COVID-19 weekly update

28th May 2021

clinical management

**Title:** Biomarkers and outcomes of COVID-19 hospitalisations: systematic review and meta-analysis

BMJ Evidence-Based Medicine | May 21st 2021

The objective of this study was to evaluate association between biomarkers and outcomes in COVID-19 hospitalised patients. Biomarkers have always played an important role in clinical decision making in various infectious diseases. It is crucial to assess the role of biomarkers in evaluating severity of disease and appropriate allocation of resources.

The study found a significant association between lymphopenia, thrombocytopenia and elevated levels of CRP, PCT, LDH, D-dimer and COVID-19 severity. The results have the potential to be used as an early biomarker to improve the management of COVID-19 patients, by identification of high-risk patients and appropriate allocation of healthcare resources in the pandemic.

Full paper: [Biomarkers and outcomes of COVID-19 hospitalisations: systematic review and meta-analysis](https://ebm.bmj.com/content/ebmed/26/3/107.full.pdf)

See also: [Previous version](https://ebm.bmj.com/content/early/2020/09/14/bmjebm-2020-111536?versioned=true) (15 September 2020)

**Title:** Vitamin D supplementation for the treatment of COVID‐19: a living systematic review

Cochrane Database of Systematic Reviews | 24th May 2021

The objectives of this study are to assess whether vitamin D supplementation is effective and safe for the treatment of COVID‐19 in comparison to an active comparator, placebo, or standard of care alone, and to maintain the currency of the evidence, using a living systematic review approach.

The authors conclude that there is currently insufficient evidence to determine the benefits and harms of vitamin D supplementation as a treatment of COVID‐19. The evidence for the effectiveness of vitamin D supplementation for the treatment of COVID‐19 is very uncertain. Moreover, the study found only limited safety information, and the authors were concerned about consistency in measurement and recording of these outcomes.

There is an urgent need for well‐designed and adequately powered randomised controlled trials (RCTs) with an appropriate randomisation procedure, comparability of study arms and preferably double‐blinding. This review identified 21 ongoing and three completed studies without published results, which indicates that these needs will be addressed and that these findings are subject to change in the future.

Full detail: [Vitamin D supplementation for the treatment of COVID‐19: a living systematic review](https://www.cochranelibrary.com/cdsr/doi/10.1002/14651858.CD015043/full)

**Title:** An external validation of the QCovid risk prediction algorithm for risk of mortality from COVID-19 in adults: a national validation cohort study in England

The Lancet Digital Health | 25th May 2021

Public policy measures and clinical risk assessments relevant to COVID-19 need to be aided by risk prediction models that are rigorously developed and validated. This study aimed to externally validate a risk prediction algorithm (QCovid) to estimate mortality outcomes from COVID-19 in adults in England.

The QCovid population-based risk algorithm performed well, showing high levels of discrimination for COVID-19 deaths in men and women for both time periods. QCovid has the potential to be dynamically updated as the pandemic evolves and, therefore, has potential use in guiding national policy.

Full article: [An external validation of the QCovid risk prediction algorithm for risk of mortality from COVID-19 in adults: a national validation cohort study in England](https://www.thelancet.com/action/showPdf?pii=S2589-7500%2821%2900080-7)

**Title:** DPP-4 inhibitors may improve the mortality of coronavirus disease 2019: A meta-analysis

Plos One | 20th May 2021

DPP-4 inhibitors are predicted to exert a protective effect on the progression of coronavirus disease 2019 (COVID-19). The authors of this study conducted a meta-analysis to investigate this hypothesis.

The study concludes DPP-4 inhibitors may improve the mortality of patients with COVID-19 and type 2 diabetes. As few relevant studies are available, more large-scale studies need to be performed.

Full article: [DPP-4 inhibitors may improve the mortality of coronavirus disease 2019: A meta-analysis](https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0251916)

**Title:** COVID-19 rapid guideline: managing COVID-19

NICE guideline [NG191]| updated: 27th May 2021

This guideline covers the management of COVID-19 for children, young people and adults in all care settings. It brings together our existing recommendations on managing COVID-19, and new recommendations on therapeutics, so that healthcare staff and those planning and delivering services can find and use them more easily.

On 27th May 2021 new recommendations were added on [colchicine to treat COVID-19](https://app.magicapp.org/#/guideline/L4Qb5n/section/jOxYrL) and existing recommendations on [remdesivir for COVID-19 pneumonia](https://app.magicapp.org/#/guideline/L4Qb5n/section/ERYAXn) were updated.

Full detail: [COVID-19 rapid guideline: managing COVID-19](https://www.nice.org.uk/guidance/ng191)

**Title:** Evaluation of SARS-CoV-2 IgG antibody reactivity in patients with systemic lupus erythematosus: analysis of a multi-racial and multi-ethnic cohort

The Lancet Rheumatology | 27th May 2021

Patients with systemic lupus erythematosus (SLE) are at risk of developing COVID-19 due to underlying immune abnormalities and regular use of immunosuppressant medications. This paper aimed to evaluate the presence of SARS-CoV-2 IgG antibodies in patients with SLE with or without previous COVID-19-related symptoms or RT-PCR-confirmed SARS-CoV-2 infection.

