COVID-19 weekly update

8th January 2021

**clinical management**

**Title**: Clinical practice guide for improving the management of adult COVID-19 patients in secondary care

Getting it Right First Time | December 2020

This document summarises the challenges faced and responses utilised by the high performing trusts visited as part of the GIRFT cross-specialty COVID-19 deep dives, as well as identifying successful innovations they implemented. It is not intended to be a comprehensive summary of COVID-19 related management, but rather it presents key learning points from the cross-specialty trust deep dives undertaken in September/October 2020. It aims to provide guidance to hospital clinical staff and managers in the secondary care management of COVID-19 patients based on the experience of hospital trusts that performed well during the early phase of the COVID-19 pandemic.

Full document: [Clinical practice guide for improving the management of adult COVID-19 patients in secondary care: Shared learning from high performing trusts during COVID-19 pandemic](https://www.gettingitrightfirsttime.co.uk/wp-content/uploads/2020/12/Covid19-Clinical-Practice-Guidance-S-FINAL.pdf)

**Title**: Therapeutic Anticoagulation (Heparin) in the Management of Severe COVID-19 (SARS-CoV-2 Positive) Patients

Department of Health and Social Care | NHS England | 23rd December 2020

Therapeutic dose of either unfractionated heparin (UFH) or subcutaneous low molecular
weight heparin (LMWH) should not be offered in the treatment of patients with COVID-19, unless there is a standard indication for therapeutic anti-coagulation, such as the acute management of acute deep vein thromboses or pulmonary emboli, or as part of a clinical trial.

Continue to use pharmacological VTE prophylaxis in COVID-19 pneumonia, unless contraindicated, with a standard prophylactic dose (for acutely ill medical patients) of low molecular weight heparin (LMWH). See NICE guidance ([link](https://www.nice.org.uk/guidance/ng186/resources/visual-summary-pdf-8949281725)).

Full detail: [Therapeutic Anticoagulation (Heparin) in the Management of Severe COVID-19 (SARS-CoV-2 Positive) Patients](https://trfthealthweeklydigest.files.wordpress.com/2021/01/8c228-cem-cmo-2020-042.pdf)

**Title**: Risks of and risk factors for COVID-19 disease in people with diabetes: a cohort study of the total population of Scotland

The Lancet Diabetes & Endocrinology | 23rd December 2020

This paper aimed to ascertain the cumulative risk of fatal or critical care unit-treated COVID-19 in people with diabetes and compare it with that of people without diabetes, and to investigate risk factors for and build a cross-validated predictive model of fatal or critical care unit-treated COVID-19 among people with diabetes.

Overall risks of fatal or critical care unit-treated COVID-19 were substantially elevated in those with type 1 and type 2 diabetes compared with the background population. The risk of fatal or critical care unit-treated COVID-19, and therefore the need for special protective measures, varies widely among those with diabetes but can be predicted reasonably well using previous clinical history.

Full paper: [Risks of and risk factors for COVID-19 disease in people with diabetes: a cohort study of the total population of Scotland](https://www.thelancet.com/action/showPdf?pii=S2213-8587%2820%2930405-8)

**Title**: Early High-Titer Plasma Therapy to Prevent Severe Covid-19 in Older Adults

New England Journal of Medicine | 6th January 2020

Therapies to interrupt the progression of early coronavirus disease 2019 (Covid-19) remain elusive. Among them, convalescent plasma administered to hospitalized patients has been unsuccessful, perhaps because antibodies should be administered earlier in the course of illness.

In this randomized, double-blind, placebo-controlled trial, high-titer convalescent plasma was compared with placebo in older adult patients within the first 3 days after the onset of symptoms of Covid-19 and documented SARS-CoV-2 infection. Disease progression was approximately half as common in patients who received convalescent plasma (16%) as in those who received placebo (31%).

Full document: [Early high-titer plasma therapy to prevent severe covid-19 in older adults](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2033700?articleTools=true)

**Title**: Tocilizumab in Patients Hospitalized with Covid-19 Pneumonia

New England Journal of Medicine | 7th January 2021

Coronavirus disease 2019 (Covid-19) pneumonia is often associated with hyperinflammation. Despite the disproportionate incidence of Covid-19 among underserved and racial and ethnic minority populations, the safety and efficacy of the anti–interleukin-6 receptor antibody tocilizumab in patients from these populations who are hospitalized with Covid-19 pneumonia are unclear.

This study randomly assigned (in a 2:1 ratio) patients hospitalized with Covid-19 pneumonia who were not receiving mechanical ventilation to receive standard care plus one or two doses of either tocilizumab (8 mg per kilogram of body weight intravenously) or placebo.

The authors conclude that in hospitalized patients with Covid-19 pneumonia who were not receiving mechanical ventilation, tocilizumab reduced the likelihood of progression to the composite outcome of mechanical ventilation or death, but it did not improve survival.

Full article: [Tocilizumab in patients hospitalized with Covid-19 Pneumonia](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2030340?articleTools=true)

**Title**: Antibody Cocktail in Early SARS-CoV-2 Infection

New England Journal of Medicine | 17th December 2020

Recent data suggest that complications and death from coronavirus disease 2019 (Covid-19) may be related to high viral loads.

In this study, an anti–SARS-CoV-2 antibody cocktail was given to patients within 3 days after PCR confirmation of Covid-19. In patients who were antibody-negative at baseline, treatment was associated with rapid viral clearance and potentially with a less frequent need for medical attention. The effect was less marked among patients who were antibody-positive at baseline.

