COVID-19 weekly update

15th January 2021

**clinical management**

**Title**: Online tool identifies COVID-19 patients at highest risk of deterioration

National Institute for Health Research | 9th January 2021

Researchers have developed a new risk stratification tool that can accurately predict the likelihood of deterioration in adults hospitalised with COVID-19. The online tool, which has been made freely available to NHS doctors, could support clinical decision making, helping to improve patient outcomes and ultimately save lives.

The tool assesses 11 measurements routinely collected from patients - including age, gender, and physical measurements (such as oxygen levels), along with some standard laboratory tests - and calculates a percentage risk of deterioration.

The tool has been developed by researchers from the UK Coronavirus Clinical Characterisation Consortium (known as ISARIC4C), which is funded by the NIHR and UK Research and Innovation. The tool was developed using data from 74,944 people with COVID-19 admitted to 260 hospitals across England, Scotland and Wales, between February and August 2020. Researchers tested the 11 measures against the data from this large group of patients, to establish how, and to what to degree each of the measures affected the likelihood of deterioration.

They then assessed how well the tool performed in nine NHS regions and found that it performed similarly well in each, suggesting that it is likely to be useful across the NHS. Importantly, the new risk score performed better than previous risk scores.

Full detail: [Online tool identifies COVID-19 patients at highest risk of deterioration](https://www.nihr.ac.uk/news/online-tool-identifies-covid-19-patients-at-highest-risk-of-deterioration/26543)

Full research paper: [Development and validation of the ISARIC 4C Deterioration model for adults hospitalised with COVID-19: a prospective cohort study](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930559-2) | The Lancet Respiratory Medicine

Related: [Improving clinical management of COVID-19: the role of prediction models](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900006-0) | The Lancet Respiratory Medicine

**Title**: Blood plasma treatment has limited effect for sickest COVID-19 patients

Imperial College London| 11th January 2021

Treating critically ill COVID-19 patients with blood plasma from people who have fought off the disease has limited impact on patient outcomes.

The early findings, which are yet to be published, come from the REMAP-CAP study and show that treatment with convalescent plasma did not improve outcomes among patients requiring intensive care unit (ICU) support.

There was no evidence of harm associated with the administration of convalescent plasma, but investigators have paused enrollment of severely ill COVID-19 patients in ICU to this arm of REMAP-CAP study.

They explain the trial will continue to recruit hospitalised COVID-19 patients who are moderately unwell and are not requiring intensive care, to assess if less severely ill patients benefit from the treatment.

Full detail: [Blood plasma treatment has limited effect for sickest COVID-19 patients](https://www.imperial.ac.uk/news/211493/blood-plasma-treatment-limited-effect-sickest/)

**Title:** Large trial of new treatment begins in UK

BBC News | 13th January 2021

A large-scale trial of a new treatment it is hoped will help stop Covid-19 patients from developing severe illness has begun in the UK. It involves inhaling a protein called interferon beta which the body produces when it gets a viral infection. The hope is it will stimulate the immune system, priming cells to be ready to fight off viruses.

Early findings suggested the treatment cut the odds of a Covid-19 patient in hospital developing severe disease - such as requiring ventilation - by almost 80%. It was developed at Southampton University Hospital and is being produced by the Southampton-based biotech company, Synairgen.

Full news story: [Large trial of new treatment begins in UK](https://www.bbc.co.uk/news/health-55639096#:~:text=A%20large%2Dscale%20trial%20of,Royal%20Infirmary%20on%20Tuesday%20afternoon.)

Press release: [Synairgen announces commencement of dosing in its international Phase III study of inhaled interferon beta in hospitalised COVID-19 patients](https://www.synairgen.com/wp-content/uploads/2021/01/210113-Synairgen-SG018-First-dosing-final-1.pdf)

**Title**: Prevalence and risk factors for delirium in critically ill patients with COVID-19 (COVID-D)

The Lancet Respiratory Medicine | 8th January 2021

To date, 750 000 patients with COVID-19 worldwide have required mechanical ventilation and thus are at high risk of acute brain dysfunction (coma and delirium). The authors aimed to investigate the prevalence of delirium and coma, and risk factors for delirium in critically ill patients with COVID-19, to aid the development of strategies to mitigate delirium and associated sequelae.

The study found acute brain dysfunction was highly prevalent and prolonged in critically ill patients with COVID-19. Benzodiazepine use and lack of family visitation were identified as modifiable risk factors for delirium, and thus these data present an opportunity to reduce acute brain dysfunction in patients with COVID-19.

Full paper[: Prevalence and risk factors for delirium in critically ill patients with COVID-19 (COVID-D): a multicentre cohort study](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930552-X)

**Title**: Clinical guide for the management of critical care for adults with COVID-19 during the Coronavirus pandemic: RAPID UPDATE

Faculty of Intensive Care Medicine | Intensive Care Society | 13th January 2021

This RAPID UPDATE to the FICM/ICS “Clinical guide for the management of critical care for adults with COVID-19 during the Coronavirus pandemic” highlights five clinically urgent issues for practising clinicians caring for critically ill adult patients during the January/February 2021 surge in COVID-19 critical illness:

* Thromboprophylaxis and treatment of thromboembolism
* Tocilizumab
* CPAP/NIV Transfers
* Clinical Decision Making
* Oxygen constraints and supply risks

 It should be read alongside Version 4 of the full guideline (28th October 2020) and is published pending a full revision of the main guideline within the next few weeks.

Full document: [Clinical guide for the management of critical care for adults with COVID-19 during the Coronavirus pandemic: RAPID UPDATE](https://static1.squarespace.com/static/5e6613a1dc75b87df82b78e1/t/6000338e1c2ed95228ad2218/1610625935801/COVID-CC-Guideline_Bullet-Point-Update_Final_13-1-21.pdf)

**Title**: Allocating scarce intensive care resources during the COVID-19 pandemic: practical challenges to theoretical frameworks

The Lancet Respiraory Medicine | 12th January 2021

The COVID-19 pandemic strained health-care systems throughout the world. For some, available medical resources could not meet the increased demand and rationing was ultimately required.