Most patients with SLE and confirmed COVID-19 were able to produce and maintain a serological response despite the use of a variety of immunosuppressants, providing reassurance about the efficacy and durability of humoral immunity and possible protection against re-infection with SARS-CoV-2.

Full article: [Evaluation of SARS-CoV-2 IgG antibody reactivity in patients with systemic lupus erythematosus: analysis of a multi-racial and multi-ethnic cohort](https://www.thelancet.com/action/showPdf?pii=S2665-9913%2821%2900114-4)

**Title:** Colchicine for community-treated patients with COVID-19 (COLCORONA): a phase 3, randomised, double-blinded, adaptive, placebo-controlled, multicentre trial

The Lancet Respiratory Medicine | 27th May 2021

Evidence suggests a role for excessive inflammation in COVID-19 complications. Colchicine is an oral anti-inflammatory medication beneficial in gout, pericarditis, and coronary disease. We aimed to investigate the effect of colchicine on the composite of COVID-19-related death or hospital admission.

In community-treated patients including those without a mandatory diagnostic test, the effect of colchicine on COVID-19-related clinical events was not statistically significant. Among patients with PCR-confirmed COVID-19, colchicine led to a lower rate of the composite of death or hospital admission than placebo.

Given the absence of orally administered therapies to prevent COVID-19 complications in community-treated patients and the benefit of colchicine in patients with PCR-proven COVID-19, this safe and inexpensive anti-inflammatory agent could be considered for use in those at risk of complications. Notwithstanding these considerations, replication in other studies of PCR-positive community-treated patients is recommended.

Full article: [Colchicine for community-treated patients with COVID-19 (COLCORONA): a phase 3, randomised, double-blinded, adaptive, placebo-controlled, multicentre trial](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900222-8)

**Title:** Corticosteroid therapy for COVID-19

Medicine: May 21, 2021 - Volume 100 - Issue 20

Corticosteroid treatment is an effective and common therapeutic strategy for various inflammatory lung pathologies and may be an effective treatment for coronavirus disease 2019 (COVID-19). The purpose of this systematic review and meta-analysis of current literature was to investigate the clinical outcomes associated with corticosteroid treatment of COVID-19.

Corticosteroid treatment can reduce the odds for mortality and the need for mechanical ventilation in severe COVID-19 patients.

Full paper: [Corticosteroid therapy for COVID-19. A systematic review and meta-analysis of randomized controlled trials](https://journals.lww.com/md-journal/Fulltext/2021/05210/Corticosteroid_therapy_for_COVID_19__A_systematic.10.aspx)

recovery

**Title:** Study confirms longer-term lung damage after COVID-19

NIHR Oxford Biomedical Research Centre | 25th May 2021

A study by Oxford and Sheffield researchers using a cutting-edge method of imaging has identified persistent damage to the lungs of COVID-19 patients at least three months after they were discharged from hospital, and for some patients even longer.

This damage was not detected by routine CT scans and clinical tests, and the patients would consequently normally be told their lungs are normal.

Further early research by the team has shown that patients who have not been hospitalised with COVID-19 but who are experiencing long-term breathlessness may have similar damage in their lungs, and a larger study is needed to confirm this.

In a paper published in Radiology, the researchers from Oxford and Sheffield said that hyperpolarised xenon MRI (XeMRI) scans had found abnormalities in the lungs of some COVID-19 patients more than three months – and in some cases, nine months – after leaving hospital, when other clinical measurements were normal.

Full detail: [Study confirms longer-term lung damage after COVID-19](https://oxfordbrc.nihr.ac.uk/study-confirms-longer-term-lung-damage-after-covid-19/)

Full research: [Hyperpolarized 129Xe MRI Abnormalities in Dyspneic Participants 3 Months after COVID-19 Pneumonia: Preliminary Results](https://pubs.rsna.org/doi/10.1148/radiol.2021210033)

**Title:** Time use and mental health in UK adults during an 11-week COVID-19 lockdown: a panel analysis

The British Journal of Psychiatry | 12th May 2021

There is currently major concern about the impact of the global COVID-19 outbreak on mental health. But it remains unclear how individual behaviours could exacerbate or protect against adverse changes in mental health.

The aim of this paper was to examine the associations between specific activities (or time use) and mental health and well-being among people during the COVID-19 pandemic.

Data were from the UCL COVID-19 Social Study, a panel study collecting data weekly during the COVID-19 pandemic. The analytical sample consisted of 55 204 adults living in the UK who were followed up for the 11-week strict lockdown period from 21 March to 31 May 2020.

Changes in time spent on a range of activities were associated with changes in mental health and well-being. Behaviours involving outdoor activities such as gardening and exercising predicted subsequent improvements in mental health and well-being, whereas increased time spent following news about COVID-19 predicted declines in mental health and well-being.

These results are relevant to the formulation of guidance for people obliged to spend extended periods in isolation during health emergencies and may help the public to maintain well-being during future lockdowns and pandemics.

