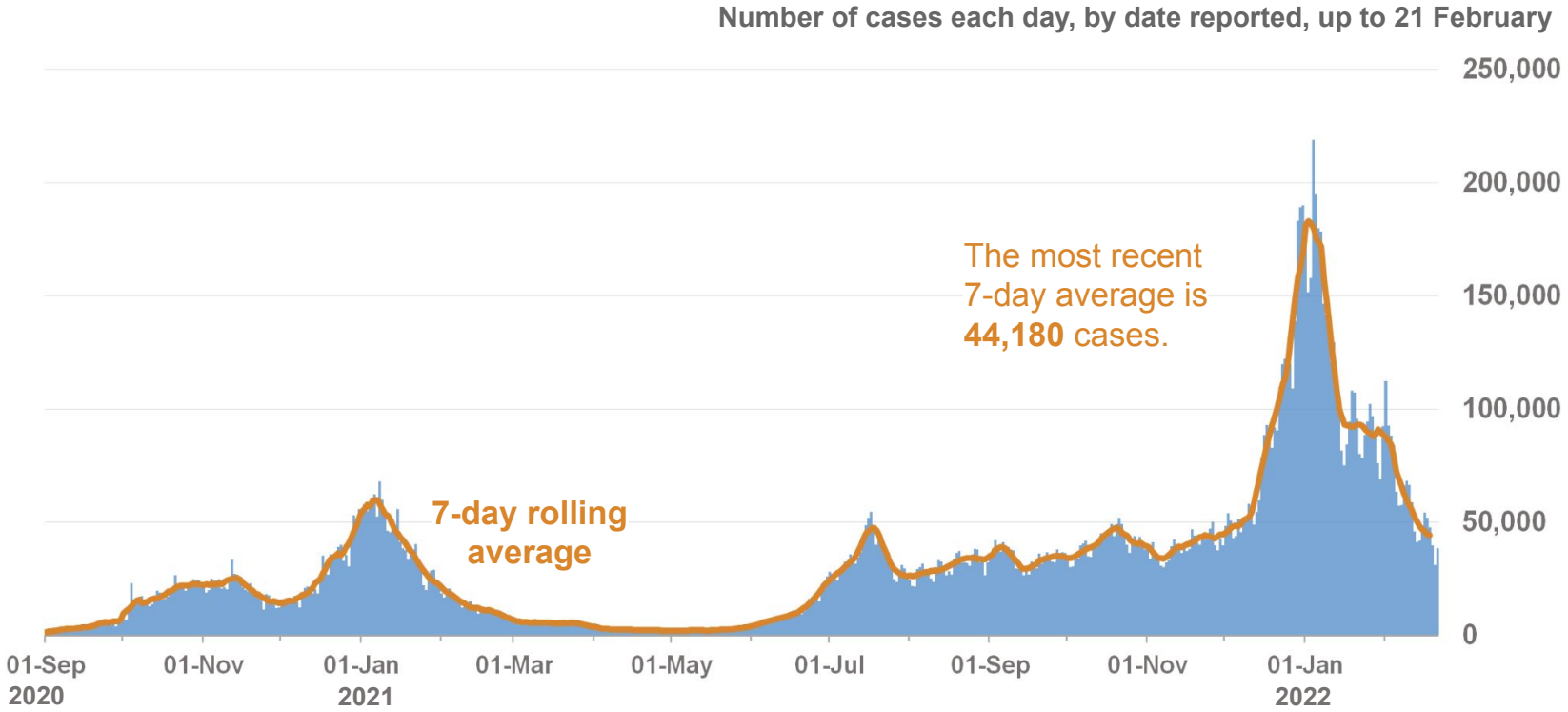
The number of people testing positive for COVID-19 in the UK