Full article: [REGN-COV2, a neutralizing antibody cocktail, in outpatients with Covid-19](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2035002?articleTools=true)

**Title**: NHS patients to receive life-saving COVID-19 treatments that could cut hospital time by 10 days

Department of Health and Social Care | 7th January 2021

Patients across the UK who are admitted to intensive care units due to COVID-19 are set to receive new life-saving treatments which can reduce the time spent in hospital by up to 10 days. Results from the government-funded REMAP-CAP clinical trial showed tocilizumab and sarilumab reduced the relative risk of death by 24%, when administered to patients within 24 hours of entering intensive care. Most of the data came from when the drugs were administered in addition to a corticosteroid, such as dexamethasone.

Patients receiving these drugs, typically used to treat rheumatoid arthritis, left intensive care between 7 to 10 days earlier on average. The rollout of these treatments could therefore contribute significantly towards reducing pressures on hospitals over the coming weeks and months.

Full detail: [NHS patients to receive life-saving COVID-19 treatments that could cut hospital time by 10 days](https://www.gov.uk/government/news/nhs-patients-to-receive-life-saving-covid-19-treatments-that-could-cut-hospital-time-by-10-days)

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

**Title**: Systematic Review on the Therapeutic Options for COVID-19: Clinical Evidence of Drug Efficacy and Implications

Infection and Drug Resistance | 29th December 2020

A novel coronavirus-2 (SARS-CoV-2) was first identified in Wuhan, China, and quickly spread globally. Several treatments have been proposed, many of which have proven ineffective. Consequently, there is a need to review the published evidence of drug clinical trials to guide future prescribing.

A systematic review of published clinical trials and retrospective observational studies was carried out. Hydroxychloroquine, chloroquine, and azithromycin produced no clinical evidence of efficacy in randomized controlled clinical trials (RCT). However, retrospective observational studies reported the efficacy of remdesivir and lopinavir/ritonavir in reducing viral load, although there have been concerns with lopinavir/ritonavir and, more recently, remdesivir.

Recently, tocilizumab, dexamethasone, and methylprednisolone significantly relieved lung inflammation and decreased mortality in patients with severe COVID-19. In addition, convalescent plasma was effective in boosting strong immunity among patients with mild COVID-19.

There is currently no single worldwide approved therapeutic option for patients with COVID-19 despite the initial hype with medicines, including hydroxychloroquine. Nonetheless, dexamethasone has shown promise in symptomatic treatment and convalescent plasma in boosting immunity. New treatments are currently being researched, and the findings will be reported accordingly to provide evidence-based guidance for prescribers and policymakers.

Full article: [Systematic Review on the therapeutic options for COVID-19: Clinical evidence of drug efficacy and implications](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7778508/pdf/idr-13-4673.pdf)

**Title**: COVID-19 in children: Pathogenesis and current status

Allergy and Asthma Proceedings | January 3rd 2021

Unlike the disease in adults, the vast majority of children with COVID-19 have mild symptoms and are largely spared from severe respiratory disease. However, there are children who have significant respiratory disease, and some may develop a hyperinflammatory response similar to that seen in adults with COVID-19 and in children with Kawasaki disease (KD), which has been termed multisystem inflammatory syndrome in children (MIS-C).

The purpose of this report was to examine the current evidence that supports the etiopathogenesis of COVID-19 in children and the relationship of COVID-19 with KD and MIS-C as a basis for a better understanding of the clinical course, diagnosis, and management of these clinically perplexing conditions.

Full detail: [COVID-19 in children: Pathogenesis and current status](https://pubmed.ncbi.nlm.nih.gov/33404385/)

**Title**: Development and external validation of a COVID-19 mortality risk prediction algorithm

BMJ Open | 24th December 2020

This study aimed to develop and externally validate a COVID-19 mortality risk prediction algorithm.

The full model included seven predictors of age, respiratory failure, white cell count, lymphocytes, platelets, D-dimer and lactate dehydrogenase. The simple model contained five indicators of age, respiratory failure, coronary heart disease, renal failure and heart failure.

The prediction models showed good model performance in identifying patients with COVID-19 with a high risk of death in 60 days. It may be useful for acute risk classification.

Full article: [Development and external validation of a COVID-19 mortality risk prediction algorithm: a multicentre retrospective cohort study](https://bmjopen.bmj.com/content/bmjopen/10/12/e044028.full.pdf)

**Title**: Therapeutics and Vaccines: Strengthening Our Fight Against the Global Pandemic COVID-19

Current Microbiology | 3rd January 2021

The newly identified 2019 novel coronavirus (SARS-CoV-2) has become a public health concern globally posing a significant threat to human health and economy and creating an unprecedented crisis in all spheres of the global life.

This review article summarizes and highlights the ongoing advances and approaches that are being carried out across the globe in designing vaccines and novel therapeutics, with particular reference to the previous knowledge gained from other viral infections like with the earlier SARS and MERS-CoV. A detailed knowledge may pave the way to combat this pandemic COVID-19 as well as prevent similar deadly epidemics in future.

Full article: [Therapeutics and Vaccines: Strengthening our fight against the global pandemic COVID-19](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7779084/pdf/284_2020_Article_2310.pdf)

**Title:** Heart failure and COVID-19: synergism of two inflammatory conditions?

British Journal of Community Nursing | 1st January 2021

Heart failure as a comorbidity in the older population with COVID-19 poses an additional threat to those affected. Patients with both COVID-19 and heart failure share similar risk factors, which result in magnification of pathological outcomes. These include a common inflammatory pathology and related coagulopathy. Both illnesses pose a risk of arrhythmia.

Polypharmacy further complicates safe drug administration and worsens the risk of medication-induced arrhythmia. Additionally, both conditions present challenges regarding attaining and maintaining an appropriate nutritional state.

Exploration of the interplay between these factors demonstrates the gravity of the co-existence of these conditions and helps understand the difficulties faced when caring for this patient group.