Full paper: [Time use and mental health in UK adults during an 11-week COVID-19 lockdown: a panel analysis](https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/time-use-and-mental-health-in-uk-adults-during-an-11week-covid19-lockdown-a-panel-analysis/8F07743CB011DCB181B8491FDD6514DE)

**Title:** On the road to Recovery—the world’s biggest covid-19 treatment trial

BMJ | 2021; 373: n1299 | 26th May 2021

When it comes to covid-19 therapeutics, the UK is the world leader, spearheaded by the largest, most successful trial in the world. This BMJ Feature piece looks at Recovery, and why it has proved hard to replicate elsewhere.

Full detail: [On the road to Recovery—the world’s biggest covid-19 treatment trial](https://www.bmj.com/content/373/bmj.n1299)

**Title:** Living and dying with covid-19 – an ethical perspective is vital

UK Pandemic Ethics Accelerator | 24th May 2021

With the worst of the pandemic behind us, even as our country starts to return to normal life, challenging ethical questions remain. How should we evaluate the decisions that were made in the first waves of the covid-19 pandemic? What decisions should we make now? And how should we respond to future pandemic threats?

For example, can there ever be an ethically acceptable level of deaths from an infectious threat, and how could such a thing be determined? Do we need to learn to live with covid-19? Do we need to change our ways of living to minimise future infections?

In considering many of these issues, the UK Pandemic Ethics Accelerator has published five ‘thought pieces’:

* [Living and dying with covid: The tough choices ahead](https://ukpandemicethics.org/living-and-dying-with-covid-the-tough-choices-ahead/)
* [Living and dying with covid: Not all deaths are equal](https://ukpandemicethics.org/living-and-dying-with-covid-not-all-deaths-are-equal/)
* [Living and dying with covid: Ethical complexity and health/health trade-offs](https://ukpandemicethics.org/living-and-dying-with-covid-ethical-complexity-and-health-health-trade-offs/)
* [Living and dying with covid: An ethics of counting for living with covid-19 deaths](https://ukpandemicethics.org/living-and-dying-with-covid-when-every-life-counts-equally-how-should-we-count-deaths/)
* [Living and dying with covid: Resolving the hard questions of living with covid-19 – the need for public deliberation](https://ukpandemicethics.org/living-and-dying-with-covid-resolving-the-covid-trilemma-the-need-for-public-deliberation/)

Full detail: [Living and dying with covid-19 – an ethical perspective is vital](https://ukpandemicethics.org/living-and-dying-with-covid-19-an-ethical-perspective-is-vital-press-release/)

See also: [Public debate is needed to decide how UK will live with SARS-CoV-2, says ethics collaborative](https://www.bmj.com/content/373/bmj.n1327) | BMJ

**Title:** A population-based analysis of the longevity of SARS-CoV-2 antibody seropositivity in the United States

EClinicalMedicine | 24th May 2021

This cross-sectional study aimed to track population-based SARS-CoV-2 antibody seropositivity duration across the United States using observational data from a national clinical laboratory registry of patients tested by nucleic acid amplification (NAAT) and serologic assays. Knowledge of antibody seropositivity and its duration may help dictate post-pandemic planning.

Observational data from a national clinical laboratory, though limited by an epidemiological view of the U.S. population, offer an encouraging timeline for the development and sustainability of antibodies up to ten months from natural infection and could inform post-pandemic planning.

Full article: [A population-based analysis of the longevity of SARS-CoV-2 antibody seropositivity in the United States](https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900182-6)

**Title:** Characteristics and predictors of acute and chronic post-COVID syndrome: A systematic review and meta-analysis

EClinicalMedicne | 22nd May 2021

A significant proportion of individuals experience lingering and debilitating symptoms following acute COVID-19 infection. The National Institute for Health and Care Excellence (NICE) have coined the persistent cluster of symptoms as post-COVID syndrome. This has been further sub-categorised into acute post-COVID syndrome for symptoms persisting three weeks beyond initial infection and chronic post-COVID syndrome for symptoms persisting beyond twelve weeks. The aim of this review was to detail the prevalence of clinical features and identify potential predictors for acute and chronic post-COVID syndrome.

A total of 43 studies met the eligibility criteria. Fatigue and dyspnoea were the most prevalent symptoms in acute post-COVID (0·37 and 0·35) and fatigue and sleep disturbance in chronic post-COVID syndrome (0·48 and 0·44), respectively. The available evidence is generally of poor quality, with considerable risk of bias, and are of observational design.

In conclusion, this review highlights that flaws in data capture and interpretation, noted in the uncertainty within our meta-analysis, affect the applicability of current knowledge. Policy makers and researchers must focus on understanding the impact of this condition on individuals and society with appropriate funding initiatives and global collaborative research.

Full paper: [Characteristics and predictors of acute and chronic post-COVID syndrome: A systematic review and meta-analysis](https://www.thelancet.com/action/showPdf?pii=S2589-5370%2821%2900179-6)

**Title:** a New Deal for Surgery

Royal College of Surgeons of England | 28th May 2021

The COVID-19 pandemic has had a devastating impact on NHS surgical services in England. All elective (planned) surgery was cancelled in the first wave and many surgical teams were redeployed to help treat COVID-19 patients.