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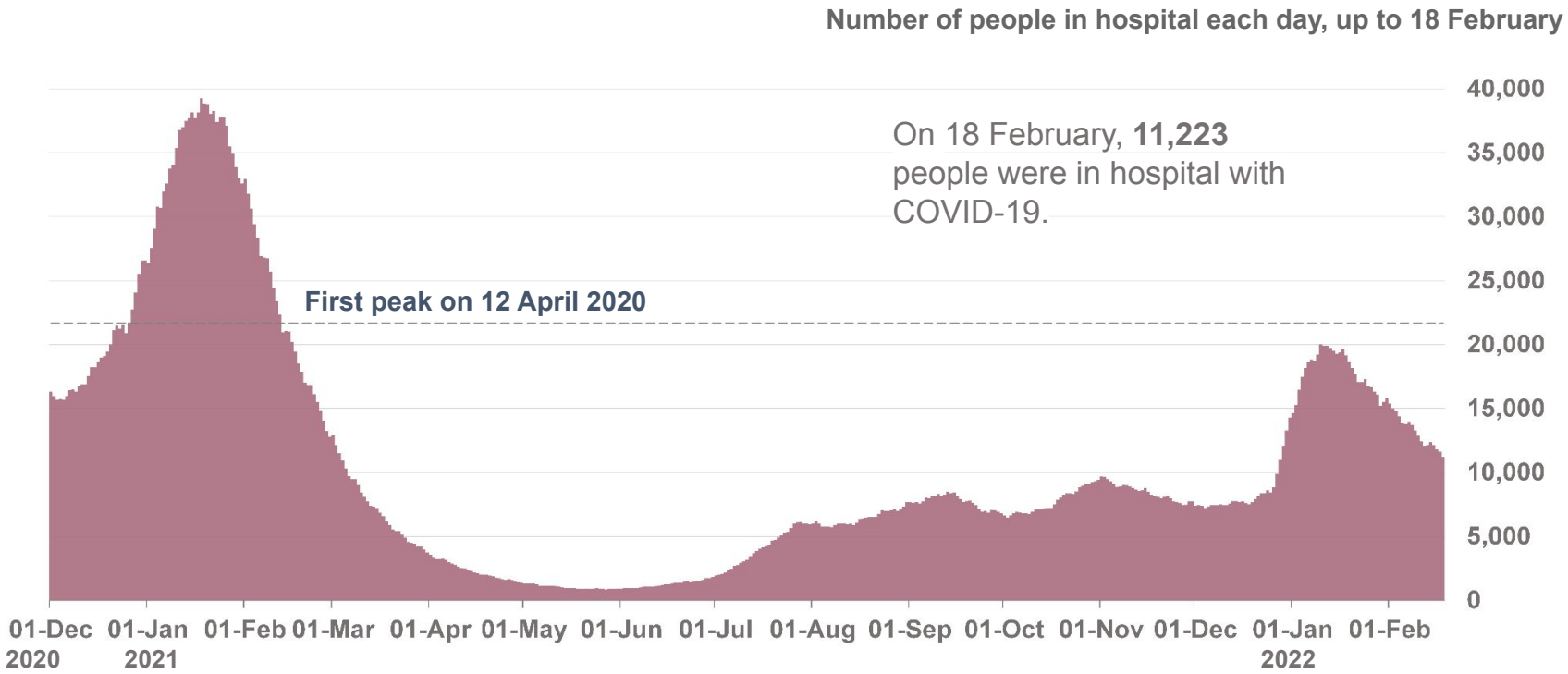
Source: https://coronavirus.data.gov.uk/
Further details on data sources can be found here:
https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences

The number of people in hospital with COVID-19 in the UK



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Source: https://coronavirus.data.gov.uk/
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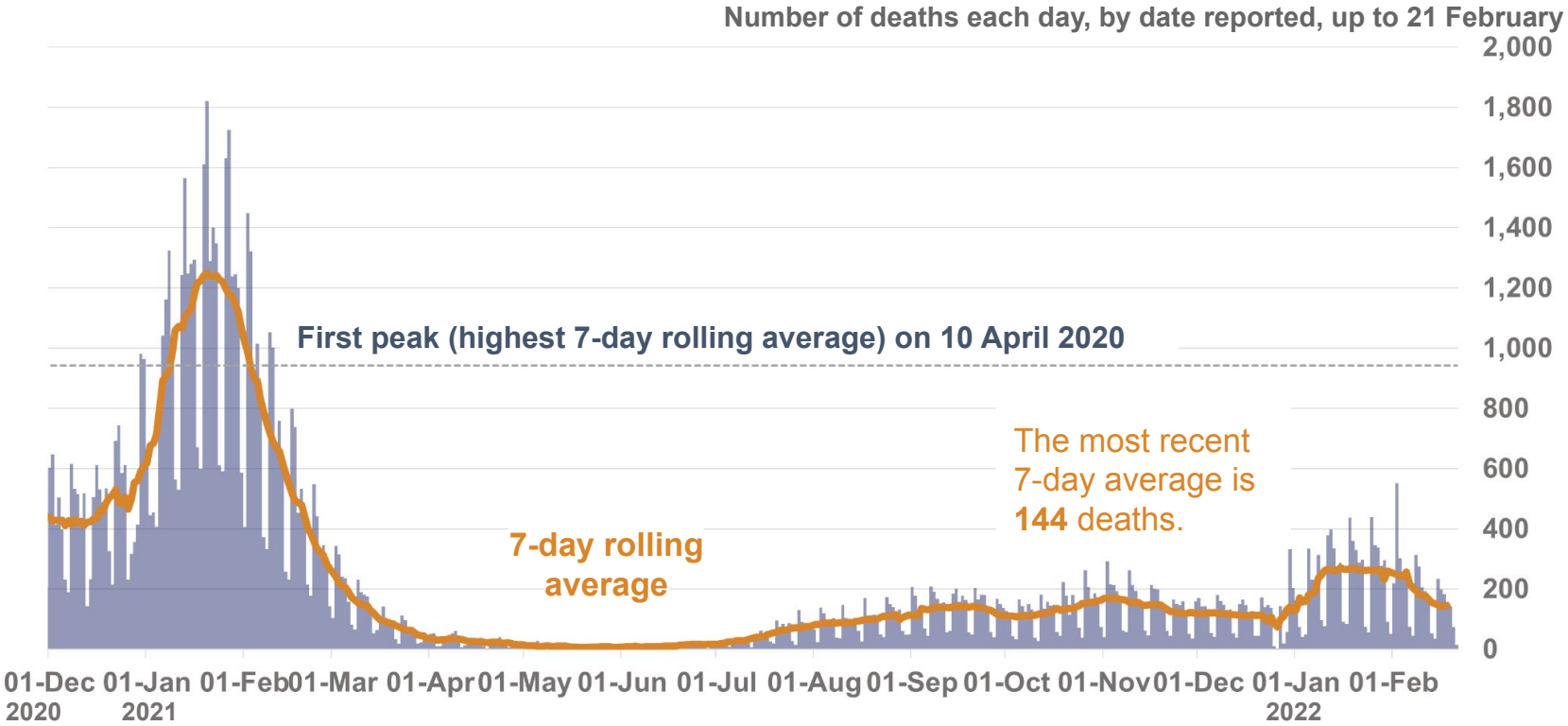
https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences

The number of deaths of people who had a positive test result for COVID-19 in the UK



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Source: https://coronavirus.data.gov.uk/
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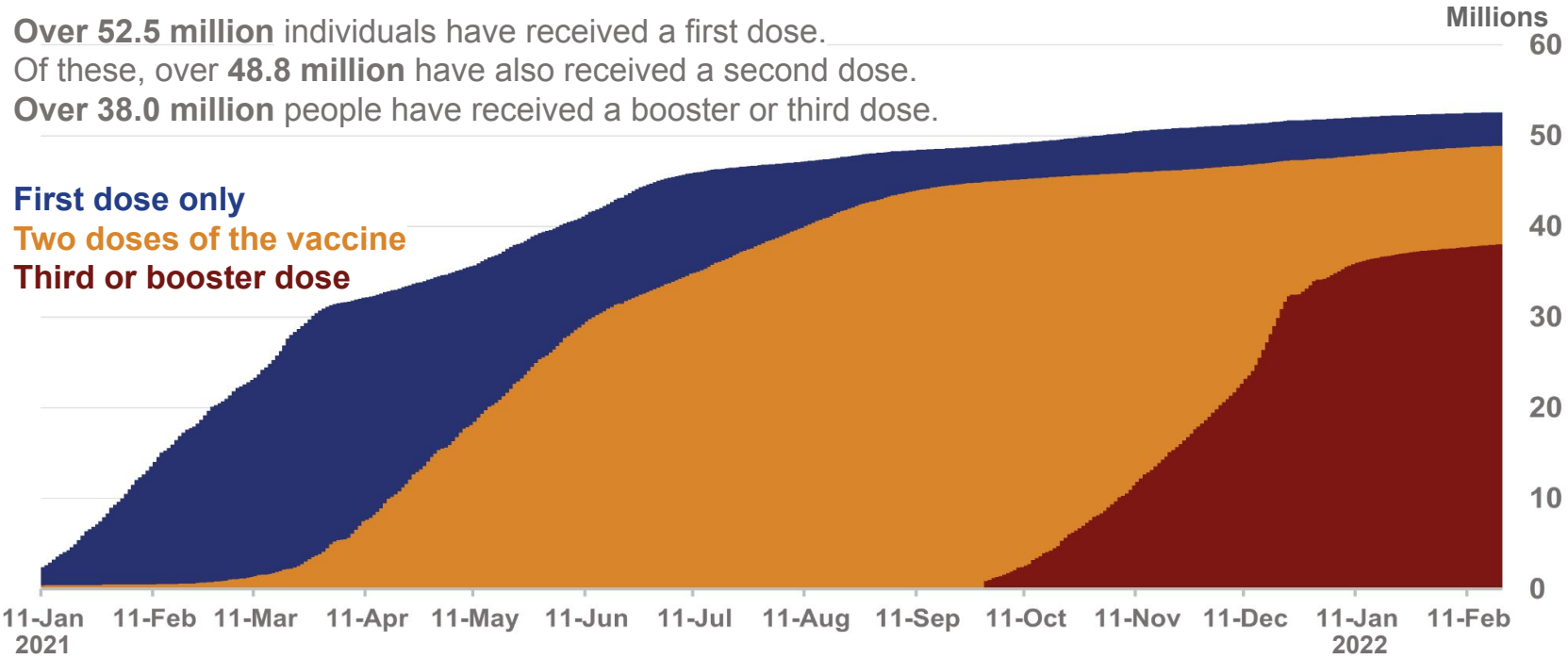
The number of people aged 12 and over who have received a vaccination for COVID-19 in the UK

Cumulative number of people who have received a COVID-19 vaccination, by date reported, up to 20 February

Over 52.5 million individuals have received a first dose.
Of these, over **48.8 million** have also received a second dose.
Over 38.0 million people have received a booster or third dose.



