COVID-19 weekly update

November 5th 2021

clinical management

**Title:** First oral antiviral for COVID-19 approved by MHRA

Medicines and Healthcare products Regulatory Agency | 4th November 2021

The antiviral Lagevrio (molnupiravir) is safe and effective at reducing the risk of hospitalisation and death in people with mild to moderate COVID-19 who are at increased risk of developing severe disease, the Medicines and Healthcare products Regulatory Agency (MHRA) have announced.

This follows a rigorous review of its safety, quality and effectiveness by the UK regulator and the government’s independent expert scientific advisory body, the Commission on Human Medicines, making it the first oral antiviral for the treatment of COVID-19 to be approved.

Lagevrio works by interfering with the virus’ replication. This prevents it from multiplying, keeping virus levels low in the body and therefore reducing the severity of the disease. Based on the clinical trial data, Lagevrio is most effective when taken during the early stages of infection and so the MHRA recommends its use as soon as possible following a positive COVID-19 test and within five days of symptoms onset. Molnupiravir has been authorised for use in people who have mild to moderate COVID-19 and at least one risk factor for developing severe illness.

Full detail: [First oral antiviral for COVID-19 approved by MHRA](https://www.gov.uk/government/news/first-oral-antiviral-for-covid-19-lagevrio-molnupiravir-approved-by-mhra)

See also:

* [UK becomes first country to authorise antiviral molnupiravir](https://www.bmj.com/content/375/bmj.n2697) | BMJ
* [First pill to treat Covid gets approval in UK](https://www.bbc.co.uk/news/health-59163899) | BBC News

**Title:** Pfizer’s Novel COVID-19 Oral Antiviral Treatment Candidate Reduced Risk Of Hospitalization Or Death By 89% In Interim Analysis Of Phase 2/3 EPIC-HR Study

pfizer.com | 5th November 2021

Pfizer's new COVID-19 antiviral pill cuts the risk of hospitalisation or death by 89%, the company has announced.  The company announced its investigational novel COVID-19 oral antiviral candidate,PAXLOVID™, significantly reduced hospitalization and death, based on an interim analysis of the Phase 2/3 EPIC-HR randomized, double-blind study of non-hospitalized adult patients with COVID-19, who are at high risk of progressing to severe illness.

The scheduled interim analysis showed an 89% reduction in risk of COVID-19-related hospitalization or death from any cause compared to placebo in patients treated within three days of symptom onset.

At the recommendation of an independent Data Monitoring Committee and in consultation with the U.S. Food and Drug Administration (FDA), Pfizer will cease further enrolment into the study due to the overwhelming efficacy demonstrated in these results and plans to submit the data as part of its ongoing rolling submission to the U.S. FDA for Emergency Use Authorization (EUA) as soon as possible.

Full detail: [Pfizer’s Novel COVID-19 oral antiviral treatment candidate reduced risk of hospitalization or death by 89% in interim analysis of Phase 2/3 EPIC-HR Study](https://www.pfizer.com/news/press-release/press-release-detail/pfizers-novel-covid-19-oral-antiviral-treatment-candidate)

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

NICE guideline [NG191] | updated 3rd November 2021

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

On 3 November, a new recommendation on inhaled budesonide was added and the recommendations on casirivimab and imdevimab were updated, clarifying that these recommendations apply to people who are hospitalised because of COVID-19.

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

**Title:** Efficacy and safety of tocilizumab versus standard care/placebo in patients with COVID-19

British Journal of Clinical Pharmacology | 29th October 2021

Tocilizumab has emerged as an important therapy in treating patients with coronavirus disease (COVID-19). The purpose of this review was to evaluate the efficacy and safety of tocilizumab versus standard care/placebo in patients with COVID-19.

In COVID-19 patients with moderate to critical COVID-19, use of tocilizumab reduces all-cause mortality and progression to mechanical ventilation. This efficacy was not associated with higher number of serious adverse events.

Full paper: [Efficacy and safety of tocilizumab versus standard care/placebo in patients with COVID-19; a systematic review and meta-analysis of randomized clinical trials](https://bpspubs.onlinelibrary.wiley.com/doi/epdf/10.1111/bcp.15124)

**Title:** Prevalence and impact of COVID-19 sequelae on treatment and survival of patients with cancer who recovered from SARS-CoV-2 infection

The Lancet Oncology | 3rd November 2021

The medium-term and long-term impact of COVID-19 in patients with cancer is not yet known. This study aimed to describe the prevalence of COVID-19 sequelae and their impact on the survival of patients with cancer. The authors also aimed to describe patterns of resumption and modifications of systemic anti-cancer therapy following recovery from SARS-CoV-2 infection.

Sequelae post-COVID-19 affect up to 15% of patients with cancer and adversely affect survival and oncological outcomes after recovery. Adjustments to systemic anti-cancer therapy can be safely pursued in treatment-eligible patients.