Hospitals and governments often sought to establish triage committees to assist with allocation decisions. However, for institutions operating under crisis standards of care (during times when standards of care must be substantially lowered in the setting of crisis), relying on these committees for rationing decisions was impractical—circumstances were changing too rapidly, occurring in too many diverse locations within hospitals, and the available information for decision making was notably scarce. Furthermore, a utilitarian approach to decision making based on an analysis of outcomes is problematic due to uncertainty regarding outcomes of different therapeutic options. The authors of this article propose that triage committees could be involved in providing policies and guidance for clinicians to help ensure equity in the application of rationing under crisis standards of care. An approach guided by egalitarian principles, integrated with utilitarian principles, can support physicians at the bedside when they must ration scarce resources.

Full detail: [Allocating scarce intensive care resources during the COVID-19 pandemic: practical challenges to theoretical frameworks](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930580-4)

**Title:** Vitamin D and COVID-19: why the controversy?

The Lancet Diabetes & Endocrinology | 11th January 2021

This editorial discusses the issue of vitamin D supplementation, which has been extensively debated, with strong arguments in favour and against. It explores how the COVID-19 pandemic has further escalated the discussion.

Full detail: [Vitamin D and COVID-19: why the controversy?](https://www.thelancet.com/action/showPdf?pii=S2213-8587%2821%2900003-6)

**Title**: When to start invasive ventilation is “the million dollar question”

BMJ | 2021; 372: n121 | 14th January 2021

During the first wave of the covid-19 pandemic, almost three quarters of patients who were admitted to critical care received invasive ventilation, and one in two received it within 24 hours of admission. Now the numbers are around half that. Most receive non-invasive respiratory support instead, such as high flow nasal oxygen or continuous positive airway pressure (CPAP) by machine.

The pace of the move away from invasive ventilation varies among hospitals and has been driven by greater clinical experience of treating covid patients, by data associating invasive ventilation with higher mortality, and by the ventilation options available.

This analysis explains that doctors are unsure of the best management pathway because evidence is lacking.

Full detail: [When to start invasive ventilation is “the million dollar question”](https://www.bmj.com/content/372/bmj.n121)

**Title**: Arthritis drugs improve survival in intensive care patients, shows study

BMJ | 2021; 372: n61 | 8th January 2021

Two rheumatoid arthritis drugs will now be used to treat the patients with severe covid-19 in intensive care, after new findings have shown that they significantly improve survival and cut the time spent in hospital by a week to 10 days.

Results from the REMAP-CAP trial showed that the interleukin 6 receptor antagonists tocilizumab and sarilumab reduced mortality from 35.8% to 27.3% compared with standard care—an absolute reduction of 8.5% and a relative reduction in mortality of 24%. The benefit was seen when the drugs were given within 24 hours of patients entering intensive care and were in addition to a corticosteroid, such as dexamethasone.

Full detail: [Arthritis drugs improve survival in intensive care patients, shows study](https://www.bmj.com/content/372/bmj.n61)

Related research paper: [Interleukin-6 receptor antagonists in critically ill patients with covid-19—preliminary report.](https://www.medrxiv.org/content/10.1101/2021.01.07.21249390v2)

See also:

* [Arthritis drugs effective in improving survival in sickest COVID-19 patients](https://www.nihr.ac.uk/news/arthritis-drugs-effective-in-improving-survival-in-sickest-covid-19-patients/26535) | NIHR
* [COVID-19 rapid evidence summary: Tocilizumab for COVID-19](https://www.nice.org.uk/advice/es33/chapter/Product-overview) | NICE

**Title**: Convalescent Plasma Antibody Levels and the Risk of Death from Covid-19

New England Journal of Medicine | 13th January 2021

Convalescent plasma has been widely used to treat coronavirus disease 2019 (Covid-19) under the presumption that such plasma contains potentially therapeutic antibodies to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) that can be passively transferred to the plasma recipient. Whether convalescent plasma with high antibody levels rather than low antibody levels is associated with a lower risk of death is unknown.

In this retrospective study, the authors determined the anti–SARS-CoV-2 IgG antibody levels in convalescent plasma used to treat hospitalized adults with Covid-19. The primary outcome was death within 30 days after plasma transfusion.

The study concludes that among patients hospitalized with Covid-19 who were not receiving mechanical ventilation, transfusion of plasma with higher anti–SARS-CoV-2 IgG antibody levels was associated with a lower risk of death than transfusion of plasma with lower antibody levels.

Full article: [Convalescent plasma antibody levels and the risk of death from Covid-19](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2031893?articleTools=true)

**Title**: Interim Results of a Phase 1–2a Trial of Ad26.COV2.S Covid-19 Vaccine

New England Journal of Medicine | 13th January 2021

Efficacious vaccines are urgently needed to contain the ongoing coronavirus disease 2019 (Covid-19) pandemic of infection with severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). A candidate vaccine, Ad26.COV2.S, is a recombinant, replication-incompetent adenovirus serotype 26 (Ad26) vector encoding a full-length and stabilized SARS-CoV-2 spike protein.

In this multicenter, placebo-controlled, phase 1–2a trial, the authors randomly assigned healthy adults between the ages of 18 and 55 years (cohort 1) and those 65 years of age or older (cohort 3) to receive the Ad26.COV2.S vaccine at a dose of 5×1010 viral particles (low dose) or 1×1011 viral particles (high dose) per milliliter or placebo in a single-dose or two-dose schedule.

Longer-term data comparing a single-dose regimen with a two-dose regimen are being collected in cohort 2; those results are not reported here. The primary end points were the safety and reactogenicity of each dose schedule.

The study found that the safety and immunogenicity profiles of Ad26.COV2.S support further development of this vaccine candidate.

Full article: [Interim results of a Phase 1–2a Trial of Ad26.COV2.S Covid-19 Vaccine](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2034201?articleTools=true)

**Title**: The association between mechanical ventilator availability and mortality risk in intensive care patients with COVID-19

medRxiv preprint | 13th January 2021

There is limited data on the extent to which occupancy levels impacted patient outcomes
during the first wave of COVID-19, especially in light of the mobilisation of significant additional resources.