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Source: https://coronavirus.data.gov.uk/
Further details on data sources can be found here:
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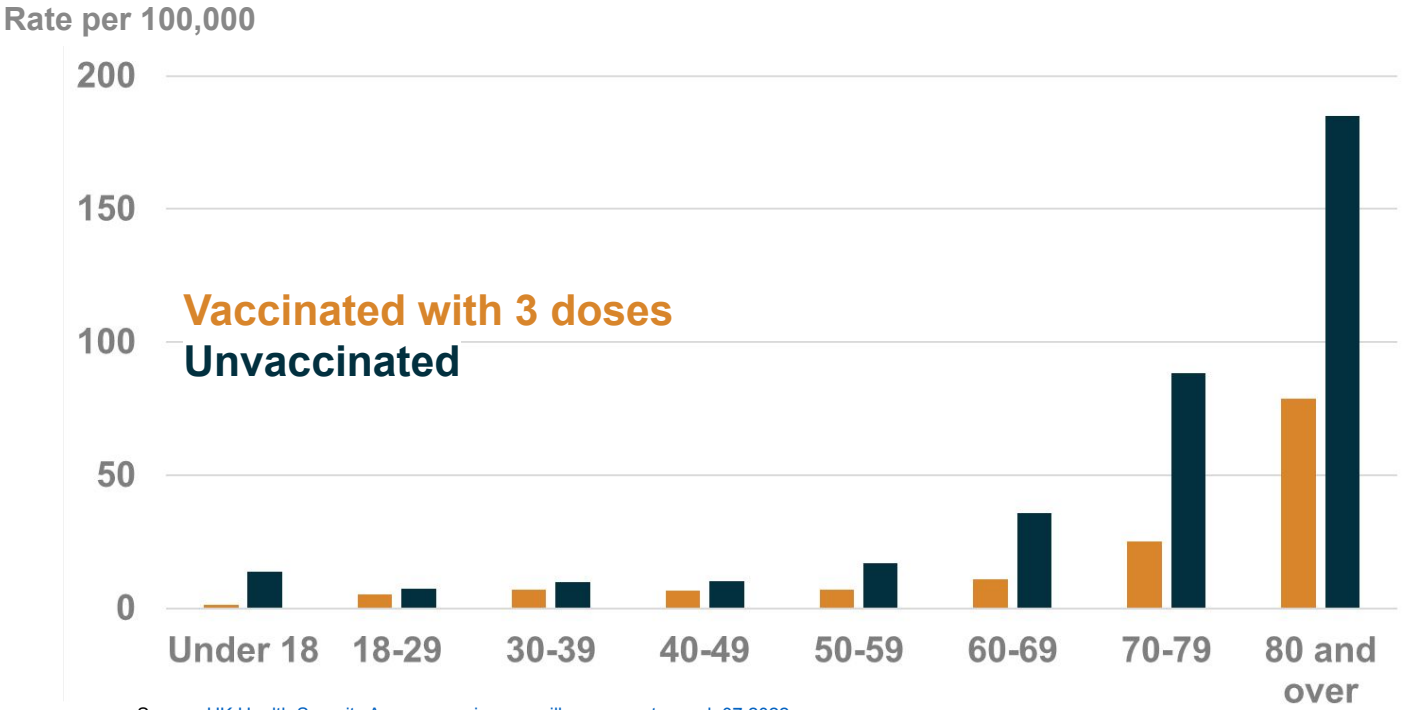
Unadjusted rates of COVID-19 hospitalisation for vaccinated and unvaccinated people in England

Cases presenting to emergency care within 28 days of a positive test resulting in overnight inpatient admission, by specimen date, between 23 January 2022 and 13 February 2022



These raw data are used to help understand the implications of the pandemic to the NHS.

Raw data should not be used to assess vaccine effectiveness.