Full paper: [Prevalence and impact of COVID-19 sequelae on treatment and survival of patients with cancer who recovered from SARS-CoV-2 infection: evidence from the OnCovid retrospective, multicentre registry study](https://www.thelancet.com/action/showPdf?pii=S1470-2045%2821%2900573-8)

Infection control

**Title:** National survey of attitudes towards and intentions to vaccinate against COVID-19: implications for communications

BMJ Open | 28th October 2021

The objective of this study was to examine public views on COVID-19 vaccination and consider the implications for communications and targeted support.

The authors conclude that targeted engagement is needed to address COVID-19 vaccine hesitancy in non-white British ethnic groups, in younger adults, and among those with lower education, greater financial hardship and unconfirmed past infection. Healthcare professionals and scientific advisors should play a central role in communications and tailored messaging is needed for hesitant groups. Careful communication around vaccination prioritisation continues to be required.

Full paper: [National survey of attitudes towards and intentions to vaccinate against COVID-19: implications for communications](https://bmjopen.bmj.com/content/bmjopen/11/10/e055085.full.pdf)

**Title:** NHS set to deliver COVID-19 jabs in hundreds more schools as students return to class this week

NHS England | 31st October 2021

Hundreds more schools will be offering the COVID-19 vaccine to 12-15-year olds this week when young people return to the classroom, as part of the NHS COVID-19 vaccination programme. NHS teams will visit over 800 schools in the next week to offer children aged 12 to 15 a chance to get vaccinated, with consent from a parent or guardian.

Last week, the national booking system opened so that young people could visit existing vaccination centres across the country together with their parents as an extra way to get vaccinated during half term and beyond.

Full detail: [NHS set to deliver COVID-19 jabs in hundreds more schools as students return to class this week](https://www.england.nhs.uk/2021/10/nhs-set-to-deliver-covid-19-jabs-in-hundreds-more-schools-as-students-return-to-class-this-week/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+NHSCBoard+%28NHS+England%29)

**Title:** NHS delivers 1.6 million booster jabs in record week as total tops seven million

 NHS England | 2nd November 2021

The NHS COVID-19 vaccination programme reported a record 1.6 million booster doses last week (Monday to Sunday). More than seven million people across England have received their COVID-19 booster vaccine and since Friday, more than half a million people have booked in for their top-up jab.

In total, 7,022,871 boosters have been delivered in just over six weeks since the campaign was rolled out, 48 hours after being given the green light by the government. Hundreds of walk-in sites are now also administering crucial booster vaccines across the country, making it easier than ever for those eligible to get their jab.

Full detail: [NHS delivers 1.6 million booster jabs in record week as total tops seven million](https://www.england.nhs.uk/2021/11/nhs-delivers-1-6-million-booster-jabs-in-record-week-as-total-tops-seven-million/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+NHSCBoard+%28NHS+England%29)

**Title:** US doctors begin administering vaccine to children aged 5-11

BMJ | 2021; 375: n2693 | 4th November 2021

US physicians began giving the Pfizer BioNTech vaccine to children aged 5-11 on 3 November, immediately after the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) authorised its use.

There are about 28 million children in that age group in the US. They will receive a 10 µg dose (about one third the adult dose) of the vaccine followed by a second jab three weeks later. Previously, vaccination had been approved only for children over 12.

Full detail: [US doctors begin administering vaccine to children aged 5-11](https://www.bmj.com/content/375/bmj.n2693)

**Title:** Effectiveness of a third dose of the BNT162b2 mRNA COVID-19 vaccine for preventing severe outcomes in Israel: an observational study

The Lancet | 29th October 2021

Many countries are experiencing a resurgence of COVID-19, driven predominantly by the delta (B.1.617.2) variant of SARS-CoV-2. In response, these countries are considering the administration of a third dose of mRNA COVID-19 vaccine as a booster dose to address potential waning immunity over time and reduced effectiveness against the delta variant.

The authors of this study aimed to use the data repositories of Israel's largest health-care organisation to evaluate the effectiveness of a third dose of the BNT162b2 mRNA vaccine for preventing severe COVID-19 outcomes.

The findings suggest that a third dose of the BNT162b2 mRNA vaccine is effective in protecting individuals against severe COVID-19-related outcomes, compared with receiving only two doses at least 5 months ago.

Full paper: [Effectiveness of a third dose of the BNT162b2 mRNA COVID-19 vaccine for preventing severe outcomes in Israel: an observational study](https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2902249-2)

**Title:** REACT-1 study of coronavirus transmission: October 2021 final results

UK Health Security Agency | 4th November 2021

During the 11 days covered by the period of this interim report, the number of SARS-CoV-2 infections rose to its highest ever level in the REACT study, with 171 per 10,000 people infected. The highest rates were observed regionally in the South West and in those aged 5 to 17 years nationally. All positive samples from this round that could be sequenced were found to be the Delta variant.

