COVID-19 weekly update

8th August 2022

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**clinical management**

**title:** Risk factors for severe COVID-19 in hospitalized children in Canada: A national prospective study from March 2020–May 2021

the lancet regional health americas| 1st AUGUST 2022  
  
Children living with chronic comorbid conditions are at increased risk for severe COVID-19, though there is limited evidence regarding the risks associated with specific conditions and which children may benefit from targeted COVID-19 therapies. The objective of this study was to identify factors associated with severe disease among hospitalized children with COVID-19 in Canada.

We conducted a national prospective study on hospitalized children with microbiologically confirmed SARS-CoV-2 infection via the Canadian Paediatric Surveillance Program (CPSP) from April 2020–May 2021…  
  
…While severe outcomes were detected at all ages and among patients with and without comorbidities, neurologic and pulmonary conditions as well as technology dependence were associated with increased risk of severe COVID-19. These findings may help guide vaccination programs and prioritize targeted COVID-19 therapies for children.  
<https://www.thelancet.com/journals/lanam/article/PIIS2667-193X(22)00154-5/fulltext>

**title:** Development of Resistance-Associated Mutations After Sotrovimab Administration in High-risk Individuals Infected With the SARS-CoV-2 Omicron Variant

JAMA| 1st august 2022  
  
The SARS-CoV-2 Omicron variant of concern is currently the dominant variant circulating globally. Sotrovimab is among the few monoclonal antibodies that has retained its neutralizing activity against Omicron/BA.1 and received Emergency Use Authorization for treatment of patients at risk for progression to severe disease.

However, concerns have been raised about the potential induction of spike protein resistance–associated viral mutations, especially in immunocompromised patients who are at risk for prolonged infection with SARS-CoV-2.3 We investigated whether resistance-associated mutations developed after treatment with sotrovimab in high-risk patients infected with the SARS-CoV-2 Omicron variant…  
  
…This study found rapid development of sotrovimab resistance–associated mutations at positions S:E340 and S:P337 in a large proportion of high-risk patients infected with the Omicron variant after treatment with sotrovimab, which was associated with a delay in viral clearance. These results are in line with a report describing the occurrence of resistance mutations 6 to 13 days after treatment with sotrovimab in patients infected with the Delta variant.

Spike protein mutations at positions S:E340K/A/V/G and S:P337L/R have been associated with a 27- to 279-fold reduction in susceptibility to sotrovimab.4,5 The present findings add to the emerging evidence that treatment of high-risk patients with a single monoclonal antibody is associated with mutation development, especially in immunocompromised patients who are at risk for prolonged infection.

Study limitations include a relatively small sample size, possible sampling or nonresponse bias, lack of a control group, technical restrictions of the sequencing platform, and lack of clinical outcomes. Further studies investigating combination monoclonal antibody therapy and continuous genomic surveillance in immunocompromised patients are warranted to address the expanding antigenic diversity and subsequent emergence of resistance during COVID-19 treatment.  
<https://jamanetwork.com/journals/jama/fullarticle/2794999>

**title:** Maternal Death Rate Increased During Early COVID-19 Pandemic

JAMA|2nd august 2022  
  
The rate of maternal deaths increased 33.3% during the first 9 months of the COVID-19 pandemic, researchers [reported](https://jamanetwork.com/journals/jamanetworkopen/fullarticle/10.1001/jamanetworkopen.2022.19133) in *JAMA Network Open*.

The investigators analyzed National Center for Health Statistics data from people who died within 42 days after pregnancy. In 2018, 2019, and the first quarter of 2020, the maternal death rate was 18.8 per 100 000 live births. During April to December 2022, the rate increased to 25.1 per 100 000 live births, a relative increase of 33.3%. The maternal death rate increased 74.2% among Hispanic individuals, 40.2% among non-Hispanic Black individuals, and 17.2% among non-Hispanic White individuals during the study period…  
<https://jamanetwork.com/journals/jama/article-abstract/2794775>

**title:** Sickle Cell Trait Associated With Kidney Failure and COVID-19 Death  
  
JAMA| 2nd AUGUST 2022  
  
Sickle cell trait (SCT) should be considered an adverse prognostic factor for COVID-19, a genetic association study suggests.