Now, the findings of this study -conducted by reserachers at University College London -suggest that survival rates for patients with COVID-19 in intensive care settings appears to deteriorate as the occupancy of (surge capacity) beds compatible with mechanical ventilation, rises. The experts found that this is linear: as going from 0% occupancy to 100% occupancy increases risk of mortality by 92%.

They used data from over 4000 patients across 114 hospital trusts admitted to an ICU in England between 2nd April and 1st June, 2020, for whom data was submitted to the national surveillance programme : COVID-19 Hospitalisation in England Surveillance System (CHESS).

They found mortality risk was higher for admissions during periods of high occupancy. The data demonstrates it was a fifth higher in ICUs where more than 85% of beds were occupied, than in those at between 45% and 85% capacity.

Full paper: [The association between mechanical ventilator availability and mortality risk in intensive care patients with COVID-19: A national retrospective cohort study](https://www.medrxiv.org/content/10.1101/2021.01.11.21249461v1.full.pdf)

See also: [Packed hospitals raised death risk by 20%](https://www.bbc.co.uk/news/health-55652771) | BBC News

**Title**: Practical guidance for the management of adults with Immune Thrombocytopenia during the COVID-19 pandemic

British Society for Haematology | updated January 2021

This document aims to provide practical guidance for the assessment and management of patients with Immune Thrombocytopenia (ITP) during the COVID-19 pandemic. The intention is to support clinicians and, although recommendations have been provided, it is not a formal guideline. Nor is there sufficient evidence base to conclude that alternative approaches to treatment are incorrect. Instead, it is a consensus written by clinicians with an interest in ITP or coagulation disorders and reviewed by members of the UK ITP forum.

Full document: [Practical guidance for the management of adults with Immune Thrombocytopenia during the COVID-19 pandemic](http://comm.knowledgeshare.nhs.uk/ls/click?upn=w6kEKPngG5Unp9AJ7fP-2BOX0EjxB7p5AvwMDbLj6wqSaOnM2QwtQflvjFYmyoJdx6ogPQHGrK-2FwAWCr98Htr9Qe4L1StlJbmO9mwEAsaJoJ8t3QeGvbaHikN1VRgBrJA-2B-2BwMe9Swwb9WUB-2FBsoF-2Fxvq1q2TE-2BJj199TJrqp4DKfQ-3DekPR_GptQX16N64WwKT5la58D1sn3BTE9Hn1VSg3EYJGKw-2Bm52KJ5IgzcjTdK8Bz3fHMqMM5ab3MIab7KzaMaWzjQe30U-2FrGTJgghzHWIh5hPF6vTP9ENaAQndTuuGe0htuwDcLp88NnfumK0MHbl-2FP-2FSIEfSHZZDMDwz3ikIks0mgE7C5nwljNXA2S4k5RdVDVenI2LwwKud4jBKw2lYEtI-2BdYI-2BIDXwDjfbX4SxJ-2Fit1bAHMHBnPH5BDa-2BBwr9kN-2FMLp1bZN1H2olOQPqhr8-2FNGnuFwEwrRrq5UbYUCnb3ge1HULSR5VM0QLIQvWs2CrsN8dGyBE9ksDdgb6efBgo3vCxj1665A7Vz6-2FX0oSVB8cgheNfi3R-2BzDp4sJ6z3-2FbuAs3yk-2Btm7Dku6PUrDr0gAkYw-3D-3D)

**Title**: Therapeutic options for COVID-19: a quick review

Journal of Chemotherapy | 11th January 2021

Since the announcement by the World Health Organization (WHO) of an outbreak of a contagious respiratory viral pneumonia in Wuhan, China, in December 2019 (later named as COVID-19), several research works have been carried out to unstitch the therapeutic options and combat the disease using various aproaches and modalities. These works are currently at different clinical trial stages, and their results may be determined by the outcome of the ongoing trial process.

There is the need for a collection of information regarding the availlable therapeutic options related to COVID-19. This article therefore reviewed emerging and re-emerging therapeutic compounds/drugs used in COVID-19 management and reports of clinical trials, with the view to summarize and highlight their prospect and possible adverse effects to allow more extensive choice by clinicians, researchers, and policymakers.

This review indicates that there is both a race and quest in the test of antiviral agents against COVID-19 and that arbidol seems to have dominated in the studies analyzed. The use of anticoagulants and antibiotics, such as teicoplanin and azithromycin/hydroxychloroquine were reported to also play a leading role in the management of the disease. Likewise, dexamethasone has been recently claimed to be effective in patients in need of respiratory assistance.

Based on unresolved controversies and inconclusive findings, it could be said that generally, a single and specific therapeutics to COVID-19 is still a mirage. There is, thus, an urgent need to test more potent compounds and agents to establish much safer and highly efficacious drugs/agents for the disease, even as we continue to learn more about the disease as well as the characteristic of the virus.

Full article: [Therapeutic options for COVID-19: a quick review](https://www.tandfonline.com/doi/pdf/10.1080/1120009X.2020.1868237?needAccess=true)

**recovery**

**Title**: 6-month consequences of COVID-19 in patients discharged from hospital

The Lancet | 8th January 2021

The long-term health consequences of COVID-19 remain largely unclear. The aim of this study was to describe the long-term health consequences of patients with COVID-19 who have been discharged from hospital and investigate the associated risk factors, in particular disease severity.

At 6 months after acute infection, COVID-19 survivors were mainly troubled with fatigue or muscle weakness, sleep difficulties, and anxiety or depression. Patients who were more severely ill during their hospital stay had more severe impaired pulmonary diffusion capacities and abnormal chest imaging manifestations, and are the main target population for intervention of long-term recovery.

Full article: [6-month consequences of COVID-19 in patients discharged from hospital](https://www.thelancet.com/action/showPdf?pii=S0140-6736%2820%2932656-8)

Related Comment: [Long-term follow-up of recovered patients with COVID-19](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2821%2900039-8/fulltext)

**Title**: Returning to physical activity after covid-19

BMJ | 2021; 372: m4721 | 8th January 2021

Professional experience suggests that, after mild suspected covid-19, a proportion of people experience a prolonged recovery, particularly when trying to return to exercise. Moreover, there is increasing recognition of potential long term complications of covid-19, including enduring illness (“post-acute” or “long” covid), cardiopulmonary disease, and psychological sequelae in some people.