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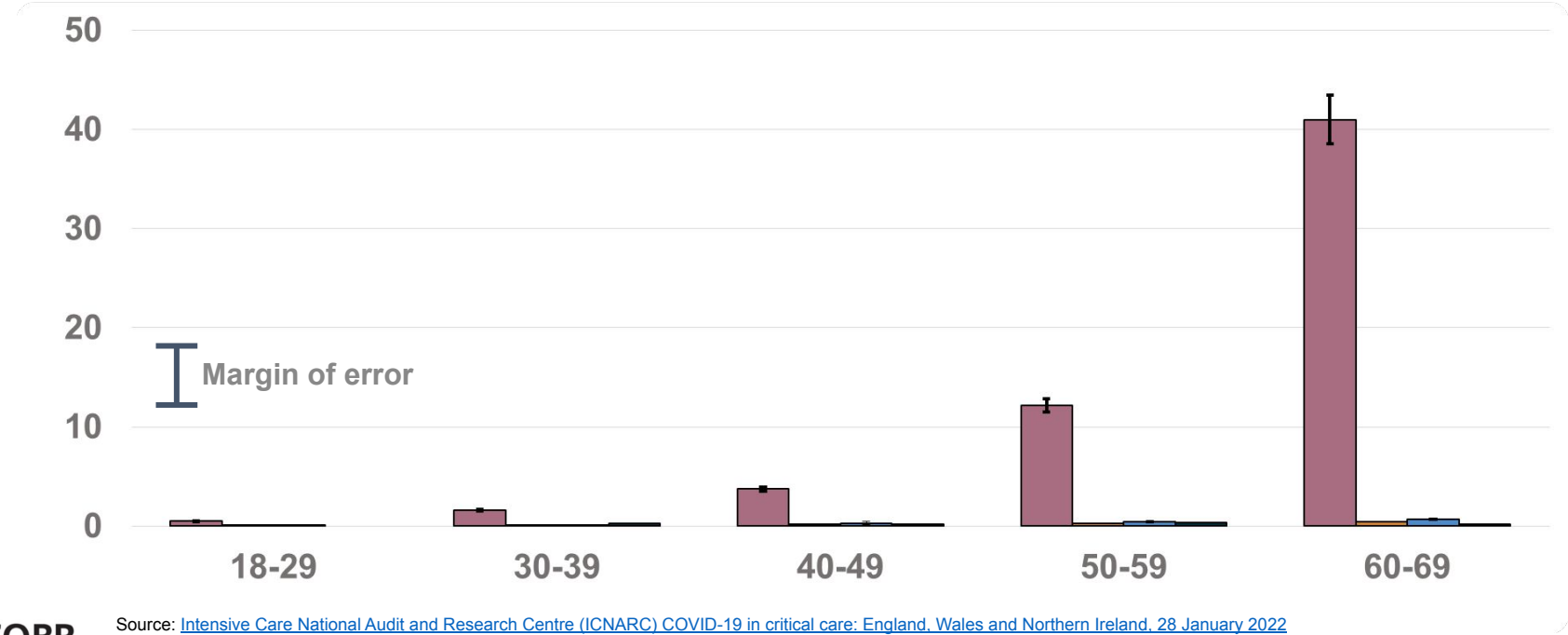
Source: UK Health Security Agency vaccine surveillance report - week 07 2022
Further details on data sources can be found here:
https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences

Critical care admissions and COVID-19 vaccination status in England

Rate of admission to critical care with confirmed COVID-19 per 100,000 population per week (with 95% confidence interval) by vaccination status, assessed at 14 days prior to the positive COVID-19 test, and age group.



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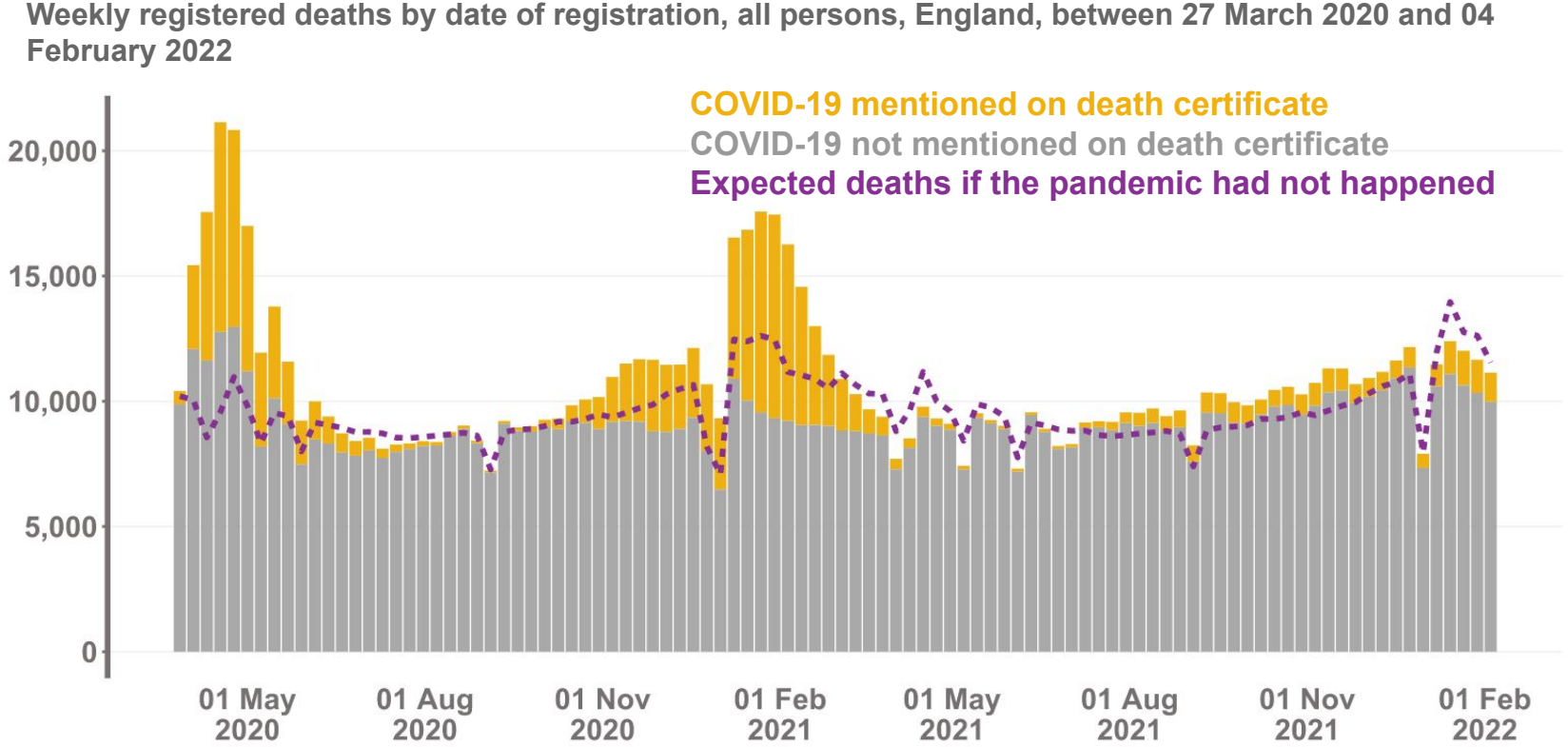
Source: Intensive Care National Audit and Research Centre (ICNARC) COVID-19 in critical care: England, Wales and Northern Ireland, 28 January 2022
Further details on data sources can be found here:
https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences

Weekly registered deaths in England



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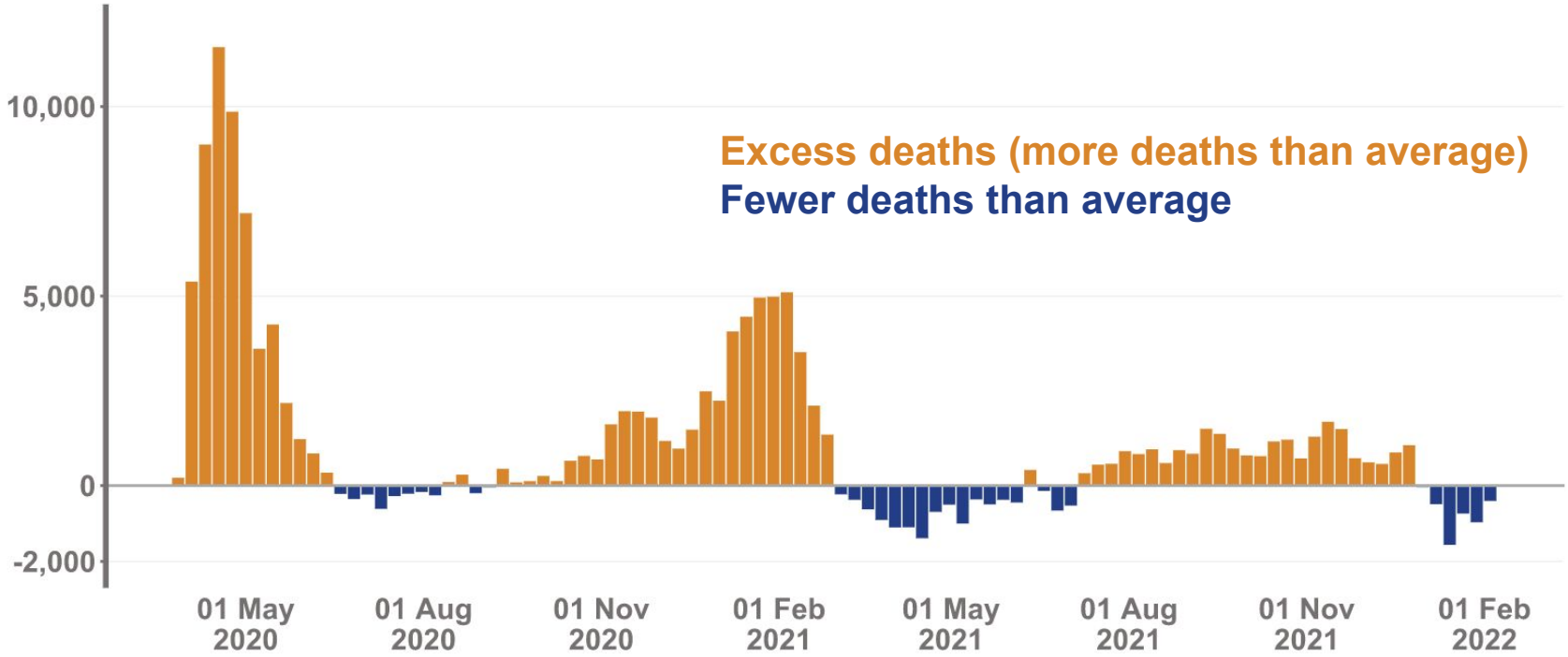
Source: Office for Health Improvement and Disparities, Excess mortality in England: weekly reports
Further details on data sources can be found here:
https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences

Excess mortality in England

Weekly excess deaths by date of registration, all persons, England, between 27 March 2020 and 04 February 2022



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Source: Office for Health Improvement and Disparities, Excess mortality in England: weekly reports
Further details on data sources can be found here:
https://www.gov.uk/government/collections/slides-and-datasets-to-accompany-coronavirus-press-conferences

Statistical notes

The number of people testing positive for COVID-19 in the UK
Number of people who have had at least one positive COVID-19 test result, either lab-reported or lateral flow device (England only), by date reported - the date the case was first included in the published totals. COVID-19 cases are identified by taking specimens from people and testing them for the presence of the SARS-CoV-2 virus. If the test is positive, this is referred to as a case. Positive rapid lateral flow test results can be confirmed with Polymerase Chain Reaction (PCR) tests taken within 72 hours. If these PCR test results are negative, these are not reported as cases. People tested positive more than once are only counted once. The 7-day rolling mean average of daily cases is plotted on the chart on the middle day of each seven day period.