Unlike people with sickle cell disease, who have 2 copies of hemoglobin beta sickle alleles, those with SCT have 1 hemoglobin beta sickle allele and 1 normal beta allele. The analysis found that SCT among people with African ancestry was associated with a range of preexisting kidney conditions, increased COVID-19 mortality, and increased incidence of kidney failure…  
<https://jamanetwork.com/journals/jama/article-abstract/2794775>

**long term effects**

**title:** Long covid and disability: a brave new world

BMJ| 1st August 2022  
  
Nicholas Evans and colleagues argue that long covid needs to be better recognised, understood, and supported, and should stimulate a rethink of our approach to disability.

One billion people worldwide live with a disability, but they are often overlooked in discussions of pandemic preparedness and response. People with physical and cognitive disabilities—including those with “invisible” disabilities that are not obvious from the outside—were at disproportionate risk of harm from covid-19 because of their pre-existing medical conditions or their social circumstances. People in the UK people whose disabilities affected their day-to-day function were up to three times more likely to have died from covid-19. They also experienced disproportionate loss of access to medical services, education, employment, and care.

The number of people experiencing disability is being swelled by people with “long covid,” in which symptoms persist after the acute viral infection subsides. The term “long covid” was coined by patients, initially being used on social media to describe symptoms that were impairing quality of life.9 We argue that this experience generates an obligation to recognise long covid as a potentially disabling condition defined by clinical diagnostic criteria and supported by ongoing clinical research. Such recognition would also re-enforce the obligation of the state to extend and expand supportive infrastructure and policy for people with other disabilities. The need for just social policies grounded in contemporary theories of disability, designed by disabled people for disabled people, can also form the basis for advocacy and policy change beyond the pandemic.  
<https://www.bmj.com/content/378/bmj-2021-069868>

**title:** Covid-19: One in eight adults develops long covid symptoms, study suggests

BMJ |4th august 2022  
  
One in eight covid-19 patients (12.7%) is likely to experience long term symptoms, a study from the Netherlands has reported.

Using digital questionnaires, researchers collected data on the frequency of 23 symptoms commonly associated with covid in an uninfected population and in people who had had a covid diagnosis. The findings, published in the Lancet,1 found that 21.4% (381/1782) of adults who had had covid experienced at least one new or severely increased symptom three to five months after infection when compared with before. This compared with only 8.7% (361/4130) of uninfected people followed over the same period.

The core long covid symptoms highlighted by the researchers include chest pain, difficulties breathing, pain when breathing, painful muscles, loss of taste and smell, tingling extremities, lump in throat, feeling hot and cold, heavy arms or legs, and general tiredness. The questionnaire was sent out 24 times to the same people from March 2020 to August 2021. During this period people would have been infected with alpha or an earlier variant, and most people were unvaccinated.

Over 76 000 participants completed a total of 883 973 questionnaires, the average age of respondents was 54, and 61% were female. A group of 4231 (5.5%) participants who had covid were then matched to 8462 controls who did not, taking into account sex, age, and the time of covid diagnosis…  
<https://www.bmj.com/content/378/bmj.o1946>

**title:** SARS-CoV-2 Infections and Presymptomatic Type 1 Diabetes Autoimmunity in Children and Adolescents From Colorado, USA, and Bavaria, Germany  
  
JAMA| 5th august 2022  
  
An increased incidence of clinical diabetes has been reported in children with previous COVID-19.1,2 It is plausible that the virus may trigger autoimmune response to the islets or hasten metabolic decompensation in persons with already established islet autoimmunity. We tested the hypothesis that previous SARS-CoV-2 infection was associated with autoimmunity, which predicts future type 1 diabetes…  
  