This article offers a pragmatic approach to help patients safely return to physical activity after symptomatic SARS-CoV-2 infection, focusing on those who have lost fitness or had a prolonged period of inactivity but who do not have an enduring post-acute covid-19 illness. It is based on current evidence and consensus statements, and our own multidisciplinary experience in sports and exercise medicine, rehabilitation, and primary care.

* Risk stratify patients before recommending a return to physical activity in people who have had covid-19. Patients with ongoing symptoms or who had severe covid-19 or a history suggestive of cardiac involvement need further clinical assessment
* Only return to exercise after at least seven days free of symptoms, and begin with at least two weeks of minimal exertion
* Use daily self monitoring to track progress, including when to seek further help

Full detail: [Returning to physical activity after covid-19](https://www.bmj.com/content/372/bmj.m4721)

**Infection control**

**Title**: vaccine surveillance strategy

Public Health England | 11th January 2021

This document provides information on the COVID-19 vaccine surveillance strategy in England.

The document includes:

* the proposed post-implementation surveillance plan for COVID-19 vaccines in England
* details of vaccines that may be introduced are dependent on licensing decisions from regulators
* surveillance of vaccine programmes will involve monitoring of vaccine uptake (coverage), vaccine effectiveness, population impact and vaccine safety

Full detail: [COVID-19 vaccine surveillance strategy](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951189/COVID-19_vaccine_surveillance_strategy.pdf)

**Title**: UK Covid-19 vaccines delivery plan

Department of Health and Social Care | 11th January 2021

In this policy paper, and accompanying press release, the Government sets out the UK ‘s COVID-19 vaccines delivery plan for vaccinating tens of millions of people by spring.

* At least 2 million vaccinations per week with over 2,700 vaccine sites across the UK
* Over 200,000 offers of non-clinical support from the public and leading UK businesses to help with the logistics of the programme

Tens of millions of people will be immunised by the spring at more than 2,700 vaccination sites across the UK, the government yesterday announced as part of comprehensive plans to rapidly scale up the COVID-19 vaccination programme. The expansion of the programme will also mean all adults will be offered a vaccine by the autumn.

The UK COVID-19 vaccines delivery plan explains how the government will work with the NHS, devolved administrations, local councils and the armed forces, and how it is planning, to deploy them to deliver the largest vaccination programme in British history.

Full document: [UK COVID-19 vaccines delivery plan](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/951284/UK_COVID-19_vaccines_delivery_plan.pdf)

Press release: [Government publishes plan for the largest vaccination programme in British history](https://www.wired-gov.net/wg/news.nsf/articles/Government%2Bpublishes%2Bplan%2Bfor%2Bthe%2Blargest%2Bvaccination%2Bprogramme%2Bin%2BBritish%2Bhistory%2B12012021081000?open)

**Title**: The COVID-19 Vaccine Communication Handbook

via University of Bristol | 7th January 2021

A team of scientific experts has joined forces from across the world to help fight the spread of misinformation about the COVID-19 vaccines, which hold the key to beating the deadly pandemic and releasing countries from debilitating lockdown restrictions.

Together they have created an online guide to arm people with practical tips combined with the very latest information and evidence to talk reliably about the vaccines, constructively challenge associated myths, and allay fears.

With the race on to vaccinate as many people as possible soonest in the wake of a more virulent virus strain, they’re appealing to everyone, from doctors to politicians, teachers to journalists and parents to older generations, to understand the facts, follow the guidance, and spread the word.

Full document: [The COVID-19 Vaccine Communication Handbook. A practical guide for improving vaccine communication and ­fighting misinformation](https://hackmd.io/%40scibehC19vax/home)

Press release: [Global experts urge everyone to talk about COVID-19 vaccines responsibly](http://www.bristol.ac.uk/news/2021/january/covid-19-vaccine-communication-handbook.html)

**Title**: GPs can limit routine work to focus on vaccination, says NHS England

BMJ | 2021; 372: n67 | 8th January 2021

General practices can suspend some non-essential work to allow them to focus on delivering covid-19 vaccinations, NHS England has said.

In a letter to general practitioners and local commissioners sent on 7 January, NHS England set out measures designed to reduce practices’ workloads while protecting their income to help them deliver covid-19 vaccinations. The letter urged local commissioners to “take a supportive and pragmatic approach to minimise local contract enforcement across routine care, with attention and support focused on the core areas.” But it stressed that GPs should ensure that “general practice remains fully and safely open for patients, including maintenance of appointments.”

Most locally commissioned enhanced services should be suspended, except when these are specifically in support of vaccination or other covid-19 related support such as reducing hospital admissions, the letter said.

Full detail: [GPs can limit routine work to focus on vaccination, says NHS England](https://www.bmj.com/content/372/bmj.n67)

Related letter: [Freeing up practices to support COVID vaccination](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/03/C1026_Freeing-up-GP-practices-letter_070121.pdf)

**Title**: Data on vaccination rollout and its effects are vital to gauge progress, say scientists

BMJ | 2021; 372: n76 | 11th January 2021

Scientists have called for more data on the rollout of covid-19 vaccinations in the UK to be released to show how it is working together with details of a long term strategy for ending the pandemic.

Members of Independent Scientific Advisory Group for Emergencies (Independent SAGE) have voiced concerns about an absence of a coherent policy to control the spread of covid-19 amid reliance on emergency lockdowns and promises that “vaccines are coming.”

Full detail: [Data on vaccination rollout and its effects are vital to gauge progress, say scientists](https://www.bmj.com/content/372/bmj.n76)

**Title**: COVID-19 Vaccination FAQs

Royal College of General Practitioners | 7th January 2021

This publication from the Royal College of General Practitioners answers 10 frequently asked questions about the COVID-19 vaccine

1. Which health and care staff are eligible for a vaccination?
2. Who should have which vaccine?
3. Do all patients have to wait 15 minutes after their vaccination?
4. Is it safe to give the COVID-19 vaccination to patients on warfarin?
5. Can we give the COVID-19 vaccination to patients with allergies?
6. . What is the best way to staff the clinics? Who can give the vaccine?
7. Do we need written consent from patients?
8. Is the COVID-19 vaccine safe in pregnancy?
9. Can patients who are Clinically Extremely Vulnerable stop shielding after their vaccination?
10. When should the doses be given?