Latest figures show the largest ever recorded NHS waiting list in England of 4.95 million people, including more than 430,000 waiting over a year. In addition, there is a ‘hidden waiting list’ of people who have not yet come forward or who have not yet been referred for hospital treatment. Estimates vary, but could mean the waiting list growing to a figure of 9.7 million by 2023/24.

This report highlights the challenges that exist and provides recommendations for recovery.

Full report: [A New Deal for surgery](file:///C:\Users\andrew.carrick\Downloads\7534%20%20RCS%20%20New%20Deal%20For%20Surgery_AW3_Web%20%20270521.pdf)

See also: [Surgery waiting times could be cut with specialist hubs, say surgeons](https://www.bbc.co.uk/news/health-57277793)

Infection control

**Title:** Government launches new pilots to further support people to self-isolate

Department of Health and Social Care | 24th May 2021

The government is to launch 9 trailblazing pilots in England to test new, creative ways to help ensure people stick to self-isolation rules in areas with higher prevalence of infection including from new variants.

In partnership with local authorities, the government is backing the pilots with £12 million which will be used for a range of initiatives including providing alternative accommodation for people in overcrowded households, social care support such as increasing existing social care support for vulnerable adults and providing ‘buddying’ services for people whose mental health has been affected by lockdown and the variant outbreaks, and language communications support for individuals where English isn’t their first language. These pilots are designed to encourage people most at risk of catching and transmitting COVID-19 to come forward for testing and to self-isolate successfully if they test positive.

Full detail: [Government launches new pilots to further support people to self-isolate](https://www.gov.uk/government/news/government-launches-new-pilots-to-further-support-people-to-self-isolate)

**Title:** Vaccines highly effective against B.1.617.2 variant after 2 doses

Public Health England | 22nd May 2021

A new study by Public Health England shows for the first time that 2 doses of the COVID-19 vaccines are highly effective against the B.1.617.2 variant first identified in India.

The study found that, for the period from 5 April to 16 May:

* the Pfizer-BioNTech vaccine was 88% effective against symptomatic disease from the B.1.617.2 variant 2 weeks after the second dose, compared to 93% effectiveness against the B.1.1.7 variant
* 2 doses of the AstraZeneca vaccine were 60% effective against symptomatic disease from the B.1.617.2 variant compared to 66% effectiveness against the B.1.1.7 variant
* both vaccines were 33% effective against symptomatic disease from B.1.617.2, 3 weeks after the first dose compared to around 50% effectiveness against the B.1.1.7 variant

The analysis included data for all age groups from 5 April to cover the period since the B.1.617.2 variant emerged. It included 1,054 people confirmed as having the B.1.617.2 variant through genomic sequencing, including participants of several ethnicities. Data published on Thursday 20 May for vaccine effectiveness covered the period since December for those aged over 65.

The difference in effectiveness between the vaccines after 2 doses may be explained by the fact that rollout of second doses of AstraZeneca was later than for the Pfizer-BioNTech vaccine, and other data on antibody profiles show it takes longer to reach maximum effectiveness with the AstraZeneca vaccine.

Further detail: [Vaccines highly effective against B.1.617.2 variant after 2 doses](https://www.gov.uk/government/news/vaccines-highly-effective-against-b-1-617-2-variant-after-2-doses)

Full research: [Effectiveness of COVID-19 vaccines against the B.1.617.2 variant](https://khub.net/documents/135939561/430986542/Effectiveness+of+COVID-19+vaccines+against+the+B.1.617.2+variant.pdf/204c11a4-e02e-11f2-db19-b3664107ac42) [preprint]

See also: [Single vaccine dose is 33% effective against variant from India, data show](https://www.bmj.com/content/373/bmj.n1346) | BMJ

**Title:** Regulatory approval of COVID-19 Vaccine Janssen

Medicines and Healthcare products Regulatory Agency | 28th May 2021

A single-dose Covid vaccine made by Janssen has been approved for use in the UK by the medicines regulator. The vaccine, which was 85% effective in stopping severe illness from Covid-19 in trials, has met expected safety standards. Twenty million doses have been ordered for the UK, and will arrive later this year. It will be the fourth vaccine to be used in the UK to protect against Covid-19.

Further detail: [Regulatory approval of COVID-19 Vaccine Janssen](https://www.gov.uk/government/publications/regulatory-approval-of-covid-19-vaccine-janssen)

See also:

[One-dose Janssen COVID-19 vaccine approved by the MHRA](https://www.gov.uk/government/news/one-dose-janssen-covid-19-vaccine-approved-by-the-mhra) | Department of Health & Social Care

[Janssen single-dose Covid vaccine approved by UK](https://www.bbc.co.uk/news/health-57283837) | BBC News

**Title:** Local councils initiate surge vaccination to tackle B.1.617.2 variant

BMJ | 2021; 373: n1361 | 25th May

Local public health teams in areas with high case numbers of the B.1.617.2 variant first detected in India are boosting efforts to vaccinate their populations and targeting younger adults to try to limit the spread of infection.