…Screening of more than 50 000 youths in diverse populations of Colorado and Bavaria found no association of SARS-CoV-2 infection with autoimmunity related to development of type 1 diabetes. Study limitations include the low prevalence of autoantibodies, limiting the power to detect an increase in risk associated with SARS-CoV-2 infection. Moreover, the cross-sectional design did not allow determination of whether autoantibodies developed before or after SARS-CoV-2 infection. Long-term follow-up of persons with preexisting autoimmunity is necessary to determine whether SARS-CoV-2 accelerates progression to clinical diabetes.  
<https://jamanetwork.com/journals/jama/fullarticle/2795226>

**title:** Long COVID: which symptoms can be attributed to SARS-CoV-2 infection?

the lancet |6th august 2022  
  
…Current evidence supports the view that long COVID is common and can persist for at least 2 years after SARS-CoV-2 infection, although severe debilitating disease is present in a minority. The long COVID case definition needs to be further improved, potentially to describe different types of long COVID, of which better mechanistic understanding is crucial. This will lead to personalised multimodality treatments that can be implemented to manage the increasingly high number of people with long COVID.  
<https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(22)01385-X/fulltext>

**title:** Addressing the Long-term Effects of COVID-19

JAMA |3rd August 2022  
  
The COVID-19 pandemic is the most significant medical and public health challenge the US has encountered in the last 100 years. As of July 26, 2022, an estimated 90 million cases of COVID-19 have been reported in the US, with an estimated 1 million COVID-19–related deaths. The current number of SARS-CoV-2 infections is difficult to estimate accurately, considering that many individuals with positive self-test results do not seek care or report their infection. At the same time, new coronavirus variants continue to emerge, with Omicron subvariants such as BA.5 and BA.4 now identified as the dominant circulating strains.

From the start of the pandemic, infected individuals exhibited different patterns of recovery. Some patients partnered with other groups of patients with similar or overlapping sets of symptoms and voiced their concerns to health care professionals, allowing recognition of what has been referred to as “Long COVID.”

In defining Long COVID, 2 perspectives need to be balanced: the need to learn more and avoid premature definitions that inappropriately exclude patients in need of care, and the need to establish interim definitions to enable access to health care and disability services as the science of Long COVID continues to emerge…  
<https://jamanetwork.com/journals/jama/fullarticle/2795139>

**title:** Two-Year Prevalence and Recovery Rate of Altered Sense of Smell or Taste in Patients With Mildly Symptomatic COVID-19

JAMA OTOLARYNGOL HEAD NECK SURG|4th AUGUST 2022  
  
…In this cohort study, 88.2% of patients reporting a COVID-19–related smell or taste dysfunction completely recovered within 2 years. A late recovery was observed in 10.9% of patients. Although these results must be interpreted with caution owing to study limitations (eg, data were self-reported based on a cross-sectional survey; outcomes not specifically validated for olfactory loss were used; a psychophysical evaluation of the chemosensory function was not performed; the sample was relatively small and geographically limited, with patients with more severe symptoms not included; data regarding potential treatments used for chemosensory impairment were lacking), contrary to what is often reported,6 patients should be reassured that recovery from smell or taste impairment may continue for many months after the onset. These results apply to patients infected in the pre-Omicron period. COVID-19 driven by the SARS-CoV-2 Omicron variant has been indeed observed to less frequently and less severely affect chemosensory function.  
<https://jamanetwork.com/journals/jamaotolaryngology/fullarticle/2794937>

**title:** National Commissioning Guidance For Post Covid Services

NHS ENGLAND |3rd AUGUST 2022  
  
This document informs the commissioning of post Covid services in England. It aims to assist local health care systems to plan and deliver services that meet the varied and often complex needs of people living with long Covid.  
[C1670\_National-commissioning-guidance-for-post-COVID-services\_V3\_July-2022-1.pdf (england.nhs.uk)](https://www.england.nhs.uk/wp-content/uploads/2022/07/C1670_National-commissioning-guidance-for-post-COVID-services_V3_July-2022-1.pdf)

**rates & variants**

**title:** Covid-19: is omicron less lethal than delta? [editorial]

BMJ |2nd august 2022  
  
The linked retrospective cohort study by Ward and colleagues (doi:10.1136/bmj-2022-070695) takes a further step towards addressing this question. The study reported new evidence that mortality rates were lower for infections with the omicron BA.1 subvariant than for the delta variant of concern, even after controlling for patient demographics, previous infection, and vaccination status.

