassure patient concerns, encourage completion of vaccination and minimise unnecessary antibiotic use
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## Indirect impact of COVID-19

Publication date	Title/URL	Journal/Article type	Summary	Keywords
03.03.2021	Global effect of the COVID-19 pandemic on paediatric cancer care: a cross-sectional study	The Lancet Child & Adolescent Health   Article	<ul style="list-style-type: none"> <li>• A survey of 311 clinicians from 213 hospitals worldwide finds that COVID-19 pandemic has had major impacts on childhood cancer care worldwide</li> <li>• 78% of hospitals surveyed between June and August 2020 reported that 43% made fewer new cancer diagnoses than expected, 34% noted a rise in number of patients abandoning treatment, and 7% closed their paediatric cancer units at some stage</li> <li>• Findings are more pronounced in hospitals in LMICs</li> </ul>	Paediatric cancer care
02.03.2021	Global trends in 2021: how COVID-19 is transforming international development	CGD   Notes	<ul style="list-style-type: none"> <li>• Review and overlay of some of the features of the COVID crisis on earlier observed trends and dynamics</li> <li>• Exploration of some of the changes and trends in development agency strategic direction</li> <li>• 3 fundamental challenges that bilateral development agencies will need to address, and which will define their development cooperation and international partnerships</li> </ul>	Global trends

## Comments, Editorials, Opinions, Blogs, News

Publication date	Title/URL	Journal   Article type
08.03.2021	<a href="#">Financing for Global Health Security and pandemic preparedness: taking stock and what's next</a>	CGD   Blog
06.03.2021	<a href="#">Single-dose Oxford-AstraZeneca COVID-19 vaccine followed by a 12-week booster</a>	The Lancet   Comment
06.03.2021	<a href="#">Medical oxygen crisis: a belated COVID-19 response</a>	The Lancet   World Report
05.03.2021	<a href="#">A 'me' first approach to vaccination won't defeat Covid</a>	The Guardian   Opinion (Dr Tedros Adhanom Ghebreyesus)
05.03.2021	<a href="#">RECOVERY trial closes recruitment to colchicine treatment for patients hospitalised with COVID-19</a>	RECOVERY   News
05.03.2021	<a href="#">Challenges in the rollout of COVID-19 vaccines worldwide</a>	The Lancet Respiratory Medicine   News
05.03.2021	<a href="#">Desperation in the time of COVID-19</a>	The Lancet Respiratory Medicine   Spotlight
05.03.2021	<a href="#">From female warriors in the rainforest to infectious disease specialists: COVID-19 in the Amazon</a>	The Lancet Respiratory Medicine   Spotlight
05.03.2021	<a href="#">Sex-disaggregated data in COVID-19 vaccine trials</a>	The Lancet   Correspondence
05.03.2021	<a href="#">The USA's response to the 2014 Ebola outbreak could have informed its COVID-19 response</a>	The Lancet   Correspondence
05.03.2021	<a href="#">Long-haul COVID: heed the lessons from other infection-triggered illnesses</a>	The Lancet   Correspondence
05.03.2021	<a href="#">COVID research updates: T cells might provide rescue from rampant COVID variants</a>	Nature   News

04.03.2021	IL-6 blockade for COVID-19: a global scientific call to arms	The Lancet Respiratory Medicine   Comment
04.03.2021	Global health security requires endemic disease eradication	The Lancet   Comment
04.03.2021	US health agency will invest \$1 billion to investigate 'long COVID'	Nature   News
03.03.2021	The social and emotional side of vaccine hesitancy	SSHAP   Podcast
03.03.2021	Choices in a Crisis – Individual preferences among SARS-CoV-2 vaccines	NEJM   Perspective
02.03.2021	An urgent call to collect data related to COVID-19 and Indigenous populations globally	BMJ Global Health   Commentary
02.03.2021	Communicating COVID-19 vaccines: lessons from the dengue vaccine controversy in the Philippines	BMJ Global Health   Commentary
01.03.2021	Africa's contribution to the science of the COVID-19/SARS-CoV-2 pandemic	BMJ Global Health   Commentary
01.03.2021	African authorship on African papers during the COVID-19 pandemic	BMJ Global Health   Commentary
01.03.2021	J&J's single-dose COVID vaccine raises hopes for faster rollout	Nature   News



## 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	

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	WHO & CGD Health systems	1h 30	Joe Kutzin

	is the role of PFM in the “new normal”?	Governance & Financing		
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	<a href="#">OpenWHO</a> , the free, open-access learning platform for health emergencies, now offers 10 online courses related to COVID19.	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	<a href="#">COVID-19 Contact Tracing course</a>	Online learning	5 hours	Johns Hopkins Bloomberg School of Health
7-28 May 2020	<a href="#">Virtual Evidence Weeks</a>	5 sessions	1h 30	International Initiative for Impact Evaluation (3ie)
Tuesdays at 1700 CEST (Geneva time) & Thursdays 0830 CEST	<a href="#">COVID-19 Open online brief with Dr David Nabarro</a>	Event	1h	4SD



(Geneva time)				
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

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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