The actions come amid growing concerns about the rise in infections of B.1.617.2, with early data from Public Health England suggesting that one dose of both AstraZeneca and Pfizer vaccine is only 33% effective against the variant.

National guidance from the Joint Committee on Vaccination and Immunisation continues to advise vaccinating adults according to risk profile and age—with people aged 30 being offered the vaccine this week. But some local authorities have taken matters into their own hands and are offering any adult aged 18 or over a vaccination.

Full detail: [Local councils initiate surge vaccination to tackle B.1.617.2 variant](https://www.bmj.com/content/373/bmj.n1361)

**Title:** Investigation of SARS-CoV-2 variants of concern: routine variant data update

Public Health England | 22nd May 2021

This document includes routine data on variants of concern and under investigation. It provides an update on previous data located in technical and variant data update [briefings and updates](https://www.gov.uk/government/collections/new-sars-cov-2-variant#investigation-of-sars-cov-2-variants) up to 13 May 2021.

Full detail: [SARS-CoV-2 variant data update, England](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/988615/Variants_of_Concern_Variant_Data_Update_2.pdf)

**Title:** Vaccine status drives over one million new users to the NHS App

Department of Health and Social Care | 23rd May 2021

Over 1.3 million new people have registered to use the NHS App since the addition of COVID-19 vaccine status was announced on 7th May. The app allows easy access to coronavirus (COVID-19) vaccination status for travel and wider NHS services. Over 11,000 people have registered their preference for organ donation via the app in 4 days, 10 times more than average for that time. 90,000 people have ordered repeat prescriptions, saving clinicians and patients valuable time

The app, which now has over 4.8 million registered users, is one of the first internationally compliant systems in the world to demonstrate vaccine status. The COVID-19 vaccine status service allows users easily to show their proof of vaccine, if required for international travel, and has been designed in line with World Health Organisation (WHO) interim guidance.

Full detail: [Vaccine status drives over one million new users to the NHS App](https://www.gov.uk/government/news/vaccine-status-drives-over-one-million-new-users-to-the-nhs-app)

**Title:** Evaluating social and spatial inequalities of large scale rapid lateral flow SARS-CoV-2 antigen testing in COVID-19 management: An observational study of Liverpool, UK (November 2020 to January 2021)

The Lancet Regional Health – Europe | Volume 6, July 2021

Large-scale asymptomatic testing of communities in Liverpool (UK) for SARS-CoV-2 was used as a public health tool for containing COVID-19. The aim of the study is to explore social and spatial inequalities in uptake and case-detection of rapid lateral flow SARS-CoV-2 antigen tests (LFTs) offered to people without symptoms of COVID-19.

Large-scale voluntary asymptomatic community testing saw social, ethnic, digital and spatial inequalities in uptake. COVID-19 testing and support to isolate need to be more accessible to the vulnerable communities most impacted by the pandemic, including non-digital means of access.

Full paper: [Evaluating social and spatial inequalities of large scale rapid lateral flow SARS-CoV-2 antigen testing in COVID-19 management: An observational study of Liverpool, UK (November 2020 to January 2021)](https://reader.elsevier.com/reader/sd/pii/S2666776221000843?token=7E2B0C27E9F5513CD390326564362D6B976317C194AB2A8970B233B55CDFB9989B48CED3CA40A396D85EF76697F7FB84&originRegion=eu-west-1&originCreation=20210526154920)

**Title:** assessment of hospital-associated SARS-CoV-2 infection and care home outbreaks

Public Health England | 27th May 2021

This report uses a data linkage approach to assessing the contribution of hospital-associated SARS-CoV-2 infection to care home outbreaks in England between 30 January and 12 October 2020. The paper was commissioned by the Public Accounts Committee, via the Social Care Working subgroup.

In summary:

• from 30 January to 12 October 2020, there were a total of 43,398 care home residents identified with a laboratory confirmed positive COVID-19 test result

• of these, 35,760 (82.4%) were involved in an outbreak, equivalent to a total of 5,882 outbreaks

• 1.6% (n=97) of outbreaks were identified as potentially seeded from hospital associated COVID-19 infection, with a total of 806 (1.2%) care home residents with confirmed infection associated with these outbreaks

• the majority of these potentially hospital-seeded care home outbreaks were identified in March to mid-April 2020, with none identified from the end of July until September where a few recent cases have emerged

The findings of this report suggest hospital associated seeding accounted for a small proportion of all care home outbreaks. Policies on systematic testing prior to hospital discharge for patients discharged to care homes were introduced on 15 April 2020. This may have supported the decline seen in these types of outbreaks, contributing to an overall reduction in care home cases.

Full report: [A data linkage approach to assessing the contribution of hospital-associated SARS-CoV-2 infection to care home outbreaks in England, 30 January to 12 October 2020](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/983349/Data_linkage_approach_to_assessing_the_contribution_of_hospital-associated_SARS-CoV-2_infection_to_care_home_outbreaks_in_England.pdf)

**Title:** Vaccination reduces the risk of severe COVID-19 infection

MedRxiv | Kings College London | 26th May 2021

Vaccinated adults who contract COVID-19 infection experience a less severe illness, new research has found. However, adults who are frail, living in areas of high deprivation or have unhealthy lifestyles are more at risk of COVID-19 infection and getting ill, despite being vaccinated, compared to other vaccinated people.

