

Statistical bulletin

Coronavirus and vaccination rates in people aged 70 years and over by socio-demographic characteristic, England: 8 December 2020 to 9 May 2021

First and second dose COVID-19 vaccination rates among people aged 70 years and older who live in England, both in private households and communal establishments. Includes estimates by socio-demographic factor such as ethnic group, religious group, and those identified as disabled.

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1 . Main points

- Among people who received a first dose of a vaccine against coronavirus (COVID-19) by 15 March 2021, 96.0% had received a second dose by 9 May 2021; this rate was marginally higher for men (96.2%) than women (95.8%).
- Previously reported disparities in [first dose vaccination rates by socio-demographic factor](#) were also observed in the proportion of those who went on to receive a second dose.
- While first dose vaccination rates were lowest for people identifying as Black Caribbean and Black African, those from Pakistani and Bangladeshi backgrounds had the lowest rates of receiving a second dose, with 82.4% and 82.7% of those who received their first dose going on to receive their second dose respectively; the White British group had the highest rate of receiving a second dose.
- Among those who received a first dose, only 84.7% of those identifying as Muslim received a second dose.
- People who do not have English as their main language were less likely to have received their first and second dose of a vaccine than native speakers and had substantially lower rates of continuing to a second dose.
- People living in more deprived areas had lower first dose vaccination and second dose vaccination rates; among those who received a first dose, 93.3% of those in the most deprived areas received a second dose, compared with 97.2% in the least deprived areas.
- We observed lower second dose rates in less advantaged socio-economic groups; those with no qualifications and those who do not own their own home were less likely than their more advantaged counterparts to continue to a second dose.
- As observed in first dose vaccination rates, disabled people reporting being "limited a lot" in their day-to-day activities had lower second dose vaccination rates (93.1%) than non-disabled people (96.6%).

These data only refer to first dose vaccinations that were received prior to 15 March 2021. This is to allow for sufficient time for a second dose vaccination to have been offered and/or received.

The vaccination data presented in this release are produced using the linked National Immunisation Management System (NIMS) and Office for National Statistics (ONS) Public Health Data Asset (PHDA) dataset and cover a subset of the population. Therefore, the data may differ from the administrative data on vaccinations published by NHS England weekly, which cover all vaccinations given to individuals who have an NHS number and are currently alive in the resident population.

2 . Coronavirus and vaccination rates data

[COVID-19 vaccination rates and odds ratios by socio-demographic group](#)

Dataset | Released 7 June 2021

Vaccination rates and odds ratios by socio-demographic group among people aged 70 years and older and 50 years and older who live in England.

3 . Glossary

COVID-19 vaccination

Vaccinations against coronavirus (COVID-19) were initially introduced for the people most at risk of COVID-19, including those who are aged 70 years and over. The vaccine is given as an injection and requires two doses; the second dose is given between 3 and 12 weeks after the initial injection.

Approved vaccines in the UK are Pfizer/BioNTech, AstraZeneca (also known as the Oxford vaccine) and Moderna vaccine. For more information on vaccines see NHS information about the coronavirus (COVID-19) vaccine.

4 . Measuring the data

We linked vaccination data from the National Immunisation Management System (NIMS) to the Office for National Statistics (ONS) Public Health Data Asset (PHDA) based on NHS number. The ONS PHDA is a unique linked dataset combining the 2011 Census, the General Practice Extraction Service (GPES) data for pandemic planning and research and the Hospital Episode Statistics (HES).

The study population consisted of people aged 70 years and over, alive on 9 May 2021 who were resident in England, registered with a general practitioner (GP), and enumerated at the 2011 Census. This analysis covers only people aged 70 years and over, as it can be assumed that a substantial proportion of this age group had been offered the a second dose of a vaccine during the time period presented – this is not applicable for younger age groups.

These data only refer to first dose vaccinations that were received prior to 15 March 2021. This is to allow for sufficient time for a second dose vaccination to have been offered and/or received.

All individual level socio-demographic characteristics (ethnic group, religious affiliation, country of birth, English language proficiency, disability status, educational attainment, household tenure) come from the 2011 Census. Place of residence (rural-urban classification and local authority) and area-based deprivation were derived based on data from the 2019 Patient Register.

Strengths of the data

One of the main strengths of the linked NIMS – PHDA is that it combines a rich set of demographic and socio-economic factors from the 2011 Census and 2019 Patient Register with pre-existing conditions based on clinical records. This unique dataset allows us to analyse how rates of vaccination differ by socio-demographic group. Lower vaccination rates among people from ethnic minority groups are consistent with the higher vaccination hesitancy among ethnic minorities reported in [Coronavirus and vaccine hesitancy, Great Britain](#).

Limitations of the data

The dataset only contains information on people who were enumerated in the 2011 Census, and therefore excludes residents who did not take part in that census, and people who have immigrated since 2011.

The NIMS data covered the period 8 December 2020 to 9 May 2021, however, there may be some additional lag in reporting the data so it is possible that we have not captured everyone aged 70 years and over who had a second dose of a COVID-19 vaccine by 9 May 2021.

5 . Related links

[Coronavirus and vaccination rates in people aged 50 years and over by socio-demographic characteristic, England: 8 December 2020 to 12 April 2021](#)

Bulletin | Released 6 May 2021

First dose COVID-19 vaccination rates among people aged 50 years and older who live in England, both in private households and communal establishments. Includes estimates for ethnic minorities, religious groups, those identified as disabled and by other socio-demographic factors.

[What the ONS can tell you about the COVID-19 Vaccine programme](#)

Blog | Released 27 April 2021

A guide to the Office for National Statistics' (ONS') vaccine analysis.

[Coronavirus and vaccine hesitancy, Great Britain: 31 March to 25 April 2021](#)

Article | Released 6 May 2021

Hesitancy towards the coronavirus (COVID-19) vaccine, based on the Opinions and Lifestyle Survey covering the period 31 March to 25 April 2021.

[Coronavirus \(COVID-19\) Infection Survey, UK](#)

Bulletin | Released 4 June 2021

Estimates for England, Wales, Northern Ireland and Scotland. This survey is being delivered in partnership with University of Oxford, University of Manchester, Public Health England and Wellcome Trust. This study is jointly led by the ONS and the Department for Health and Social Care (DHSC) working with the University of Oxford and UK Biocentre to collect and test samples.

[Coronavirus \(COVID-19\) latest insights](#)

Webpage | Updated as and when data are available

An interactive tool to explore the latest data and trends about the coronavirus (COVID-19) pandemic from the ONS and other sources.

[Coronavirus \(COVID-19\) roundup](#)

Webpage | Updated as and when data are available

Catch up on the latest data and analysis related to the coronavirus (COVID-19) pandemic and its impact on our economy and society.

[NHS England Coronavirus \(COVID-19\) Vaccinations](#)

Webpage | Updated daily

Administrative data on vaccinations published by NHS England weekly, covering all vaccinations given to individuals who have an NHS number and are currently alive in the resident population.