The study team used the United Kingdom’s Office for National Statistics Public Health Data Asset to access census data, mortality records, vaccination dates, and other standardised measures for over one million UK adults who tested positive for SARS-CoV-2 in December 2021 when omicron and delta were circulating. Quantitative polymerase chain reaction test results were mined for spike gene target failure, with specimens failing to amplify the S gene classified as BA.1 compatible. Although less reliable than whole genome sequencing, this technique can distinguish delta from BA.1 by detecting the deletion at positions 69 and 70 of the spike gene characteristic of BA.1 (present in almost 95% of BA.1 lineage sequences v 0.2% of delta).5 Death certification records definitively identified over 350 covid-19 related deaths in the cohort. Ultimately, the risk of covid-19 related death was found to be 66% lower in people infected with omicron than in those with delta, similar to the 69% lower risk reported by Nyberg and colleagues.

This study provides the most conclusive evidence to date that infection with the omicron subvariant BA.1 was inherently less deadly than delta when controlling for a number of key covariates. Combining death certification records with molecular surveillance is the main advantage of this study, which avoids previous biases in covid-19 death designations. Accounting for a broad array of standardised covariates, including sociodemographic variables, pre-existing health conditions, and previous immunity, is another strength…  
<https://www.bmj.com/content/378/bmj.o1806>   
Linked research: [Risk of covid-19 related deaths for SARS-CoV-2 omicron (B.1.1.529) compared with delta (B.1.617.2): retrospective cohort study | The BMJ](https://www.bmj.com/content/378/bmj-2022-070695)

**title:** Maintaining genomic surveillance using whole-genome sequencing of SARS-CoV-2 from rapid antigen test devices

the lancet |4th august 2022  
  
With point-of-care rapid antigen tests replacing PCR as the main diagnostic modality in many settings, opportunities for genomic characterisation of circulating variants are increasingly limited. We describe an approach for whole-genome sequencing of SARS-CoV-2 from rapid antigen test devices and demonstrate the application of this technique to devices collected as part of clinical care…  
<https://www.thelancet.com/journals/laninf/article/PIIS1473-3099(22)00512-6/fulltext>

**title:** Animal Reservoirs—Where the Next SARS-CoV-2 Variant Could Arise

JAMA| 3rd AUGUST 2022  
  
...As of this May, 36 countries in Africa, the Americas, Asia, and Europe had officially reported SARS-CoV-2 infections in 23 nonhuman animal species, including not only big cats like tigers and lions but also domestic cats and dogs, gorillas, white-tailed deer, hamsters, farmed mink, otters, anteaters, manatees, hippopotamuses, and others, according to the World Organization for Animal Health, founded as OIE…  
  
“With SARS-CoV-2, the remarkable thing is how many species have been infected with the human form of the virus,” evolutionary biologist Edward Holmes, PhD, a professor at the University of Sydney, said in an interview. Understanding how the virus jumps between species—known to ecologists as a “spillover” event—is complicated but potentially critical in ending the COVID-19 pandemic, Holmes and others told JAMA. Interspecies transmission can produce new animal reservoirs where the virus can multiply or persist for prolonged periods, creating the potential for the pathogen to transmit back to human populations…  
<https://jamanetwork.com/journals/jama/fullarticle/2795140>

**title:** Rate of SARS-CoV-2 Reinfection During an Omicron Wave in Iceland

the lancet | 11th JULY 2022  
  
…The aim of this study was to estimate the proportion of persons who become reinfected with SARS-CoV-2 during the Omicron wave in Iceland.  
  