The preprint study showed fewer, milder symptoms were reported in vaccinated people compared to unvaccinated adults who had contracted the virus, and those who’d had a jab were more likely to be completely asymptomatic. Only 104 individuals were hospitalised in the vaccinated group, compared to 239 in the unvaccinated group. People over 60 have a higher risk of long-COVID generally, but analysis showed that risk of prolonged symptoms was down by 28% in the unlikely event of infection after a vaccine. This suggests that the risk of long COVID is substantially less if an older person is vaccinated.

However, individuals who had health conditions that limited their independence – such as frailty - were more at risk of COVID-19 infection after vaccination, and of getting sick. Age on its own, however was not a risk factor. Adults living in areas of higher deprivation were consistently at more risk of infection despite vaccination even when adjusting for health behaviours. COVID-19 infection in vaccinated individuals was less likely in individuals with a healthy lifestyle, for example a healthy diet and normal body mass index.

The findings demonstrate the necessity of targeted policy towards at-risk groups. Frail adults in residential settings have already shown to be disproportionately affected by COVID-19. The research team suggests strategies such as a timely booster programme, targeted infection control measures and more research into the immune response to vaccination in this group could help address the issue.

Further detail: [Vaccination reduces the risk of severe COVID-19 infection](https://www.kcl.ac.uk/news/vaccination-reduces-the-risk-of-severe-covid-19-infection)

Full research: [Post-vaccination SARS-CoV-2 infection: risk factors and illness profile in a prospective, observational community-based case-control study](https://www.medrxiv.org/content/10.1101/2021.05.24.21257738v1) [preprint]

**Title:** Confirmed cases of COVID-19 variants identified in UK

Public Health England | updated 27th May 2021

Public Health England (PHE) releases weekly updates on the number of confirmed new cases of variants of concern and variants under investigation identified in the UK.

The most affected areas continue to be Bolton, Bedford and Blackburn with Darwen, which have seen 1,354, 366 and 361 confirmed cases, respectively. There are small numbers of cases of VOC-21APR-02 in most parts of the country. PHE have published a full breakdown of VOC-21APR-02 cases by lower-tier local authority.

In some affected areas, hospitalisations are rising. Hospital attendances and admissions are predominantly in unvaccinated individuals, highlighting how crucial it is that people in these areas come forward to receive vaccination. Nationwide, up to 25 May, 201 people who were confirmed to have VOC-21APR-02 attended A&E, resulting in 43 admissions. These numbers will be updated with new sequencing results on a weekly basis.

Full detail: [Confirmed cases of COVID-19 variants identified in UK](https://www.gov.uk/government/news/confirmed-cases-of-covid-19-variants-identified-in-uk)

**Title:** COVID-19 vaccine surveillance report published

Public Health England | 27th May 2021

PHE estimates that 13,200 deaths have now been prevented in people aged 60 years or older in England up to 13 May. Estimates also indicate that the vaccination programme has prevented around 39,700 hospitalisations in those aged 65 years and over in England.

The method for analysing the approximate number of deaths and hospitalisations prevented by the vaccine programme now takes into account the impact of both first and second doses, due to more data being available. However, it does not include the impact of vaccination on transmission, therefore the true impact of the vaccination programme is likely to be even greater.

Full detail: [COVID-19 vaccine surveillance report published](https://www.gov.uk/government/news/covid-19-vaccine-surveillance-report-published)

**Title:** BNT162b2 Vaccination against Covid-19 in 12-to-15-Year-Old Adolescents

New England Journal of Medicine | 28th May 2021

Until very recently, vaccines against severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) had not been authorized for emergency use in persons younger than 16 years of age. Safe, effective vaccines are needed to protect this population, facilitate in-person learning and socialization, and contribute to herd immunity.

This randomized trial of the BNT162b2 vaccine involved 2260 adolescents 12 to 15 years of age. 1131 received BNT162b2, and 1129 received placebo. Among participants without evidence of previous SARS-CoV-2 infection, no Covid-19 cases with an onset of 7 or more days after dose 2 were noted among BNT162b2 recipients, and 16 cases occurred among placebo recipients.

The study concludes that the BNT162b2 vaccine in 12-to-15-year-old recipients had a favorable safety profile, produced a greater immune response than in young adults, and was highly effective against Covid-19.

Full article: [Safety, immunogenicity, and efficacy of the BNT162b2 Covid-19 vaccine in adolescents](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2107456?articleTools=true)

**Title:** Same-day SARS-CoV-2 antigen test screening in an indoor mass-gathering live music event: a randomised controlled trial

The Lancet Infectious Diseases | 27th May 2021

The banning of mass-gathering indoor events to prevent SARS-CoV-2 spread has had an important effect on local economies. Despite growing evidence on the suitability of antigen-detecting rapid diagnostic tests (Ag-RDT) for mass screening at the event entry, this strategy has not been assessed under controlled conditions. This study aimed to assess the effectiveness of a prevention strategy during a live indoor concert.

