

Statistical bulletin

# Coronavirus and vaccination rates in people aged 40 to 64 years by occupation, England: 8 December 2020 to 12 December 2021

First, second, third dose and booster COVID-19 vaccination rates, among people aged 40 to 64 years old who live in England, by Standard Occupational Classification 2010 (SOC 2010).

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# 1 . Main points

- The occupations that had the highest coverage for third dose and booster vaccinations were related to health care and services; 75.3% of health professionals and 58.7% of health and social care associate professionals had received three vaccinations.
- The occupations with the lowest coverage for third dose and booster vaccinations were elementary trades and related occupations (37.0%) and skilled construction and building trades (39.8%); these occupations also had the highest proportion of people that had not received a vaccination at 14.5% and 12.0% respectively.

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

[Coronavirus and vaccination rates in people aged 40 to 64 years by occupation, England](#)

Dataset | Released 24 December 2021

First, second, third dose and booster COVID-19 vaccination rates, among people aged 40 to 64 years old who live in England, by Standard Occupational Classification 2010 (SOC 2010): 8 December 2020 to 12 December 2021.

## 3 . 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 40 to 64 years, alive on 12 December 2021 who were resident in England, registered with a general practitioner (GP) in 2019, and enumerated at the 2011 Census.

These data only include third dose and booster vaccinations that were received from 16 September 2021 onwards. Individuals who received a third dose or booster vaccination prior to this date were excluded from the analysis.

Occupation was derived from the 2011 Census and was classified according to the [Standard Occupational Classification \(SOC\) 2010](#). As this occupation information was collected in 2011, it is likely to be misclassified for a proportion of people, because they have left the labour force or changed occupation since 2011. To mitigate measurement error, we restricted our analysis to people aged 40 to 64 years, who are likely to have relatively higher occupational stability.

These data only contain information on people who were enumerated in the 2011 Census, and therefore exclude residents who did not take part in that census, and people who have immigrated since 2011. It also excludes those not registered with a GP in 2019.

The NIMS data covered the period 8 December 2020 to 12 December 2021. However, there may be an additional lag in data reporting such that it is possible we have not captured all COVID-19 vaccinations that were received by 12 December 2021.

## 4 . Related links

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

Bulletin | Released 24 December 2021

First, second, third dose and booster COVID-19 vaccination rates among people aged 50 years and older who live in England. Includes estimates by socio-demographic characteristic such as ethnic group, religious group, those identified as disabled and socio-economic 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's (ONS's) vaccine analysis.

[Coronavirus and the social impacts on Great Britain: 17 December 2021](#)

Bulletin | Released 17 December 2021

Indicators from the Opinions and Lifestyle Survey covering the period 1 to 12 December to understand the impact of the coronavirus (COVID-19) pandemic on people, households and communities in Great Britain.

[COVID-19 Health Inequalities Monitoring for England \(CHIME\) tool](#)

Webpage | Updated monthly

The CHIME tool brings together data relating to the direct impacts of COVID-19, for factors such as mortality rates, hospital admissions, confirmed cases and vaccinations. The tool presents these factors by inequality breakdowns, including by age, sex, ethnic group, level of deprivation and region.

[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.