Full document: [COVID-19 Vaccination FAQs](https://elearning.rcgp.org.uk/pluginfile.php/160165/mod_page/content/31/COVID-19%20Vaccination%20FAQ_formatted_v1.1.pdf)

**Title**: Covid-19 vaccine roll-out. Frequently Asked Questions

House of Commons Library | 7th January 2021

This briefing addresses commonly asked questions about the roll-out of the Covid-19 vaccine. It includes links to resources and guidance on the Covid-19 vaccine programme published by Public Health England, the NHS and other health bodies.

Full document: [Covid-19 vaccine roll-out. Frequently Asked Questions](https://researchbriefings.files.parliament.uk/documents/CBP-9081/CBP-9081.pdf)

**Title**: Scientists developing Covid-19 vaccine nasal spray

Lancaster University| 13th January 2021

Lancaster University researchers have successfully engineered a Covid-19 vaccine which can be administered through the nose. The researchers administered two doses of the vaccine via a nasal spray in animal trials which are the first stage in vaccine development.

This elicited robust antibodies and T cell responses which were enough to be able to neutralize SARS-CoV-2. There was also a significant reduction in lung pathology, inflammation and clinical disease in the rodents who received the vaccine.

The vaccine is based on a common poultry virus called the Newcastle Disease Virus (NDV), which can replicate in humans but is harmless. The scientists engineered NDV to produce the spike proteins of the SARS-CoV-2 virus which causes Covid-19, tricking the body into mounting an immune response against SARS-CoV-2.

Full detail: [Scientists developing Covid-19 vaccine nasal spray](https://www.lancaster.ac.uk/news/scientists-developing-covid-19-vaccine-nasal-spray-1)

**Title**: National protocol for COVID-19 Vaccine AstraZeneca (ChAdOx1-S [recombinant])

Public Health England | 10th January 2021

This protocol is for the administration of COVID-19 Vaccine AstraZeneca (ChAdOx1-S [recombinant]) to individuals in accordance with the national COVID-19 vaccination programme.

Full detail: [National protocol for COVID-19 Vaccine AstraZeneca (ChAdOx1-S [recombinant])](https://www.gov.uk/government/publications/national-protocol-for-covid-19-vaccine-astrazeneca-chadox1-s-recombinant)

**Title**: How the Oxford-AstraZeneca covid-19 vaccine was made

BMJ | 2021; 372: n86 | 12th January 2021

In this BMJ interview, Andrew Pollard, who has been leading the Oxford vaccine clinical trials in the UK, Brazil, and South Africa explains how the Oxford vaccine came to be, how dosing was worked out, and whether it will stand up to the new variants.

Full detail: [How the Oxford-AstraZeneca covid-19 vaccine was made](https://www.bmj.com/content/372/bmj.n86)

**Title**: UK approves Moderna vaccine to be given as two doses 28 days apart

BMJ | 2021; 372: n74 | 11th January 2021

The UK has approved the Moderna covid-19 vaccine and ordered an additional 10 million doses—bringing the total up to 17 million doses to be delivered from spring. Interim analysis of the Moderna phase III trial reported that the vaccine was 94.5% effective 14 days after the second dose. The Medicines and Healthcare Products Regulatory Agency (MHRA) has approved the vaccine as a two dose regime, with the second dose given 28 days after the first.

This comes after the UK announced that previously approved vaccines—Oxford AstraZeneca and Pfizer BioNTech—would be given up to 12 weeks apart.

Nearly 1.5m people in the UK have so far received at least one dose of either the Pfizer BioNTech or Oxford University AstraZeneca vaccine.

Full detail: [UK approves Moderna vaccine to be given as two doses 28 days apart](https://www.bmj.com/content/372/bmj.n74)

**Title**: Asymptomatic testing to be rolled out across the country starting this week

Department of Health and Social Care | 10th January 2021

Rapid, regular testing for people without symptoms of coronavirus (COVID-19) will be made available across the country from this week, with the eligibility of the community testing programme expanded to cover all 317 local authorities.

Local authorities will be encouraged to target testing at people who are unable to work from home during the national lockdown.

Expansion of asymptomatic testing will identify more positive cases of COVID-19 and ensure those infected isolate, protecting those who cannot work from home and our vital services. This programme is crucial given that around 1 in 3 people have coronavirus without displaying any symptoms.

Full detail: [Asymptomatic testing to be rolled out across the country starting this week](https://www.gov.uk/government/news/asymptomatic-testing-to-be-rolled-out-across-the-country-starting-this-week)

**Title:** Use lateral flow tests in schools to find cases, urges Independent SAGE

BMJ | 2021; 372: n75 | 11th January 2021

The Independent Scientific Advisory Group for Emergencies has endorsed the use of mass lateral flow testing in schools to screen staff and pupils for coronavirus. It said this should be one element of a comprehensive “safe schools” strategy that ministers should implement through a new national education taskforce to enable pupils to return to school.

Independent SAGE’s strategy calls for properly trained staff to conduct the tests, with effective oversight and clear clinical care and advice being provided to pupils who test positive and their families. It has also set out a range of measures to tackle the “substantial harms” caused by school closures, including to school students’ mental health and their long term prospects.

The move comes amid growing concern over more widespread use of lateral flow testing. The rapid test kits most widely used in UK universities, schools, and care homes were shown to detect just 48.89% of covid-19 infections in people without symptoms when compared with a polymerase chain reaction (PCR) test, in real world data from the Liverpool pilot scheme.

In its latest report proposing a comprehensive “safe schools policy,” Independent Sage said testing should be used as a means of “finding cases rather than as a means of determining whether or not people are infected, given the high negative rates.