Full detail: [REACT-1 study of coronavirus transmission: October 2021 final results](https://www.gov.uk/government/publications/react-1-study-of-coronavirus-transmission-october-2021-final-results/react-1-study-of-coronavirus-transmission-october-2021-final-results)

**Title:** Risk of infection and contribution to transmission of SARS-CoV-2 in school staff: a systematic review

BMJ Open | 3rd November 2021

The objective of this review was to summarise the comparative risk of infection in school staff and their contribution to SARS-CoV-2 transmission. The study concludes that while in low incidence settings there is little evidence for school staff to be at high risk of SARS-CoV-2 infection, in high incidence settings there is an increased risk of SARS-CoV-2 infection in school staff teaching face-to-face compared to staff teaching digitally and general population.

Full paper: [Risk of infection and contribution to transmission of SARS-CoV-2 in school staff: a systematic review](https://bmjopen.bmj.com/content/bmjopen/11/11/e052690.full.pdf)

**Title:** Estimating the early impact of the US COVID-19 vaccination programme on COVID-19 cases, emergency department visits, hospital admissions, and deaths among adults aged 65 years and older

The Lancet | 3rd November 2021

In the USA, COVID-19 vaccines became available in mid-December, 2020, with adults aged 65 years and older among the first groups prioritised for vaccination. The authors of this study estimated the national-level impact of the initial phases of the US COVID-19 vaccination programme on COVID-19 cases, emergency department visits, hospital admissions, and deaths among adults aged 65 years and older.

The study found that the initial roll-out of the US COVID-19 vaccination programme was associated with reductions in COVID-19 cases, emergency department visits, and hospital admissions among older adults.

Full paper: [Estimating the early impact of the US COVID-19 vaccination programme on COVID-19 cases, emergency department visits, hospital admissions, and deaths among adults aged 65 years and older: an ecological analysis of national surveillance data](https://www.thelancet.com/action/showPdf?pii=S0140-6736%2821%2902226-1)

See also: [The value of vaccine programme impact monitoring during the COVID-19 pandemic](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2821%2902322-9/fulltext) | The Lancet [comment]

**Title:** Association Between mRNA Vaccination and COVID-19 Hospitalization and Disease Severity

JAMA | 4th November 2021

This case-control study explores the association between vaccination with mRNA COVID-19 vaccines and hospitalization for COVID-19, and, among patients hospitalized with COVID-19, the association with progression to critical disease in adults from 18 US states.

The study found that vaccination with an mRNA COVID-19 vaccine was significantly less likely among patients with COVID-19 hospitalization and with disease progression, consistent with risk reduction among vaccine breakthrough infections.

Full paper: [Association Between mRNA vaccination and COVID-19 hospitalization and disease severity](https://jamanetwork.com/journals/jama/fullarticle/2786039)
Related editorial: [Understanding breakthrough infections following mRNA SARS-CoV-2 vaccination](https://jamanetwork.com/journals/jama/fullarticle/2786040)

**Title:** When are masks most useful?

Nature | 4th November 2021

An analysis of hundreds of COVID-19 cases suggests that face masks are most protective in specific circumstances, such as exposure to a person with COVID-19 that lasts for more than three hours or that takes place indoors.

The study shows that several of the measures that are collectively known as non-pharmaceutical interventions — such as physical distancing, keeping interactions outdoors and wearing masks — “are in fact helpful” for preventing SARS-CoV-2 transmission, says study co-author Joseph Lewnard. Previous studies provided evidence that masking helps to protect against infection, but the latest work shows that it is beneficial even when other measures, such as distancing, aren’t in use.

Further detail: [When are masks most useful? COVID cases offer hints](https://www.nature.com/articles/d41586-021-03030-3)

Related study: [Predictors of SARS-CoV-2 infection following high-risk exposure](https://www.medrxiv.org/content/10.1101/2021.10.20.21265295v1) | medRxiv

workforce wellbeing

**Title:** Anxiety and depression among medical doctors in Catalonia, Italy, and the UK during the COVID-19 pandemic

PLOS ONE | 2nd November 2021

Healthcare workers have had the longest and most direct exposure to COVID-19 and consequently may suffer from poor mental health. This study presents the findings of one of the first repeated multi-country analysis of the mental wellbeing of medical doctors at two time points during the COVID-19 pandemic (June 2020 and November/December 2020) to understand the prevalence of anxiety and depression, as well as associated risk factors.

Rates of anxiety and depression were highest in Italy (24.6% and 20.1%, June 2020), second highest in Catalonia (15.9% and 17.4%, June 2020), and lowest in the UK (11.7% and 13.7%, June 2020).