…In this population-based cohort study, a substantial proportion of persons experienced SARS-CoV-2 reinfection during the first 74 days of the Omicron wave in Iceland, with rates as high 15.1% among those aged 18 to 29 years…  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794886>

**infection control**

**title:** “Downgrade your mask before entering”—a dangerous NHS policy at a critical public health juncture

BMJ |2nd august 2022  
  
…The above factors may help explain local downgrade-your-mask policies, but they do not excuse them. The practice is not supported by evidence, puts patients and others at risk, excludes vulnerable people from health services, thereby exacerbating health inequalities, and could potentially lead to expensive lawsuits. More widely, at a time when covid prevalence is at an all-time high and clear and consistent messages are needed about the importance of wearing high-filtration well fitting masks, when NHS staff suggest that loose paper masks are better than respirators, it becomes all the harder to persuade people that the opposite is the case.19

If, conversely, the NHS were to provide all visitors with free FFP2 or FFP3 masks to replace paper or cloth masks, it would bring multiple benefits within and beyond healthcare settings. It would address the alarming dropoff of health service usage by clinically vulnerable people and it would constitute a powerful public health intervention. It is time for the NHS to switch its policy from downgrading to upgrading masks.  
<https://www.bmj.com/content/378/bmj.o1929>

**title:** Duration of Symptoms and Association With Positive Home Rapid Antigen Test Results After Infection With SARS-CoV-2

JAMA| 3rd august 2022  
  
…In this cohort study of individuals newly diagnosed with COVID-19, 75% continued to have positive RAT results, while 35% had culturable virus on day 6. Everyone with a negative day-6 RAT result had a negative viral culture. However, only 50% of those with a positive RAT result had culturable virus. Acknowledging the caveats of a small cohort of mostly young, vaccinated, nonhospitalized individuals with a presumed Omicron variant and potential variation in self-sampling techniques and lab-based culture methods, these data suggest that a negative RAT result in individuals with residual symptoms could provide reassurance about ending isolation. However, a universal requirement of a negative RAT result may unduly extend isolation for those who are no longer infectious. Meanwhile, a recommendation to end isolation based solely on the presence of improving symptoms risks releasing culture-positive, potentially infectious individuals prematurely, underscoring the importance of proper mask wearing and avoidance of high-risk transmission venues through day 10.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794884>

**title:** EFFECTIVENESS ASSOCIATED WITH BNT162B2 VACCINE AGAINST EMERGENCY DEPARTMENT AND URGENT CARE ENCOUNTERS FOR DELTA AND OMICRON SARS-COV-2 INFECTION AMONG ADOLESCENTS AGED 12 TO 17 YEARS

JAMA| 3rd AUGUST 2022  
  
Question What is the durability associated with 2 doses of the BNT162b2 COVID-19 vaccine against Delta- and Omicron-related emergency department and urgent care encounters among adolescents aged 12 to 17 years, and is a third dose associated with improved protection?

Findings In this case-control study including 3168 adolescents, estimated effectiveness of 2 doses of BNT162b2 was highest against both Delta (89%) and Omicron (73%) less than 2 months after vaccination but waned to 49% against Delta and 16% against Omicron at 6 months and beyond. Estimsted effectiveness of 3 doses of BNT162b2 against Omicron was 87%.

Meaning These findings suggest that third doses are needed to achieve peak protection for adolescents and may help mitigate against a future surge in cases.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794882>

**title:** Association of Receiving a Fourth Dose of the BNT162b Vaccine With SARS-CoV-2 Infection Among Health Care Workers in Israel

JAMA |2nd august 2022  
  
Question Was there a benefit of vaccinating health care workers with a fourth dose of BNT162b2 vaccine during the Omicron variant outbreak of the COVID-19 pandemic?

Findings In this multicenter cohort study of 29 611 health care workers in Israel, the breakthrough infection rate among those who received 4 doses was 6.9% compared with 19.8% in those who received 3 doses.  
  