Full detail: [Use lateral flow tests in schools to find cases, urges Independent SAGE](https://www.bmj.com/content/372/bmj.n75)

Related: [A safe schools policy for re-opening education as soon as possible and mitigating the harms of closure](https://www.independentsage.org/wp-content/uploads/2021/01/Schools-Jan-2021-final.pdf)

**Title**: Past COVID-19 infection provides some immunity but people may still carry and transmit virus

Public Health England | 14th January 2021

People infected with COVID-19 in the past are likely to be protected against reinfection for several months, a Public Health England (PHE) study has found, although experts cautioned those with immunity may still be able carry the virus in their nose and throat and therefore have a risk of transmitting to others.

PHE has been regularly testing tens of thousands of health care workers across the UK since June for new COVID-19 infections as well as the presence of antibodies, which suggest people have been infected before.

PHE scientists working on the study have concluded naturally acquired immunity as a result of past infections provide 83% protection against reinfection, compared to people who have not had the disease before. This appears to last at least for 5 months from first becoming sick.

While the [SIREN study](https://www.hra.nhs.uk/planning-and-improving-research/application-summaries/research-summaries/siren-sars-cov2-immunity-and-reinfection-evaluation-covid-19-uph/) will continue to assess whether protection may last for longer, this means people who contracted the disease in the first wave may now be vulnerable to catching it again. The study will continue to follow participants for 12 months to explore how long any immunity may last, the effectiveness of vaccines and to what extent people with immunity are able to carry and transmit the virus.

Full detail: [Past COVID-19 infection provides some immunity but people may still carry and transmit virus](https://www.gov.uk/government/news/past-covid-19-infection-provides-some-immunity-but-people-may-still-carry-and-transmit-virus)

Related:

* [Previous infection can give immunity for at least five months - but reinfection is still possible](https://news.sky.com/story/covid-19-previous-infection-could-give-immunity-for-months-but-reinfection-is-still-possible-12187171) | Sky News
* [UK study suggests that the risk of re-infection with COVID-19 is low](https://hospitalhealthcare.com/covid-19/uk-study-suggests-that-the-risk-of-re-infection-with-covid-19-is-extremely-low/) | Hospital Healthcare Europe

**Title**: Lockdown compliance improving but low take up of Covid tests ‘worrying’

University College London | 13th January 2021

Three quarters (75%) of adults aged 60+ who reported experiencing symptoms at least once said they had never requested a test, with just 18% of the same age group saying they requested a test every time they experienced symptoms. Younger adults have been most consistent in requesting tests when they experience symptoms of Covid-19, with 42% requesting a test every time, but 45% of this age group still said they’d never request a test despite experiencing symptoms.

Compliance with lockdown rules has been increasing since last September, especially as stricter measures have been brought in, with particular improvements since the start of December when news of the new variant became widespread. ‘Majority’ compliance with the rules is being reported by 96% of people; an improvement since the start of the autumn across all demographic groups. ‘Complete’ compliance is lower, but still being reported by the majority of people (56% for the week ending 10th January) and is now at comparable levels to back in May 2020.

Over a third of respondents (38%) say they are not isolating for the recommended number of days (ten or more) when they develop symptoms of Covid-19, with 13% saying they are not isolating at all. Younger adults and those from higher income households are much less likely to not isolate at all (3% of those aged 18-29 and 9% of those in higher income households are not isolating at all).

Full detail: [Lockdown compliance improving but low take up of Covid tests ‘worrying’](https://www.ucl.ac.uk/news/2021/jan/lockdown-compliance-improving-low-take-covid-tests-worrying)

**Title**: Mitigation Policies and COVID-19–Associated Mortality — 37 European Countries, January 23–June 30, 2020

Centers for Disease Control and Prevention | 15th January 2021

Mitigation policies, including closure of nonessential businesses, restrictions on gatherings and movement, and stay-at-home orders, have been critical to controlling the COVID-19 pandemic in many countries, but they come with high social and economic costs.

European countries that implemented more stringent mitigation policies earlier in their outbreak response tended to report fewer COVID-19 deaths through the end of June 2020. These countries might have saved several thousand lives relative to countries that implemented similar policies, but later.

Earlier implementation of stringent mitigation policies, even by just a few weeks, appears to be important to prevent widespread COVID-19 transmission and reduce the number of deaths.

Full detail: [Mitigation Policies and COVID-19–Associated Mortality — 37 European Countries, January 23–June 30, 2020](https://www.cdc.gov/mmwr/volumes/70/wr/mm7002e4.htm?s_cid=mm7002e4_w)

**workforce wellbeing**

**TITLE:** PUBLIC HEALTH DOCTORS ‘COMPLETELY SHATTERED’

BMA | 7th January 2021

A study of doctors working in public health and health protection roles has exposed criticism and scepticism with the Government’s plans to reorganise Public Health England, and the opportunities for doctors to help shape any changes.

The survey carried out by the association’s public health committee, further found doctors reporting dangerously highly levels of mental and physical fatigue as a result of battling COVID-19, coupled with resentment with the sense their branch of practice had been overlooked by decision makers.

Full detail: [Public health doctors ‘completely shattered’](https://www.bma.org.uk/news-and-opinion/public-health-doctors-completely-shattered)

See also: [Public Health Medicine Pandemic Experience survey](https://www.bma.org.uk/media/3642/preliminary-analysis-phe-reorganisation-data-v2.docx)

**Title:** Mental health of staff working in intensive care during COVID-19

King’s College London | Occupational Medicine | 13th January 2021

New research from King's College London shows nearly half of Intensive Care Unit (ICU) staff are likely to meet the threshold for PTSD, severe anxiety or problem drinking during the COVID-19 pandemic.

Results from a study of ICU healthcare workers, published in *Occupational Medicine*, shows the stark impact of working in critical care during the COVID-19 pandemic. The researchers found poor mental health was common in many ICU clinicians although they were more pronounced in nurses than in doctors or other healthcare professionals.

The authors state that the high rate of mortality amongst COVID-19 patients admitted to ICU, coupled with difficulty in communication and providing adequate end-of-life support to patients, and their next of kin because of visiting restrictions, are very likely to have been highly challenging stressors for all staff working in ICUs.