 Across all countries, higher risk of anxiety and depression symptoms were found among women, individuals below 60 years old, those feeling vulnerable/exposed at work, and those reporting normal/below-normal health.

Full paper: [Anxiety and depression among medical doctors in Catalonia, Italy, and the UK during the COVID-19 pandemic](https://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0259213&type=printable)

See also: [Research confirms impact of Covid-19 on doctors’ mental health](https://www.independent.co.uk/news/health/doctors-mental-health-study-covid-b1949973.html) | The Independent

Health management

**Title:** Multi-professional team-working: The experience and lessons from COVID-19

Academy of Medical Royal Colleges | 26th October 2021

The COVID-19 pandemic has powerfully illustrated the importance of effective multi-professional team-working in healthcare. Clinical and non-clinical staff have come together in a range of ways, working tirelessly in response to the urgency of the virus as well as helping patients not affected by COVID-19 access other forms of care and treatment. Collaboration across professional groups and across different healthcare settings — long recognised as important drivers to improving patient experiences and outcomes — became crucial factors in withstanding the pressures of the pandemic.

While the pressures of the pandemic are likely to reverberate in the months and years ahead, it is vital that we take stock of the experiences from this crisis and the lessons learned for the system, organisations, teams and individuals. This report reflects on what COVID-19 has taught us about the opportunities for and barriers to multi-professional team-working, to help us understand how we can realise the vision for collaborative working across traditional boundaries and hierarchies to ensure the best possible care for our patients.

Full report: [Multi-professional team-working: The experience and lessons from COVID-19](https://www.aomrc.org.uk/wp-content/uploads/2021/10/Multi-professional_team-working_experiences_from_COVID-19_1021.pdf)

other

**Title:** Effects of covid-19 pandemic on life expectancy and premature mortality in 2020: time series analysis in 37 countries

BMJ | 2021; 375:e066768 | 3rd November 2021

The objective of this study was to estimate the changes in life expectancy and years of life lost in 2020 associated with the covid-19 pandemic. The authors used time series analysis across 37 upper-middle and high income countries or regions with reliable and complete mortality data.

Years of life lost in 2020 were higher than expected in all countries except Taiwan, New Zealand, Norway, Iceland, Denmark, and South Korea. More than 28 million excess years of life were lost in 2020 in 31 countries, with a higher rate in men than women. Excess years of life lost associated with the covid-19 pandemic in 2020 were more than five times higher than those associated with the seasonal influenza epidemic in 2015.

Full paper: [Effects of covid-19 pandemic on life expectancy and premature mortality in 2020: time series analysis in 37 countries](https://www.bmj.com/content/bmj/375/bmj-2021-066768.full.pdf)

**Title:** Health spending during Covid-19: how does the UK compare?

Nuffield Trust | 2nd November 2021

Across the globe, Covid-19 has had a significant impact on health care spending – sparking debate on how much countries should spend on health, and what’s needed to recover from the economic and health shocks of the crisis.

While the degree of the recovery challenge will vary across different countries, no health system has been spared by the pandemic. This article looks elsewhere to understand how health spending has changed across other nations in response to the crisis, and the questions this raises about how the UK compares.

Full detail: [Health spending during Covid-19: how does the UK compare?](https://www.nuffieldtrust.org.uk/news-item/health-spending-during-covid-19-how-does-the-uk-compare)

**Title:** Deaths involving COVID-19 by vaccination status, England

Office for National Statistics | 1st November 2021

Weekly age-standardised mortality rates and age-specific rates for deaths involving COVID-19 by vaccination status; deaths occurring between 2 January and 24 September 2021 in England.

Main points:

* Between 2 January and 24 September 2021, the age-adjusted risk of deaths involving coronavirus (COVID-19) was 32 times greater in unvaccinated people than in fully vaccinated individuals.
* The weekly age-standardised mortality rates (ASMRs) for deaths involving COVID-19 were consistently lower for people who had received two vaccinations compared with one or no vaccinations.
* ASMRs take into account differences in age structure and population size to allow comparisons between vaccination status groups; however some differences between the groups such as health status may remain and partly explain the differences in ASMRs.

Full detail: [Deaths involving COVID-19 by vaccination status, England: deaths occurring between 2 January and 24 September 2021](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsinvolvingcovid19byvaccinationstatusengland/deathsoccurringbetween2januaryand24september2021)

**Title:** Review of the adult social care COVID-19 winter plan 2020 to 2021

Department of Health and Social Care | 3rd November 2021

This report forms The Social Care Sector Covid-19 Support Taskforce's independent review of the government's winter plan 2020 to 2021 for the adult social care sector in England.

Full report: [Adult social care in England: COVID-19 A review of the 2020 to 2021 winter plan and subsequent actions – what more should be done?](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1030681/Adult-Social-Care-in-England-Winter-Plan-2020-2021-Review-David-Pearson-accessible.pdf)

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[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

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