Although care provided to COVID-19 patients is primarily related to symptom presentation, based on the analysis conducted, there are some recommendations for practice in relation to evidence and guidelines when managing heart failure patients in primary care within the context of the COVID-19 pandemic.

Full detail: [Heart failure and COVID-19: synergism of two inflammatory conditions?](https://www.magonlinelibrary.com/doi/abs/10.12968/bjcn.2021.26.1.18)

**Title**: Risk Factors Associated With All-Cause 30-Day Mortality in Nursing Home Residents With COVID-19

JAMA | 4th January 2021

The objective of this study was to identify risk factors for 30-day all-cause mortality among nursing home residents with COVID-19.

Findings:  In this cohort study of 5256 US nursing home residents with COVID-19, increased age, male sex, and impaired cognitive and physical function were independent risk factors for all-cause 30-day mortality.

Meaning:  This cohort study of 5256 nursing home residents suggests that several characteristics, including sociodemographic characteristics, symptoms, comorbidities, and physical and cognitive functional impairments, can facilitate risk stratification among nursing home residents with COVID-19.

Full detail: [Risk factors associated with all-cause 30-day mortality in nursing home residents with Covid-19](https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2774729)

**Title:** End-of-life care during COVID-19: opportunities and challenges for community nursing

British Journal of Community Nursing | 4th January 2021

Community nursing teams have acquired extended roles in palliative and end-of-life care during the pandemic. Despite increased caseloads, they have continued to provide face-to-face care for dying people at home and in care homes/

This article describes how radical changes in delivery models for end-of-life care and palliative care in the community have impacted on community nursing. The authors emphasise the need for evaluation of the changes, in work funded by NIHR.

Full detail: [End-of-life care during COVID-19: opportunities and challenges for community nursing](https://www.magonlinelibrary.com/doi/full/10.12968/bjcn.2021.26.1.44)

**Title**: Continuation versus discontinuation of renin–angiotensin system inhibitors in patients admitted to hospital with COVID-19

The Lancet Respiratory Medicine | 7th January 2021

Biological considerations suggest that renin–angiotensin system inhibitors might influence the severity of COVID-19. This study aimed to evaluate whether continuing versus discontinuing renin–angiotensin system inhibitors (angiotensin-converting enzyme inhibitors or angiotensin receptor blockers) affects outcomes in patients admitted to hospital with COVID-19.

Consistent with international society recommendations, the authors conclude that renin–angiotensin system inhibitors can be safely continued in patients admitted to hospital with COVID-19.

Full article: [Continuation versus discontinuation of renin–angiotensin system inhibitors in patients admitted to hospital with COVID-19](https://www.thelancet.com/action/showPdf?pii=S2213-2600%2820%2930558-0)

**Title**: Sorting Out Whether Vitamin D Deficiency Raises COVID-19 Risk

JAMA | 6th January 2021

This Medical News Quick Uptake examines the debate about a link between vitamin D and COVID-19 risk.

Full detail: [Sorting out whether vitamin d deficiency raises Covid-19 risk](https://jamanetwork.com/journals/jama/fullarticle/2775003)

**recovery**

**TITLE:** SAFEGUARDING ADULTS WITH DEMENTIA DURING THE COVID-19 PANDEMIC

 Social Care Institute for Excellence| updated 5 January 2021

Social Care Institute for Excellence in partnership with the Alzheimer’s Society has published a quick guide to support care providers and staff to safeguard people with dementia during the pandemic. There are increased concerns that, during this time, people may be more vulnerable to abuse or neglect. This may be a result of:

* [increased social isolation](https://www.scie.org.uk/care-providers/coronavirus-covid-19/dementia/safeguarding#social-isolation)
* [stress on carers and caring relationships](https://www.scie.org.uk/care-providers/coronavirus-covid-19/dementia/safeguarding#relationships)
* [overstretched and stressed care staff](https://www.scie.org.uk/care-providers/coronavirus-covid-19/dementia/safeguarding#stressed-staff)
* [an increase in criminal behaviour (scams etc)](https://www.scie.org.uk/care-providers/coronavirus-covid-19/dementia/safeguarding#criminal-behaviour)
* [an increase in domestic abuse](https://www.scie.org.uk/care-providers/coronavirus-covid-19/dementia/safeguarding#domestic-abuse)
* [a range of new contacts (volunteers, those delivering food and medicines)](https://www.scie.org.uk/care-providers/coronavirus-covid-19/dementia/safeguarding#contacts).

Full detail: [Safeguarding adults with dementia during the COVID-19 pandemic](https://www.scie.org.uk/care-providers/coronavirus-covid-19/dementia/safeguarding)

**Title:** Loneliness, social isolation and COVID-19

Local Government Association | 21st December 2020

The Local Government Association (LGA) and Association of Directors of Public Health (ADPH) have jointly produced this practical advice for Directors of Public Health and others leading the local response to the loneliness and social isolation issues arising from the COVID-19 outbreak. It follows on from guidance about the public mental health impacts across the life course.

Full detail: [Loneliness, social isolation and COVID-19](https://www.local.gov.uk/loneliness-social-isolation-and-covid-19)

See also: [Public mental health and wellbeing and COVID-19](https://www.local.gov.uk/public-mental-health-and-wellbeing-and-covid-19)

**Infection control**

**Title**: The safety of COVID-19 vaccines when given in pregnancy

Public Health England | 5th January 2021

There is no known risk with giving inactivated virus or bacterial vaccines or toxoids during pregnancy or whilst breast-feeding. However, the COVID-19 vaccines have not yet been tested in pregnancy, so it has been advised that until more information is available, pregnant women should not routinely have these vaccines.