709 healthcare workers, from nine ICUs in England, completed anonymous web-based surveys in June and July 2020 comprising 291 (41 per cent) doctors, 344 (49 per cent) nurses, and 74 (10 per cent) other healthcare staff.

Over half (59 per cent) reported good wellbeing, however 45 per cent met the threshold for probable clinical significance for at least one of: severe depression (6 per cent), PTSD (40 per cent), severe anxiety (11 per cent) or problem drinking (7 per cent). Worryingly more than one in eight respondents (13 per cent) reported frequent thoughts of being better off dead, or of hurting themselves in the past two weeks.

Full paper: [Mental health of staff working in intensive care during COVID-19](https://academic.oup.com/occmed/advance-article/doi/10.1093/occmed/kqaa220/6072139?searchresult=1)

Press release: [New study shows mental health of ICU staff should be immediate priority](https://www.eurekalert.org/pub_releases/2021-01/kcl-nss011221.php)

See also: [Many ICU staff in England report symptoms of PTSD, severe depression, or anxiety, study reports](https://www.bmj.com/content/372/bmj.n108) | BMJ

**Title:** All doctors should be offered first vaccine dose by mid-February, government says

The UK government has promised that every adult in the UK will be offered a covid-19 vaccination by the autumn as it set out plans to rapidly scale up its mass vaccination programme.

The UK covid-19 vaccines delivery plan, published on Monday 11 January to coincide with the opening of seven new regional vaccination centres, said England will have capacity to vaccinate at least two million people per week by the end of January. This will be delivered across 206 hospital sites, 50 vaccination centres, and 1200 local vaccination sites run by primary and community care teams, it says.

The plan confirms that all frontline health and care workers, all care home residents, everyone aged over 70, and all clinically extremely vulnerable people should be offered their first dose of the vaccine by 15 February. Everyone else in the nine high risk groups identified by the Joint Committee on Vaccination and Immunisation should be offered a vaccine by spring, it stipulates.

Full detail: [All doctors should be offered first vaccine dose by mid-February, government says](https://www.bmj.com/content/372/bmj.n88)

**Title:** Health and social care staff must be vaccinated now, says BMA

BMJ | 2021; 372: n60 | 8th January 2021

The BMA has made an urgent call for all health and social care workers to be vaccinated by the end of January and for those at greatest risk of contracting covid-19 to be vaccinated within two weeks. It said that this was essential, to protect an already depleted workforce and to help prevent the NHS becoming overwhelmed in the next three weeks.

The government’s approach to vaccinating staff has been ad hoc and often chaotic, said the BMA. While some hospital trusts and general practices had been able to vaccinate reasonable numbers of staff, others had vaccinated only very few or none at all.

The slow rollout of vaccination is leading to serious staff absences because of either covid-19 infection or the need to quarantine or isolate, which is affecting patient care, said the BMA. It also backed calls for second doses of the Pfizer-BioNTech vaccine to be offered as soon as possible, in line with World Health Organization guidance.

Full detail: [Health and social care staff must be vaccinated now, says BMA](https://www.bmj.com/content/372/bmj.n60)

**Title:** One in 10 hospital nurses now off work with covid absences still rising

HSJ | 14th January 2021

More than one in 10 hospital nurses are now off work in areas hard-hit by covid, according to internal data leaked to *HSJ.* The data shows the total absence rate among acute trust nurses has risen steadily over the last month.

Nationally the total absence rate among acute trust nurses was 9.7 per cent as of Monday, up from around 7 per cent at the start of December, pushed up by rapidly rising absences due to covid. These make up more than half of total absences, and have now hit rates last seen in early May.

Senior NHS sources said staff absences are severely compounding operational pressures in the hardest hit regions, limiting hospitals’ capacity to operate more than is suggested in official bed capacity figures.

Full detail: [One in 10 hospital nurses now off work with covid absences still rising](https://www.hsj.co.uk/workforce/one-in-10-hospital-nurses-now-off-work-with-covid-absences-still-rising/7029301.article?mkt_tok=eyJpIjoiWkdZeVl6YzRORFkwWlRNeSIsInQiOiJDUklEcUJVcVJiRWJTQ0JDUjdxOUExbkVaRnBXWDV0MFJaWVloVFwvOEJSVlVwQWg2WkZmT1lBejFLMm1oSEJcL2F2NlFKR25PN3lCTnd2OGdnNlJaZTl3ejdGSldFZjJFZlBZbDhla010NnJ1U3pOSzQ0ZFBvdEhMaldCMmczY3hVIn0%3D)

**Title**: The prevalence of post-traumatic stress disorder related symptoms in Coronavirus outbreaks

Journal of Affective Disorders | Volume 282, March 2021 pages 527-538

Infectious disease outbreaks affect physical and mental health of humans worldwide. Studies showed that the prevalence of post-traumatic stress disorder (PTSD) symptoms increased in these conditions. This systematic-review and meta-analysis aimed to assess the prevalence of PTSD related symptoms in coronavirus outbreaks.

Meta-analysis reported that about three in every ten survivors of coronavirus infection, about two in every ten healthcare workers, and about one in every ten individuals of general population experienced PTSD symptoms in outbreaks.

Full article: [The prevalence of post-traumatic stress disorder related symptoms in Coronavirus outbreaks](https://www.sciencedirect.com/science/article/pii/S016503272033278X)

**Health management**

**TITLE:** NHS ENGLAND: HOSPITALS MUST ‘SURGE’ ICU SO OTHER REGIONS DON’T HAVE TO RATION CARE

HSJ | 13th January 2021

NHS England has asked hospitals across the country to open hundreds more intensive care beds so they can take in patients from the hardest hit areas, to prevent those patches having to ration access.

A letter sent to dozens of acute trusts today by NHS England asks them to enact their “maximum surge” for critical care from tomorrow, opening up hundreds of beds, which will rely on them redeploying staff and cancelling more planned care.

The letter is to trusts in the Midlands but *HSJ*understands a similar approach is being taken in the other regions where critical care is not currently under as much pressure as London, the East of England and the South East.