The study provides preliminary evidence on the safety of indoor mass-gathering events during a COVID-19 outbreak under a comprehensive preventive intervention. The data could help restart cultural activities halted during COVID-19, which might have important sociocultural and economic implications.

Full article: [Same-day SARS-CoV-2 antigen test screening in an indoor mass-gathering live music event: a randomised controlled trial](https://www.thelancet.com/action/showPdf?pii=S1473-3099%2821%2900268-1)

workforce wellbeing

**Title:** Supporting recovery after long COVID

NHS Employers | 26th May 2021

NHS Employers have produced guidance on how organisations can work with line managers to support staff in recovery from long COVID.

The information, which was produced in partnership with NHS health and wellbeing leads, focuses on:

* facilitating a safe return to work for staff with long COVID
* working with your occupational health team to support staff
* supporting staff who are at work with long COVID
* supporting staff that are off sick with long COVID
* a range of good practice examples from NHS organisations that have supported staff with long COVID.

Full detail: [Supporting recovery after long COVID](https://www.nhsemployers.org/covid19/health-safety-and-wellbeing/supporting-staff-wellbeing/supporting-recovery-after-long-covid) 

**Title:** The impact of the Covid-19 pandemic on the mental health and work morale of radiographers within a conventional X-ray department

Radiography | May 2021

There is a plethora of literature that has described the negative impact of the COVID-19 pandemic on the mental health of healthcare staff worldwide. The aim of this paper was to investigate the physical and mental demands of mobile x-ray imaging on radiographers during the first wave of the COVID-19 pandemic, within a local NHS Trust.

A total of 16 participants from 1 NHS Trust took part within this study. Both quantitative and qualitative data was obtained through an online survey.

Three key themes emerged from the data. These include mental health challenges/work morale in Radiology, demand of mobile imaging and departmental and Trust-wide mental health support. Results indicate a high demand in mobile imaging which has made a significant difference in the working life of some radiographers.

The COVID-19 pandemic has significantly affected the mental health of a proportion of radiographers at this Trust. Results indicate high workload and demand in mobile imaging has made a significant difference to the working life of radiographers, specifically the ones who were relatively newly qualified.

Two key interventions are proposed from this study. The first one is to provide and promote mental health support within radiology departments. The second is to encourage dual working on mobile x-ray examinations to help manage the emotional and physical burden.

Full detail: [The impact of the Covid-19 pandemic on the mental health and work morale of radiographers within a conventional X-ray department](https://www.radiographyonline.com/action/showPdf?pii=S1078-8174%2821%2900047-X)

Health management

**Title:** Leadership and innovation during Covid-19: lessons from the Cardiff and Vale Health System

The Kings Fund | 27th May 2021

Early in the Covid-19 pandemic, clinicians at the Cardiff and Vale University Health Board realised that they would have to make rapid changes to prevent the widespread cancellation of elective surgery. A core team of staff started meeting in a lecture theatre every morning and evening to work on the redesign. They fell into a particular ‘battle routine’: identifying problems in the morning, coming up with solutions by lunchtime and presenting the proposals back to colleagues in the evening.

Full detail: [Leadership and innovation during Covid-19: lessons from the Cardiff and Vale Health System](https://www.kingsfund.org.uk/blog/2021/05/leadership-innovation-covid-19-cardiff-vale)

See also: [How to create real, lasting change after Covid-19](https://www.thersa.org/blog/2020/04/change-covid19-response) | The Royal Society of Arts

other

**Title:** How has the COVID-19 pandemic impacted primary care?

The Health Foundation | 27th May 2021

Since the start of the pandemic the impact of COVID-19 on primary care, and those working within it, has been significant. Staff have been under considerable pressure to maintain services despite social distancing measures, adjusting to virtual consultations and helping to roll out the COVID-19 vaccine.

In April and May of 2020 – the first months of the UKs first lockdown – the number of appointments booked in general practice plummeted. This led to concerns about unmet need, particularly for people with long-term health conditions, and the potential for delayed diagnoses. However, consultation numbers recovered fast – and by September 2020 total consultations in general practice had recovered to pre-pandemic levels.

This article presents three charts, which explore the impact of the pandemic on primary care in more detail. The charts cover regional trends in the number of primary care appointments, trends in the number of primary care appointments with GPs and the shifting balance between face-to-face and phone appointments.

Key points

* In total, 31 million fewer primary care appointments were booked between April 2020 and March 2021 compared to the previous 12 months – a fall from 310 million to 279 million.
* London had the lowest drop in total number of appointments, with North East and Yorkshire, East of England and Midlands all seeing a drop in appointments twice as big percentage wise.
* The way that appointments take place has also shifted. March 2021 saw the highest ever number of telephone appointments in general practice; 11.4 million compared to 6.6 million in March 2020 and 3.5 million in March 2019. Between April 2020 and March 2021, 54% of appointments were face-to-face, compared with 79% in the previous year.