As a matter of caution, COVID-19 vaccine is therefore not routinely advised in pregnancy but there are some circumstances in which the potential benefits of vaccination are particularly important for pregnant women. This may include women who are at very high risk of catching the infection or those with certain medical conditions that put them at high risk of suffering serious complications from COVID-19 infection. In such circumstances, a woman may choose to have COVID-19 vaccine in pregnancy following a discussion with her doctor or nurse.

If a COVID-19 vaccine is given to a pregnant woman, she should be reassured that the vaccine does not contain live SARS-CoV-2 virus and therefore cannot cause COVID-19 infection in her or in her baby. Some COVID-19 vaccines contain a different harmless virus to help deliver the vaccine – whilst this virus is live, it cannot reproduce and so will not cause infection in a pregnant woman or her baby.

Full detail: [The safety of COVID-19 vaccines when given in pregnancy](https://www.gov.uk/government/publications/safety-of-covid-19-vaccines-when-given-in-pregnancy/the-safety-of-covid-19-vaccines-when-given-in-pregnancy)

**Title**: First people to receive Oxford University/AstraZeneca COVID-19 vaccine

Department of Health & Social Care | 4th January 2021

The first people will receive the Oxford University/AstraZeneca coronavirus vaccine today (4 January 2021) as the NHS rapidly expands COVID-19 vaccination programmes across the UK.

The NHS is the first health service in the world to deploy the life-saving jab, which has been authorised by the Medicines and Healthcare products Regulatory Agency (MHRA) after meeting strict standards of safety, quality and effectiveness. It is the only approved vaccine which can be stored at fridge temperatures.

The government has secured access to 100 million doses of the vaccine. More than half a million doses are available today, with tens of millions more to be delivered in the coming weeks and months once batches have been quality checked by the MHRA. More than 730 vaccination sites have already been established across the UK and hundreds more are opening this week to take the total to over 1,000, helping those who are most at risk from COVID-19 to access vaccines for free, regardless of where they live.

Full detail: [First people to receive Oxford University/AstraZeneca COVID-19 vaccine](https://www.gov.uk/government/news/first-people-to-receive-oxford-universityastrazeneca-covid-19-vaccine-today-4-january-2021)

See also: [New Oxford vaccine rolled out to general practice services](https://www.england.nhs.uk/2021/01/new-oxford-vaccine-rolled-out-to-general-practice-services/) | NHS England

**Title**: Institutional Readiness for Management of AstraZeneca COVID-19 Vaccine in Trusts

NHS Specialist Pharmacy Service | 4th January 2021

This document outlines the medicines management responsibilities of Chief Pharmacists for Mass Vaccination in Hub and Non-Hub Trust sites, and provides supporting guidance and resources in relation to:

* Safe storage and distribution, including temperature controlled storage, stock control and reporting vaccine usage to PHE
* Oversight of vaccine handling and preparation

The document aims to promote consistency of practice by providing flow diagrams outlining a stepwise approach to implementing Pharmacy processes to receive, store and issue vaccines, and to oversee vaccine-handling processes by clinical staff.

Full document: [Pharmacy Institutional Readiness for Management of AstraZeneca COVID-19 Vaccine (ChAdOx1 S [recombinant])](https://www.sps.nhs.uk/wp-content/uploads/2021/01/AZ-Pharmacy-Institutional-Readiness-for-AstraZeneca-COVID19-Vaccine-Issue-1.2.docx)

**Title**: Covid-19 vaccines: to delay or not to delay second doses

BMJ Opinion | 5th January 2021

The importance of successful vaccination strategies in controlling the covid-19 pandemic cannot be overstated and should be vigorously endorsed. Equally critical is that vaccines’ proven to be effective in a particular dosing schedule are not altered without solid scientific support or evidence.

Due to the accelerating pandemic and a desire to maximise the numbers in the population to receive a first dose vaccine, the Joint Committee on Vaccines and Immunization (JCVI) has proposed changing the dose schedules by considerably extending time to the second booster dose. The proposal has been supported by the UK Chief Medical Officers (CMOs) who indicated there are vaccine shortages across the UK.

However, as this opinion piece explains, this is disputed by vaccine manufacturers.

Full detail: [Covid-19 vaccines: to delay or not to delay second doses](https://blogs.bmj.com/bmj/2021/01/05/covid-19-vaccines-to-delay-or-not-to-delay-second-doses/)

See also:

* [GPs should decide whether to honour second dose appointments, says minister](https://www.bmj.com/content/372/bmj.n46) | BMJ
* [Covid-19 vaccination: What’s the evidence for extending the dosing interval?](https://www.bmj.com/content/372/bmj.n18) |BMJ
* [We need clear and simple upfront messaging on covid-19 vaccines](https://blogs.bmj.com/bmj/2021/01/05/benjamin-f-pierce-we-need-clear-and-simple-upfront-messaging-on-covid-19-vaccines/) | BMJ Opinion

**Title**: Optimising the COVID-19 vaccination programme for maximum short-term impact

Joint Committee on Vaccination and Immunisation (JCVI) | Department of Health & Social Care | 6th January 2021

Given the epidemiology of COVID-19 in the UK in late 2020 there is a need for rapid, high levels of vaccine uptake among vulnerable persons.

The committee supports a 2-dose vaccine schedule for the Pfizer-BioNTech and AstraZeneca vaccines. Given the data available, and evidence from the use of many other vaccines, JCVI advises a maximum interval between the first and second doses of 12 weeks for both vaccines. It can be assumed that protection from the first dose will wane in the medium term, and the second dose will still be required to provide more durable protection.