Full detail: [NHS England: Hospitals must ‘surge’ ICU so other regions don’t have to ration care](https://www.hsj.co.uk/coronavirus/nhs-england-hospitals-must-surge-icu-so-other-regions-dont-have-to-ration-care/7029296.article?mkt_tok=eyJpIjoiTlRFNE9XTTRNRGhpTmpWbCIsInQiOiJXNG5pTmZnMWFVQkt4d2lXWkJCVXM5dmpWK3lQTXRzY3Y5ZkdvelA5V3FFWStFT245bXJWS2FHKzRmRkU1ZVdKZVh1Yk5vZkZaSHdDbEllZ0VaQ2ZFdnVyM2phbGdEQXl6NEVwS2RzdzArWFVQQkdkWTZ0UVIzbXdGOTh0VytSMSJ9)

**Title:** Staff shortages left the NHS vulnerable to the COVID-19 storm

The Health Foundation | 12th January 2021

In this blog piece, Anne Charlesworth of The Health Foundation discusses how systemic weaknesses in the health service are making it hard for the UK to cope with the latest surge of COVID-19 patients, with workforce shortages being a critical barrier to increasing NHS capacity.

Full detail: [Staff shortages left the NHS vulnerable to the COVID-19 storm](https://www.health.org.uk/news-and-comment/blogs/staff-shortages-left-the-nhs-vulnerable-to-the-covid-19-storm)

**other**

**TITLE:** IMPROVING FAMILY ACCESS TO DYING PATIENTS DURING THE COVID-19 PANDEMIC

The Lancet Respiratory Medicine | 12th January 2021

In response to the COVID-19 pandemic, most health-care organisations have implemented policies to restrict visitor access. Although there are exceptions to some of these policies, including limited visiting for patients nearing the end of life, they still have profound effects on the dying and their family members. We are still in the midst of the pandemic, but this comment piece explains that there are compelling reasons to expand access of family members to their loved ones as they near the end of life, despite the risk of infection.

Full detail: [Improving family access to dying patients during the COVID-19 pandemic](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2821%2900025-4)

**Title:** The UK response to covid-19: use of scientific advice

House of Commons Science and Technology Committee | 8th January 2021

The House of Commons Science and Technology Committee has published its analysis of the way the Government has received, and applied, scientific evidence and advice during the first period of the coronavirus pandemic up to autumn 2020.

The report distils the evidence from scientists and policy makers given at a number of oral evidence sessions contemporaneous with rapidly evolving policy decisions, and from written submissions from leading experts. The report considers the nature and function of official scientific advisory structures; the transparency of scientific advice; and the use of data in informing the UK's covid-19 response.

The report makes recommendations for the Government to take forward as it navigates the current and later stages of the coronavirus pandemic and future emergencies.

Full report: [The UK response to Covid-19: use of scientific advice](https://publications.parliament.uk/pa/cm5801/cmselect/cmsctech/136/136.pdf)

Press release: [How has the Government received scientific advice, and how has the advice been used? Cross-party group of MPs publish analysis](https://committees.parliament.uk/committee/135/science-and-technology-committee-commons/news/138245/covid19-how-has-the-government-received-scientific-advice-and-how-has-the-advice-been-used-crossparty-group-of-mps-publish-analysis/)

**Title:** Analysis of geographic concentrations of COVID-19 mortality over time, England and Wales

Office for National Statistics | 11th January 2021

This analysis looking at clusters of deaths involving COVID-19 across time and areas in England and Wales between 22 February and 28 August 2020.

Main points

* An analysis of geographic clusters of raised COVID-19 mortality suggests that the known risk factors of age, population density, ethnicity and socioeconomic deprivation only partly explain the distribution of deaths across England and Wales.
* Adjusting for these risk factors reveals unexplained clusters of raised COVID-19 mortality in areas such as the South West and East of England, which have generally seen low rates of COVID-19; other explanations such as particular routes of infection, travel patterns, occupations or household types need to be explored.
* Persistently high mortality in some regions such as the North of England and West Midlands may have been driven by a “core” of relatively small areas with the highest mortality, which may have seen the most intense disease transmission.
* A few areas saw COVID-19 mortality more than seven times the expected level compared with the rest of the country.
* Raised COVID-19 mortality was seen in more deprived areas of South East Wales, but consistently high mortality was also seen in some rural areas after accounting for known risk factors.

Full detail: [Analysis of geographic concentrations of COVID-19 mortality over time, England and Wales: deaths occurring between 22 February and 28 August 2020](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/analysisofgeographicconcentrationsofcovid19mortalityovertimeenglandandwales/deathsoccurringbetween22februaryand28august2020)

**Title:**  Impact of the COVID-19 pandemic on the detection and management of colorectal cancer in England: a population-based study

The Lancet Gastroenterology & Hepatology | 14th January 2021

There are concerns that the COVID-19 pandemic has had a negative effect on cancer care but there is little direct evidence to quantify any effect. This study aims to investigate the impact of the COVID-19 pandemic on the detection and management of colorectal cancer in England.

The study finds that the COVID-19 pandemic has led to a sustained reduction in the number of people referred, diagnosed, and treated for colorectal cancer. By October, 2020, achievement of care pathway targets had returned to 2019 levels, albeit with smaller volumes of patients and with modifications to usual practice. As pressure grows in the NHS due to the second wave of COVID-19, urgent action is needed to address the growing burden of undetected and untreated colorectal cancer in England.

Full paper: [Impact of the COVID-19 pandemic on the detection and management of colorectal cancer in England: a population-based study](https://www.thelancet.com/action/showPdf?pii=S2468-1253%2821%2900005-4)

**Title:** Demographic risk factors for COVID-19 infection, severity, ICU admission and death

BMJ Open | 11th January 2021

This systematic review and meta-analysis aimed to describe the associations of age and sex with the risk of COVID-19 in different severity stages ranging from infection to death.

Meta-analyses on 59 studies comprising 36.470 patients showed that men and patients aged 70 and above have a higher risk for COVID-19 infection, severe disease, ICU admission and death.

Full paper: [Demographic risk factors for COVID-19 infection, severity, ICU admission and death: a meta-analysis of 59 studies](https://bmjopen.bmj.com/content/bmjopen/11/1/e044640.full.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>