Meaning These findings suggest that a fourth vaccine dose was effective in preventing breakthrough COVID-19 infections in health care workers, helping to maintain the function of the health care system during the pandemic.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794864>

**title:** COVID-19 Vaccination Intentions, Concerns, and Facilitators Among US Parents of Children Ages 6 Months Through 4 Years  
  
JAMA | 3rd august 2022  
  
Question What are parents’ intentions, concerns, and facilitators to COVID-19 vaccination for their children aged 6 months through 4 years?

Findings In this cross-sectional study of 2031 US adults with children aged 6 months through 4 years, half indicated they intended to get their child a COVID-19 vaccine at some point, but only one-fifth intended to do so within 3 months of the child’s eligibility. The top concerns about and facilitators to COVID-19 vaccination for this age group related to COVID-19 vaccination safety and efficacy.

Meaning These findings suggest that considerable efforts to increase parental COVID-19 vaccine confidence for children aged 6 months through 4 years may be needed to maximize COVID-19 vaccination for this age group.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794880>

**title:** Many Parents Unlikely to Seek COVID-19 Vaccination for Newly Eligible Young Children, Survey Finds  
  
JAMA | 12th july 2022  
  
A new survey of parents of children younger than 5 years who are now eligible to receive COVID-19 vaccination in the US finds that vaccine uptake in this age group is likely to be low, with more than 4 in 10 respondents saying they will “definitely not” have these young children vaccinated.

The Centers for Disease Control and Prevention recommended on June 18 that all children 6 months through 5 years of age be vaccinated to prevent COVID-19, acting 1 day after the US Food and Drug Administration authorized emergency use of 2 COVID-19 vaccines in this age group…  
<https://jamanetwork.com/journals/jama-health-forum/fullarticle/2795077>

**title:** SMOKING AND E-CIGARETTE USE: KEY VARIABLES IN TESTING IGA-ORIENTED INTRANASAL VACCINES

THE LANCET RESPIRATORY MEDICINE| 2ND august 2022  
  
Overall, although we recommend the exclusion of smokers and e-cigarette users in small clinical trials to limit the effect of these confounding variables, these subpopulations should instead be recruited (at any phase of testing) in trials that have sufficient cohort size and power to test outcomes in these individuals. Given that effects dependent on dose level (eg, smoking pack-years) are often observed, studies would ideally collect both qualitative and quantitative measurements including number of cigarettes smoked or e-cigarette puffs per day, type of e-cigarettes used, estimated duration of use, time since cessation in ex-users, levels of second-hand exposure, and serum and urine cotinine levels if available. The application of the aforementioned recommendations has the potential to improve the efficiency of clinical trials for IgA-oriented intranasal vaccines, while providing valuable information about candidate efficacy in smokers, e-cigarette users, and second-hand smoke-exposed populations.  
<https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(22)00263-6/fulltext>

**recovery**

**title:** Covid-19 impact on patients: ease of access should be a clear aim of the NHS

BMJ | 4th AUGUST 2022  
  
Not only has the covid pandemic taken its toll on staff, the consequences for patients have also been dire.

The rise in non-covid mortality won’t surprise anyone who has tried to access healthcare recently. The Office for National Statistics recorded a 14% rise in excess deaths, with 31.5% of those occurring at home. As a medical examiner I am frequently reviewing deaths that have occurred following an out-of-hospital cardiac arrest or peri-arrest when it is clear that the person had been ill but had either not sought, or been thwarted in their attempt, to obtain medical help. There is a public perception that it is near impossible to see a GP; ambulance waiting times are now so long as to be harming patients. When the ambulance gets to the hospital, patients are held in the back of it for hours on end. Waiting times for walk-in patients in emergency departments are ridiculous and if patients get through the bureaucracy placed in their way, they are frequently redirected to facilities miles away, the next day, to join another queue lasting hours.

Some of these barriers are the result of deliberate policy decisions, such as holding patients in ambulances rather than offloading them into crowded emergency departments. Some are the consequences of living with covid, such as the use of telephone triage, and some are because the NHS workforce is demoralised, knackered, and suffering from compassion fatigue. To the patient, practical and bureaucratic processes restricting access seem designed to tell them to go away and die, and according to the ONS they are succeeding.  
  