The committee advises initially prioritising delivery of the first vaccine dose as this is highly likely to have a greater public health impact in the short term and reduce the number of preventable deaths from COVID-19.

Full detail: [Optimising the COVID-19 vaccination programme for maximum short-term impact](https://www.gov.uk/government/publications/prioritising-the-first-covid-19-vaccine-dose-jcvi-statement/optimising-the-covid-19-vaccination-programme-for-maximum-short-term-impact)

See also: [Priority groups for coronavirus (COVID-19) vaccination: advice from the JCVI, 30 December 2020](https://www.gov.uk/government/publications/priority-groups-for-coronavirus-covid-19-vaccination-advice-from-the-jcvi-30-december-2020/joint-committee-on-vaccination-and-immunisation-advice-on-priority-groups-for-covid-19-vaccination-30-december-2020)

**Title**: Efficacy and Safety of the mRNA-1273 SARS-CoV-2 Vaccine

New England Journal of Medicine | 30th December 2020

This article reports that two injections of mRNA-1273, a lipid nanoparticle–encapsulated mRNA-based vaccine produced in collaboration with the NIAID that encodes the SARS-CoV-2 spike protein, conferred protection against Covid-19 illness in 94% of vaccinated patients. Adverse effects of the vaccine were mild, transient local reactions, and the incidence of systemic effects such as fever, headache, and fatigue was low.

Full article: [Efficacy and safety of the mRNA-1273 SARS-CoV-2 vaccine](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2035389?articleTools=true)

**Title**: Safety and Efficacy of the BNT162b2 mRNA Covid-19 Vaccine

New England Journal of Medicine | 31st December 2020

In this ongoing multinational, placebo-controlled, observer-blinded, pivotal efficacy trial, the authors randomly assigned persons 16 years of age or older in a 1:1 ratio to receive two doses, 21 days apart, of either placebo or the BNT162b2 vaccine candidate (30 μg per dose).

A total of 43,548 participants underwent randomization, of whom 43,448 received injections: 21,720 with BNT162b2 and 21,728 with placebo. There were 8 cases of Covid-19 with onset at least 7 days after the second dose among participants assigned to receive BNT162b2 and 162 cases among those assigned to placebo; BNT162b2 was 95% effective in preventing Covid-19 (95% credible interval, 90.3 to 97.6).

Similar vaccine efficacy (generally 90 to 100%) was observed across subgroups defined by age, sex, race, ethnicity, baseline body-mass index, and the presence of coexisting conditions. Among 10 cases of severe Covid-19 with onset after the first dose, 9 occurred in placebo recipients and 1 in a BNT162b2 recipient.

The safety profile of BNT162b2 was characterized by short-term, mild-to-moderate pain at the injection site, fatigue, and headache. The incidence of serious adverse events was low and was similar in the vaccine and placebo groups.

The authors conclude that a two-dose regimen of BNT162b2 conferred 95% protection against Covid-19 in persons 16 years of age or older.

Full article: [Safety and efficacy of the BNT162b2 mRNA Covid-19 vaccine](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2034577?articleTools=true)

**Title**: Moderna COVID-19 vaccine authorised by regulator

Medicines and Healthcare products Regulatory Agency | 8th January 2021

The Medicines and Healthcare products Regulatory Agency (MHRA) has accepted the recommendation of the Commission on Human Medicines and authorised the Moderna vaccine following months of rigorous clinical trials involving tens of thousands of people and an extensive analysis of the vaccine’s safety, quality and effectiveness.

 The vaccine is 94% effective in preventing disease, including in the elderly. The Government has agreed to purchase an additional 10 million doses of the Moderna vaccine on top of its previous order of 7 million, taking the total to 17 million.

The Information for healthcare professionals document is a description of a medicinal product’s properties and the conditions attached to its use. It explains how to use and prescribe a medicine.

Full detail: [Regulatory approval of COVID-19 Vaccine Moderna](https://www.gov.uk/government/publications/regulatory-approval-of-covid-19-vaccine-moderna?wp-linkindex=5&utm_campaign=Coronavirus_social_care_update_08.01.21&utm_content=dhsc-mail.co.uk&utm_medium=email&utm_source=Department_of_Health_and_Social_Care)

See also: [Information for Healthcare Professionals on COVID-19 Vaccine Moderna](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/950661/Moderna_Information_HCP.pdf)

**Title**: Maintaining Safety with SARS-CoV-2 Vaccines

New England Journal of Medicine | 30th December 2020

The vast majority of people who have received the Covid-19 vaccine to date have had self-limited local or low-grade systemic reactions that resolve within 2 or 3 days. A very small number of people have had serious anaphylactic reactions requiring catecholamine infusion and respiratory support.

This review article explains it is important to survey patients in advance of vaccination for allergic responses and to be aware of the early signs of an immediate hypersensitivity reaction.

Full article: [Maintaining safety with SARS-CoV-2 vaccines](https://www.nejm.org/doi/pdf/10.1056/NEJMra2035343?articleTools=true)

**Title**: Health secretary vows to reduce bureaucracy faced by vaccination volunteers

BMJ | 2021; 372: n13| 4th January 2021

Doctors volunteering to give the covid-19 vaccine should not have to undertake unnecessary training, such as on preventing terrorism, the health secretary has said.

Retired doctors who have volunteered to help with the vaccine roll out through NHS Professionals have been asked to complete 18 training modules which include preventing radicalisation and fire safety. One retired GP said on Twitter that she had given up trying to sign up to volunteer after spending seven hours reading about things she already knew. “I just wanted to help,” she said.

Speaking on the *Today* programme on 4 January, Matt Hancock said that he would remove some of the requirements, including preventing radicalisation training. “At the moment the NHS has all the people that it needs to deliver the vaccine on the current schedule, but is also hiring people, including some retired clinicians, in order to have yet more when the delivery ramps up in the months ahead,” he said. “Some of the training that has been put in place I don’t think is necessary.”