Full article: [How has the COVID-19 pandemic impacted primary care?](https://www.health.org.uk/news-and-comment/charts-and-infographics/how-has-the-covid-19-pandemic-impacted-primary-care)

See also: [Rising patient numbers threaten to overwhelm GPs](https://www.bbc.co.uk/news/health-57229848) | BBC News

**Title:** What does it mean to engage the public in the response to covid-19?

BMJ | 2021; 373: n1207 | 26th May 2021

This BMJ analysis explains that the meaning of “engagement” and its practical implications for covid-19 response and recovery are complex and at times ambiguous.It examines the different types of demands found in calls for public engagement in pandemic decision making and explains how to meet them.

The article focusses on the responsibilities of governments because their decisions have far reaching social consequences, but highlights that institutions such as hospital systems, schools, corporations, and universities also make decisions that profoundly affect the communities they serve and should engage affected communities in their decision making.

Full detail: [What does it mean to engage the public in the response to covid-19?](https://www.bmj.com/content/373/bmj.n1207)

**Title:** Adult social care and COVID-19 after the first wave: assessing the policy response in England

The Health Foundation | 27th May 2021

This briefing analyses policies to support adult social care during the height of the second wave of the pandemic in January and February 2021, and in the months leading up to it. It provides a narrative summary of central government policies related to adult social care in different areas, such as policies on testing and support for the workforce. Also provided is a summary of the latest publicly available data on the impacts of COVID-19 on adult social care. In the final part, the briefing makes an assessment of the policy response since June 2020, consider how policies changed over time, and identify priorities for the future.

The authors argue that support in some areas improved after the first wave, such as access to testing and PPE, and the priority given to social care appeared to increase. However, they found that major challenges remained, policies in several areas continued to be slow, fragmented, and short-term, and gaps in the response risk increasing inequalities. Underlying structural issues – underfunding, workforce issues, fragmentation, and more – made the social care system vulnerable to a major shock.

The briefing identifies several priorities to help prepare for potential future waves of the virus. Short-term actions should include greater involvement of social care in planning and decision making, improved access to regular testing and PPE, and a commitment to cover the costs of local government’s COVID-19 response.

Full detail: [Adult social care and COVID-19 after the first wave: assessing the policy response in England](https://www.health.org.uk/publications/reports/adult-social-care-and-covid-19-after-the-first-wave?utm_campaign=12413252_Social%20care%202nd%20wave%20briefing%20%20%2028%20May%202021%20%20WARM&utm_medium=email&utm_source=The%20Health%20Foundation&dm_i=4Y2,7E24K,6ZKZT4,U05U3,1)

**Title:** What impact has Covid-19 had on cancer services?

Nuffield Trust | 27th May 2021

By 2028, the NHS aims for 55,000 more people each year to survive cancer for at least five years after diagnosis. Achieving this requires access to timely diagnosis and treatment. However, cancer services were under pressure even before the Covid-19 pandemic, with waitingtimes for appointments and surgery worsening.

Despite plans to maintain cancer treatment during the pandemic, there has been widespread disruption. This article examines how activity levels for different cancer types have varied during the pandemic.

Full detail: [What impact has Covid-19 had on cancer services?](https://www.nuffieldtrust.org.uk/news-item/what-impact-has-covid-19-had-on-cancer-services)

**Title:** Mindfulness practice for protecting mental health during the COVID-19 pandemic

Translational Psychiatry | 28th May 2021

Emerging evidence shows that the coronavirus disease 2019 (COVID-19) pandemic is negatively affecting mental health around the globe. Interventions to alleviate the psychological impact of the pandemic are urgently needed. Whether mindfulness practice may protect against the harmful emotional effects of a pandemic crisis remains hitherto unknown.

The authors investigated the influence of mindfulness training on mental health during the COVID-19 outbreak in China. We hypothesized that mindfulness practitioners might manifest less pandemic-related distress, depression, anxiety, and stress than non-practitioners and that more frequent practice would be associated with an improvement in mental health during the pandemic.

The study found lower scores of pandemic-related distress in mindfulness practitioners compared to non-practitioners. In general, older participants showed fewer symptoms of depression and anxiety. In younger practitioners, pandemic-related distress decreased from peak to follow-up. Importantly, increased mindfulness training during the preceding two weeks was associated with lower scores of depression and anxiety at both assessments. Likewise, practice frequency predicted individual improvement in scores of depression, anxiety, and stress at follow-up.

The results indicate that mindfulness meditation might be a viable low-cost intervention to mitigate the psychological impact of the COVID-19 crisis and future pandemics.

Full article: [Mindfulness practice for protecting mental health during the COVID-19 pandemic](https://www.nature.com/articles/s41398-021-01459-8.pdf)

We

[TRFT Library & Knowledge Service](https://www.trftlibraryknowledge.com/) aim to bring together the latest guidelines, research and news on Covid-19 through our [Covid-19 portal](https://www.trftlibraryknowledge.com/coronavirus.html). For daily updates on Covid-19 visit our '[Latest Health](https://trfthealthweeklydigest.wordpress.com/)' newsfeed, or use the hashtag [#covid19rftlks](https://twitter.com/hashtag/covid19rftlks?src=hashtag_click) to see our latest tweets on Covid-19 research, guidelines and news.

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

<https://www.trftlibraryknowledge.com/health-newsfeeds.html>