There is no point in having free at the point of access healthcare if it is not available. Ease of access should be a clear aim of the NHS, otherwise vulnerable, non-articulate, and disadvantaged people will continue to die unnecessarily.  
<https://www.bmj.com/content/378/bmj.o1941>

**title:** Surge Mechanical Ventilation for the COVID-19 Surge and Future Pandemics—Time to Reframe the Strategy

JAMA | 2nd august 2022  
  
…Although we want to inform preparedness based on historical lessons, we must be cautious to assume that all lessons from COVID-19 will be applicable to future outbreaks. During the SARS-1 epidemic, transmission was largely from symptomatic persons; community transmission was limited, and risk was highest in acute care medical settings, because contagiousness generally increased with severity of illness. Intubation was a high-risk procedure, so early intubation was used to reduce the need for emergent intubations and thus ensure a safe and choreographed environment of care. A similar strategy was considered during the initial COVID-19 surge, but this strategy was quickly abandoned because a subset of use of noninvasive oxygenation delivery coupled with self-proning allowed many patients with COVID-19 to avoid intubation and mechanical ventilation. These efforts almost certainly reduced the demand for additional mechanical ventilators; however, lessons from this specific virus on the demand for mechanical ventilators should be applied cautiously to future outbreaks.

We witnessed and benefited from many rapid and strategic scientific advancements during the COVID-19 pandemic, including the development and distribution of therapeutics and vaccines. The US government ordered nearly 200 000 additional ventilators of varying functionality.6 The deployment and use of this varied equipment seems unlikely to have the intended benefit because much of the investment is for procurement rather than development of pragmatic strategies to provide meaningful care for a surge of patients with critical illness. Investment for mass respiratory failure can be justified, but it should have less attention on the widget and more focus on implementable processes and innovations to safely provide meaningful surge critical care for optimal patient outcome.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794867>

**title:** Update On Covid-19 Public Inquiry

NHS PROVIDERS | JULY 2022  
  
Not only has the covid pandemic taken its toll on staff, the consequences for patients have also been dire.  
On 21 July 2022, Baroness Hallett, chair of the UK Covid-19 Public Inquiry, officially launched the inquiry. This briefing provides an update on the inquiry including an update on the planned approach and timetable, dates for the first procedural and public hearings, and details of the modular structure of the inquiry.  
<https://nhsproviders.org/media/693936/members-briefing-update-on-covid-inquiry-21-july-2022.pdf>

**title:** Challenges of data sharing in European Covid-19 projects: A learning opportunity for advancing pandemic preparedness and response  
  
the lancet regional health europe| oct 2022  
  
The COVID-19 pandemic saw a massive investment into collaborative research projects with a focus on producing data to support public health decisions. We relay our direct experience of four projects funded under the Horizon2020 programme, namely ReCoDID, ORCHESTRA, unCoVer and SYNCHROS. The projects provide insight into the complexities of sharing patient level data from observational cohorts. We focus on compliance with the General Data Protection Regulation (GDPR) and ethics approvals when sharing data across national borders. We discuss procedures for data mapping; submission of new international codes to standards organisation; federated approach; and centralised data curation. Finally, we put forward recommendations for the development of guidelines for the application of GDPR in case of major public health threats; mandatory standards for data collection in funding frameworks; training and capacity building for data owners; cataloguing of international use of metadata standards; and dedicated funding for identified critical areas.  
<https://www.thelancet.com/journals/lanepe/article/PIIS2666-7762(22)00163-6/fulltext>