Full detail: [Health secretary vows to reduce bureaucracy faced by vaccination volunteers](https://www.bmj.com/content/372/bmj.n13)

**Title**: Novel coronavirus (COVID-19) standard operating procedure: COVID-19 local vaccination services deployment in community settings

Health Education England | updated 6th January 2021

This standard operating procedure (SOP) applies to all providers who have been contracted to provide local vaccination services in community settings including at NHS sites (GP Practices, Community Pharmacies), non-NHS sites, care homes, and patients’ own homes. All NHS and non-NHS sites providing vaccination will have been ‘designated’ via a Commissioner-led site assessment process.

This guidance is correct at the time of publishing. However, as it is subject to updates, please use the hyperlinks to confirm the information you are disseminating to the public is accurate. Any changes since v2 (18 December 2020) are highlighted in yellow.

Full document: [Novel coronavirus (COVID-19) standard operating procedure: COVID-19 local vaccination services deployment in community settings](https://madeinheene.hee.nhs.uk/Portals/0/C0992%20COVID-19%20Vaccine%20Deployment%20in%20Community%20Settings%20%28LVS%29%20SOP%20v3_1%2006%20January%202021.pdf)

**Title**: Two COVID-19 vaccines: making sense of the guidance

Royal College of Nursing | 6th January 2021

Changes to the COVID-19 vaccine roll out have understandably caused some concern and confusion and in this article, Helen Donovan, CN Professional Lead for Public health, and Helen Bedford, Professor of Children’s Health, UCL Great Ormond Street Institute of Child Health, aim to explain the rationale for these changes.

Full detail: [Two COVID-19 vaccines: making sense of the guidance](https://www.rcn.org.uk/news-and-events/blogs/two-vaccines-making-sense-of-the-guidance-060121)

**Title:** Psychological characteristics associated with COVID-19 vaccine hesitancy and resistance in Ireland and the United Kingdom

Nature Communications | 4th January 2021

Identifying and understanding COVID-19 vaccine hesitancy within distinct populations may aid future public health messaging. Using nationally representative data from the general adult populations of Ireland (*N* = 1041) and the United Kingdom (UK; *N* = 2025), this study found that vaccine hesitancy/resistance was evident for 35% and 31% of these populations respectively.

Vaccine hesitant/resistant respondents in Ireland and the UK differed on a number of sociodemographic and health-related variables but were similar across a broad array of psychological constructs. In both populations, those resistant to a COVID-19 vaccine were less likely to obtain information about the pandemic from traditional and authoritative sources and had similar levels of mistrust in these sources compared to vaccine accepting respondents.

Full article: [Psychological characteristics associated with COVID-19 vaccine hesitancy and resistance in Ireland and the United Kingdom](https://www.nature.com/articles/s41467-020-20226-9.pdf)

**Title**: Genetic Variants of SARS-CoV-2—What Do They Mean?

JAMA | 6th January 2021

This Viewpoint discusses emerging genetic variants of SARS-CoV-2, including new “UK” and “mink” variants and the significance of the new variants to coronavirus transmissibility, spread, virulence, and efforts to vaccinate the population against COVID-19.

Full detail: [Genetic variants of SARS-CoV-2—What do they mean?](https://jamanetwork.com/journals/jama/fullarticle/2775006)

**Title**: National lockdown: Stay at Home

Cabinet Office | 4th January 2021

With Coronavirus cases rising rapidly across the country, this guidance provides details of what you can and cannot do.

Full detail: [National lockdown: Stay at Home](https://www.gov.uk/guidance/national-lockdown-stay-at-home)

See also: [Prime Minister announces national lockdown](https://www.gov.uk/government/news/prime-minister-announces-national-lockdown?utm_source=d1ab7351-581d-4522-9cd8-bb774e8d45e5&utm_medium=email&utm_campaign=govuk-notifications&utm_content=immediate)

**Title**: guidance on shielding and protecting people defined on medical grounds as extremely vulnerable

Public Health England | Department of Health and Social Care| updated 7th January

This guidance provides updated information for shielding and protecting people defined on medical grounds as extremely vulnerable from COVID-19.

Full detail: [Guidance on shielding and protecting people defined on medical grounds as extremely vulnerable](https://www.gov.uk/government/publications/guidance-on-shielding-and-protecting-extremely-vulnerable-persons-from-covid-19#2021-01-07T15:30:14Z)

**Title**: Association of tiered restrictions and a second lockdown with COVID-19 deaths and hospital admissions in England

The Lancet Infectious diseases | 23rd December 2020

A second wave of COVID-19 cases in autumn, 2020, in England led to localised, tiered restrictions (so-called alert levels) and, subsequently, a second national lockdown. We examined the impact of these tiered restrictions, and alternatives for lockdown stringency, timing, and duration, on severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) transmission and hospital admissions and deaths from COVID-19.

Lockdown measures outperform less stringent restrictions in reducing cumulative deaths. The authors projected that the lockdown policy announced to commence in England on Nov 5, with a similar stringency to the lockdown adopted in Wales, would reduce pressure on the health service and would be well timed to suppress deaths over the winter period, while allowing schools to remain open.

 Following completion of the analysis, we analysed new data from November, 2020, and found that despite similarities in policy, the second lockdown in England had a smaller impact on behaviour than did the second lockdown in Wales, resulting in more deaths and hospitalisations than we originally projected when focusing on a Wales-stringency scenario for the lockdown.