As of 9 April 2021, the way cases are reported has changed. Cases that have been identified through a positive rapid lateral flow test are now removed for people who took PCR tests within 3 days that were all negative. Cases of this type that were previously reported have been removed from the cumulative total, reducing the total by 8,010. Newly reported numbers of cases for the UK and England were unaffected by the removal of these. Historical published date totals have not been changed.

From 31 January 2022, UKHSA will move all COVID-19 case reporting in England to use a new episode-based definition which includes possible reinfections. Deaths within 28 days of positive test and deaths within 60 days of positive test were also updated on 1 February 2022 to include deaths following the most recent episode of infection using the new episode-based case definition in England.
Further information on recent changes can be found at: https://coronavirus.data.gov.uk/details/whats-new/record/af008739-ffa3-47b8-8efc-ef109f2cfbdd

People in hospital with COVID-19, UK
Total number of people in hospital with COVID-19 in the UK. Definitions are not always consistent between the four nations. England data now covers all Acute Trusts, Mental Health Trusts and the Independent Sector and are reported daily by trusts to NHS England and NHS Improvement. Welsh data include confirmed COVID-19 patients in acute hospitals only, including those recovering.

COVID-19 daily deaths within 28 days of a positive test, UK:
Number of deaths of people who had a positive test result for COVID-19 and died within 28 days of the first positive test. Data from the four nations are not directly comparable as methodologies and inclusion criteria vary. The 7-day rolling mean average of daily deaths is plotted on the chart on the middle day of each seven day period. Data presented is by date reported rather than date of death or registered. *Deaths within 28 days of positive test and deaths within 60 days of positive test were also be updated on 1 February 2022 to include deaths following the most recent episode of infection using the new episode-based case definition in England.*

Statistical notes

Number of people who have received a vaccination for COVID-19, UK:
Number of people who have received a first dose or both a first and a second dose of a vaccination for COVID-19, by day on which the vaccine was reported. Data are reported daily, and include all vaccination events that are entered on the relevant system at the time of extract. This includes reported vaccines that were administered up to and including the date shown. England data includes vaccinations reported in the National Immunisation Management Service which is the system of record for the vaccination programme in England, including both hospital hubs and local vaccination services. Data are extracted at midnight on the date of report. Welsh data includes vaccinations reported in the Welsh Immunisation System. Data is extracted at 10pm on the date of report. Scottish data includes vaccinations reported in the Vaccination Management Tool. Data is extracted at 8:30am on the day following the date of report. Northern Ireland data are extracted at the end of day of the date of report.

Number of booster and third vaccine doses, United Kingdom:
The booster vaccination programme began on 16 September 2021. Booster doses are currently offered to people at highest risk from COVID-19 who received their second dose at least 6 months earlier, to give them longer-term protection. Third dose vaccinations are offered to people over 12 with severely weakened immune systems. Unlike boosters, third doses are considered part of a full vaccination course. Initially the vaccines were prioritised to be administered to the over-80s, care home residents and workers, and NHS staff. The number of people of all ages who received each dose is reported. The UK numbers by report date are the sum of the numbers reported individually by the four nations. Due to differing criteria for inclusion, some individuals may be counted in more than one nation's total. People of all ages are included. The individual nations in the UK started reporting on booster and third dose vaccinations at different times. The first time point in the series for the UK that includes data for all nations is 21 October 2021. Reporting of booster or third dose vaccinations started on 1 October 2021 in England. In Scotland, reporting of third dose vaccinations started on 7 October 2021 and reporting of booster dose vaccinations on 14 October 2021. In Wales, reporting of booster or third dose vaccinations started on 22 October 2021 and separate reporting of booster and third dose vaccinations started on 26 October 2021. In Northern Ireland, reporting of booster or third dose vaccinations started on 30 September 2021.

Statistical notes

Unadjusted rates of COVID-19 hospitalisation for vaccinated and unvaccinated people in England

COVID-19 cases identified through routine collection from the Second Generation Surveillance System were linked to the National Immunisation Management System to derive vaccination status, using an individual's NHS number as the unique identifier. Attendance to emergency care at NHS trusts was derived from the Emergency Care DataSet (ECDS) managed by NHS Digital. The same data source was used to identify COVID-19 cases where the attendance to emergency care resulted in admission to an NHS trust. ECDS is updated weekly, and cases are linked to these data twice weekly. Data from ECDS are subject to reporting delays. Data from ECDS only report on cases who have been presented to emergency care and had a related overnight patient admission. These data will not show cases who were directly admitted as inpatients without presenting to emergency care. They cannot be used as an indicator of the number of people in hospital with COVID-19. The outcome of overnight inpatient admission following presentation to emergency care was limited to those occurring within 28 days of the earliest specimen date for a COVID-19 case. The rate of COVID-19 cases in fully vaccinated and unvaccinated groups was calculated using vaccine coverage data for each age group extracted from the National Immunisation Management Service.