**mental health**

**title:** The Parallel Pandemic Covid-19 And Mental Health

Northern Health Science Alliance (NHSA) | july 2022  
  
…We found a substantial increase in the number of girls diagnosed with eating disorders in Norway   
This report, produced together with the northern National Institute for Health and Care Research Applied Research Collaborations (NIHR ARCs), shows that a parallel pandemic of mental ill health has hit the North of England with a £2bn cost to the country at the same time as the Covid-19 pandemic. Mental health in England was hit badly over the course of the Covid-19 pandemic. But people in the North performed significantly worse in their mental health outcomes compared to those in the rest of the country.  
<https://www.thenhsa.co.uk/app/uploads/2022/07/NHSA-MENTAL-HEALTH-REPORT.pdf>

**public health & health inequalities**

**title:** The Impact Of The Pandemic On Population Health And Health Inequalities

BMA| 28th july 2022  
  
This report looks at the impact of the pandemic on population health and health inequalities in the UK. It discusses how the pandemic has affected the nation’s physical and mental health, as well as social determinants of health such as education and employment. The report aims to pay particular attention to inequalities and how these pandemic effects were distributed. It also looks at the positive lessons that can be learned from the vaccine rollout and efforts to tackle homelessness…  
<https://www.bma.org.uk/media/5981/bma-covid-review-report-5_28-july-2022.pdf>

**title:** The public health response by UK governments to COVID-19

BMA Covid Review 4 | july 2022  
  
How effectively did the UK governments manage their public health responses to the COVID-19 pandemic? This question has been at the forefront of the debate surrounding the virus and its impact across the country, with many now interrogating the decisions taken by the governments of the United Kingdom, Northern Ireland, Scotland, and Wales. To help answer this question, in late 2021, the BMA conducted a call for evidence survey to set out the experience of the medical profession during the pandemic and to learn lessons for future pandemics. We found that widespread underfunding, coupled with poor decisions by governments, hindered the public health response, with the exception of the vaccination programme…  
<https://www.bma.org.uk/media/5980/bma-covid-review-report-4-28-july-2022.pdf>

**title:** How Can NHS Anchors Support Communities To Create Health: Learning From The Community Response To Covid-19

Health Creation Alliance| 25th july 2022  
  
This report provides real-world insight into how NHS anchor institutions are working in partnership communities, capitalising on both their strengths to address health inequalities.  
<https://thehealthcreationalliance.org/wp-content/uploads/2022/07/THCA-HALN-learning-from-community-response-to-COVID_19-FINAL.pdf>

**title:** Patterns of Alcohol Consumption Among Individuals With Alcohol Use Disorder During the COVID-19 Pandemic and Lockdowns in Germany

JAMA | 1st AUGUST 2022  
  
Question Are COVID-19 lockdown measures associated with alcohol consumption (AC) and temporal patterns of AC?

Findings In this cohort study of 189 participants who met the criteria for alcohol use disorder (AUD), high-frequency AC tracking comprising 14 694 smartphone ratings revealed no immediate negative association of lockdown measures with overall AC. Independent of the lockdown, intention to control AC was associated with less AC; however, a difference between AC on weekends vs weekdays decreased during lockdown measures and in individuals with severe AUD.

Meaning Both holidays and weekly patterns were associated with drinking intention and lockdown measures, reflecting losing and regaining control over AC; these patterns may serve as targets for prevention and intervention of AUD.  
<https://jamanetwork.com/journals/jamanetworkopen/fullarticle/2794813>

**title:** Engaging And Supporting Marginalised Communities, Supporting Earlier Diagnosis Of Cancer, And Improving CVD Diagnosis And Prevention: Learning From The Community Response To Covid-19

Health Creation Alliance | JULY 2022  
  
This report focusses on real-world examples of how the NHS is collaborating with communities to meet their statutory obligations and addressing health inequalities.  
[Health Creation: How can Primary Care Networks succeed in reducing health inequalities? (thehealthcreationalliance.org)](https://thehealthcreationalliance.org/wp-content/uploads/2022/07/THCA-marginalised-communities_cancer_CVD-learning-from-community-response-to-COVID_19-FINAL.pdf)

We

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We also produce a range of subject-specific news feeds to ensure our clinical and professional teams stay up to date with developments in their work areas. Please visit our [website](http://www.trftlibraryknowledge.com/) for more information

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