Full detail: [Association of tiered restrictions and a second lockdown with COVID-19 deaths and hospital admissions in England: a modelling study](https://www.thelancet.com/action/showPdf?pii=S1473-3099%2820%2930984-1)

**workforce wellbeing**

**TITLE:** UK STUDY AIMS TO UNDERSTAND EFFECTS ON ETHNIC MINORITY HEALTHCARE WORKERS

BMJ | 2021; 372: n23 | 5th January 2021

A new study has launched in the UK to understand the impact of covid-19 on healthcare workers of different ethnic groups.

The UK-Reach study brings together researchers and clinicians with the General Medical Council, Nursing and Midwifery Council, royal colleges, and ethnic minority healthcare worker associations to investigate if, how, and why ethnicity affects clinical outcomes of covid-19 in healthcare workers. It will also look at the effects of the pandemic on the physical and mental health outcomes of staff.

The research team said they expected some initial findings early this year.

Full detail: [UK study aims to understand effects on ethnic minority healthcare workers](https://www.bmj.com/content/372/bmj.n23.short?rss=1&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+bmj%2Frecent+%28Latest+from+BMJ%29)

**TITLE:** YEAR OF UNPARALLELED PRESSURE LEAVES STAFF EXHAUSTED AND ON THE BRINK

British Medical Association | 1st January 2021

Thousands of doctors have revealed the impact that working during the pandemic has had on their mental health and wellbeing, in a major BMA survey that exposes how a year of unparalleled pressure has pushed an understaffed and exhausted workforce to the brink.

New figures from the latest BMA tracker survey of doctors in England, Wales and Northern Ireland, show that almost 60 per cent (58%) of doctors are now suffering from some form of anxiety or depression, with 46 per cent saying their condition had worsened since the start of pandemic.

67 per cent of doctors say that current levels of fatigue and exhaustion are higher than normal as they tackle a mounting second wave and a growing backlog of care, on top of the usual seasonal demand.

Full detail: [Year of unparalleled pressure leaves staff exhausted and on the brink, BMA survey shows](https://www.bma.org.uk/bma-media-centre/year-of-unparalleled-pressure-leaves-staff-exhausted-and-on-the-brink-bma-survey-shows)

See also: [Nearly two thirds of doctors have anxiety or depression, BMA survey finds](https://www.bmj.com/content/372/bmj.n22) | BMJ

**Title:** Doctors and nurses demand better PPE for wider range of procedures

BMJ | 2021; 372: n30 | 6th January 2021

Healthcare workers are calling on the government to ensure that higher grade personal protective equipment (PPE) is mandatory for a range of procedures, such as fitting nasogastric tubes, because of the risk of aerosol transmission of SARS CoV-2.

Current guidance from Public Health England is for hospital staff to wear surgical masks in most areas, with filtering face piece class 3 (FFP3) respirator masks required only in intensive care or when certain procedures are carried out that are known to generate aerosols.

However, Public Health England’s current categorisation of some procedures as non-aerosol-generating is based on outdated evidence and leaves staff at increased risk of covid-19 infection, say campaigners.

Fresh Air NHS, a group of frontline healthcare workers, has written an open letter to UK political leaders calling for the UK and devolved governments to recognise the importance of airborne transmission of SARS CoV-2 and ensure that measures are in place to protect staff and patients.

Full detail: [Doctors and nurses demand better PPE for wider range of procedures](https://www.bmj.com/content/372/bmj.n30)

**Title:** vaccination of frontline health and social care workers

NHS England | 7th January 2021

Further to the [letter of 30 December 2020](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2020/12/C0994-System-letter-COVID-19-vaccination-deployment-planning-30-December-2020.pdf), this letter provides additional operational guidance on the immediate requirement to vaccinate frontline health and social care workers ensuring maximum uptake of vaccination and timely, equitable access across staff groups.

Full detail: [Operational Guidance: Vaccination of Frontline Health & Social Care Workers](https://www.england.nhs.uk/coronavirus/wp-content/uploads/sites/52/2021/01/C1008-Operational-Guidance-Vaccination-of-Frontline-Health-Social-Care-Workers-7-January-2021.pdf)

**Health management**

**Title:** NHS forced into 'daily export' of critically-ill patients from covid-saturated trusts

HSJ | 6th January 2021

Dozens of patients are being transferred between intensive care units every week as covid pressure mounts on hospitals, *HSJ* has been told. This includes multiple patients transferred from London and the South East as well as parts of the East of England, where many hospitals are well over their baseline ICU capacity, into other regions — a very rare occurrence outside of the pandemic.

The Intensive Care Society told *HSJ* that at least 10 patients per day were now being transferred between hospitals to where there is capacity, and that this was happening in nearly every region. Most of these patients are transferred from and to hospitals within the same NHS region, but a smaller number are also being transferred between regions.

Full detail: [NHS forced into 'daily export' of critically-ill patients from covid-saturated trusts](https://www.hsj.co.uk/patient-safety/nhs-forced-into-daily-export-of-critically-ill-patients-from-covid-saturated-trusts/7029256.article?mkt_tok=eyJpIjoiWmpjMk9URTFNRGt5TXpZMCIsInQiOiJub2g1VjdDbDFFd1JsSUlXYk5VQ3RsTjVTYWFWZTFjXC8rblo0SWFlWndCVFBscmNFd0E1dlR3NkpVZ2RFYUI1cXJcL3RvM1paRU5nWW1JR3lGb3J1U25BWFBvRDVsaWVZOER5eWZtVDVHajEzNHhGNzM4Y081NzZnZVFMekl3clVXIn0%3D)

**TITLE:** COVID DAILY INSIGHT 6 JAN: EVERYWHERE IS FULL

HSJ | 6th January 2021

With many parts of the NHS facing a period of the most extreme operational pressure they have ever known, HSJ’s *Daily Insight* provides an update on the latest developments and concerns from those leading the efforts.