In the context of very high vaccine coverage in the population, even with a highly effective vaccine, it is expected that a large proportion of hospitalisations and deaths would occur in vaccinated individuals, simply because a larger proportion of the population are vaccinated than unvaccinated and no vaccine is 100% effective. This is especially true because vaccination has been prioritised in individuals who are more susceptible or more at risk of severe disease. Individuals in risk groups may also be more at risk of hospitalisation or death due to non-COVID-19 causes, and thus may be hospitalised or die with COVID-19 rather than because of COVID-19.

The vaccination status of inpatients should not be used to assess vaccine effectiveness because of differences in risk, behaviour and testing in the vaccinated and unvaccinated populations. There are likely to be systematic differences between vaccinated and unvaccinated populations. For example:

People who are fully vaccinated may be more health conscious, more likely to get tested for COVID-19 and so more likely to be identified as a case;

Many of those who were at the head of the queue for vaccination are those at higher risk from COVID-19 due to their age, their occupation, their family circumstances or because of underlying health issues;

People who are fully vaccinated and people who are unvaccinated may behave differently, particularly with regard to social interactions and therefore may have differing levels of exposure to COVID-19;

People who have never been vaccinated are more likely to have caught COVID-19 in the weeks or months before the period of the cases covered in the report. This gives them some natural immunity to the virus for a few months which may have contributed to a lower case rate in the past few weeks.

Statistical notes

Weekly rate of admission to critical care by age group and COVID-19 vaccination status:
To ascertain COVID-19 vaccination status, ICNARC data for patients admitted to critical care units in England were linked with data from COVID-19 test results and from the National Immunisation Management System (NIMS) on the QResearch Trusted Research Environment. COVID-19 test results and NIMS data were only available for England. Patients were included in the analysis if they were aged 18 years or over, resident in England, and were successfully linked to a positive COVID-19 test between 28 days before and up to 2 days after admission to the critical care unit. Of 11,431 patients admitted to critical care units in England between 1 May 2021 and 15 December 2021 when the data were locked for linkage, 190 (1.7%) were missing NHS number and unable to be linked, 68 (0.6%) were aged under 18 years and 60 (0.5%) were not resident in England. Of the remaining 11,113 patients, 10,141 (91.3%) were successfully linked to a positive COVID-19 test between 28 days before and up to 2 days after admission to the critical care unit.

Based on knowledge that it takes 2-3 weeks following each vaccination to reach maximum effectiveness, vaccination status was defined (prior to analysis) as:
• Unvaccinated: Either no linked vaccination record in NIMS or first dose of vaccine received within 14 days prior to the positive COVID-19 test
• One dose: First dose of vaccine received at least 14 days prior to the positive COVID-19 test (includes patients that received a second dose within 14 days prior to the positive COVID-19 test)
• Two doses: Second dose of vaccine received at least 14 days prior to the positive COVID-19 test (includes patients that received a third or booster dose within 14 days prior to the positive COVID-19 test)
• Booster or three doses: Booster or third dose of vaccine received at least 14 days prior to the positive COVID-19 test (includes booster doses for adults that have received two doses and third doses for people with a weakened immune system)

As the numbers of people in the population at each vaccination status differ both between age groups and over time, rates of admission to critical care with confirmed COVID-19 were calculated per 100,000 population per week, allowing the denominators to change over time. Denominators for vaccinated patients were based on the numbers vaccinated from NIMS over the time period 17 April 2021 to 1 December 2021 (14 days prior to the date range of the analyses). Denominators for unvaccinated patients were based on the Office for National Statistics (ONS) population estimates for 2020 minus the numbers vaccinated.

The 70+ age group has been removed as Intensive Care Unit admission policy and timing of data collection means the results are not comparable with other age groups.

Further information can be found at: Intensive Care National Audit and Research Centre (ICNARC) COVID-19 in critical care: England, Wales and Northern Ireland, 28 January 2022

Statistical notes

Weekly Registered Deaths in England and Excess Mortality in England
The numbers of expected deaths are estimated using statistical models and based on the previous 5 years' (2015 to 2019) mortality rates drawn from fully coded and cleaned annual extracts supplied by the ONS. Excess deaths are estimated by week and in total from 21 March 2020 onwards, based on the date each death was registered. Weekly excess mortality is calculated by taking the observed number of deaths registered in a week and subtracting the expected registered deaths for that week. Excess death ratios, cumulative and weekly, are calculated by dividing observed deaths by expected deaths
Further information, data and methodology can be found here: https://www.gov.uk/government/statistics/excess-mortality-in-england-weekly-reports

Further information and data:
UK - COVID-19 in the UK; for further information contact coronavirus-tracker@phe.gov.uk
Welsh Government - NHS activity and capacity during the COVID-19 pandemic
Scottish Government - COVID-19 daily data for Scotland
Northern Ireland - COVID-19 statistics