Full detail: [Covid Daily Insight 6 Jan: Everywhere is full](https://www.hsj.co.uk/daily-insight/covid-daily-insight-6-jan-everywhere-is-full/7029257.article)

**Title**: Rapid Insights Report: A summary report exploring the rapid response to the COVID-19 pandemic among health and care partners across South Yorkshire and Bassetlaw.

Yorkshire and Humber Academic Health Science Network | December 2020

The challenges brought about by the response to the COVID-19 pandemic resulted in a need to rethink the delivery of some health and social care services in South Yorkshire and Bassetlaw. This report explores how partners responded quickly to some of the most complex challenges ever faced by our health and care system, and in doing so created a number of exciting innovations and opportunities.

Full report: [A summary report exploring the rapid response to the COVID-19 pandemic among health and care partners across South Yorkshire and Bassetlaw.](https://www.yhahsn.org.uk/wp-content/uploads/2020/12/94462-AHSN-South-Yorkshire-and-Bassetlaw-Rapid-Insights-Report.pdf)

**TITLE:**  AFTER THE COVID STORM: WHERE NEXT FOR THE NHS?

The Health Foundation | 22nd December 2020

What happens when the emergency phase of COVID is over? Has the pandemic set health and social care on a new course or will most things snap back to the way they were before?

In a global emergency we have to deal with the short term first, but this podcast from The Health Foundation asks what is the long-term path for the NHS in particular? And what are the deeper threats and opportunities we should be thinking about?

Full detail: [After the COVID storm: Where next for the NHS?](https://www.health.org.uk/news-and-comment/podcast/episode-03-after-the-covid-storm)

**other**

**TITLE:** LONDON’S NIGHTINGALE HOSPITAL WILL REOPEN FOR NON-COVID CASES

BMJ | 2021; 372: n15 | 5th January 2021

London’s NHS Nightingale Hospital is currently being repurposed to take patients without covid-19 who are recovering from operations and procedures, to help relieve the unprecedented demand for beds in the capital.

Since Christmas, hospitals in London and the south east have come under significant pressure from high covid-19 infection rates, with one hospital trust forced to cancel some cancer operations and another now operating in “disaster medicine mode.”

During the first wave of the pandemic the Nightingale Hospital London, based at the ExCeL centre, was set up to take patients with covid-19 requiring critical care. However, only 51 patients were treated at the facility before it was closed in May

Full detail: [London’s Nightingale Hospital will reopen for non-covid cases](https://www.bmj.com/content/372/bmj.n15.short?rss=1&utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+bmj%2Frecent+%28Latest+from+BMJ%29)

**Title:** Antibodies and SARS-CoV-2 Infection in Health Workers

New England Journal of Medicine | 23rd December 2020

In this longitudinal study of seropositive and seronegative health care workers undergoing asymptomatic and symptomatic SARS-CoV-2 testing, the presence of anti-spike or anti-nucleocapsid IgG antibodies was associated with a substantially reduced risk of SARS-CoV-2 reinfection in the ensuing 6 months.

Full paper: [Antibody Status and Incidence of SARS-CoV-2 Infection in Health Care Workers](https://www.nejm.org/doi/pdf/10.1056/NEJMoa2034545?articleTools=true)

**Title:** New COVID-19 variant growing rapidly in England

Imperial College London | 31st December 2021

The new SARS-CoV-2 variant is growing rapidly, is more transmissible than other variants, and affecting a greater proportion of under 20s. The new variant has a transmission advantage of 0.4 to 0.7 in reproduction number compared to the previously observed strain.

The findings come in a pre-print authored by a collaborative team from Imperial College London, University of Edinburgh, Public Health England (PHE), the Wellcome Sanger Institute, the University of Birmingham and the COVID-19 Genomics UK (COG-UK) Consortium+

Further detail: [New COVID-19 variant growing rapidly in England](https://www.imperial.ac.uk/news/211793/new-covid-19-variant-growing-rapidly-england/)

Full report: [Transmission of SARS-CoV-2 Lineage B.1.1.7 in England: insights from linking epidemiological and genetic data](https://www.medrxiv.org/content/10.1101/2020.12.30.20249034v2.full.pdf)

**Title:** The effect of Covid-19 related lockdown on patients taking warfarin

National Institute for Health & Care Excellence | January 2021

NICE’s shared learning database spotlights the work of staff at Nottingham Universities Hospitals NHS Trust, where healthcare workers implemented a service improvement study to assess the effect of Covid-19 related lockdown on patients taking warfarin.

Experts at the Trust looked at the time pre-COVID-19, pre lockdown, lockdown and post lockdown, and noted that patients time in therapeutic range during lockdown dropped. This means that patients were less safe during lockdown and at higher risk of developing clots or bleeding issues.

Full detail: [The effect of Covid-19 related lockdown on patients taking warfarin](https://www.nice.org.uk/sharedlearning/the-effect-of-covid-19-related-lockdown-on-patients-taking-warfarin)

**Title**: What have we learnt from COVID-19 research?

Royal College of Physicians | 7th January 2021

The Royal College of Physicians have produced an overview of their conference's plenaries, focusing on what we have learnt from COVID-19 research. These are plenary sessions delivered by Martin Landray, professor of epidemiology at the University of Oxford, on lessons learnt from the RECOVERY trial, and Anthony Gordon, professor of anaesthesia and critical care, Imperial College London, on REMAP-CAP.

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>

Full detail: [What have we learnt from COVID-19 research?](https://www.rcplondon.ac.uk/news/medicine-2021-what-have-we-learnt-covid-19-research)