

Article

# Coronavirus (COVID-19) vaccination uptake in school pupils, England: up to 9 January 2022

Coronavirus (COVID-19) vaccination uptake in school pupils aged 12 to 17 years attending state-funded schools. Including detailed analysis by demographic and geographic characteristics for those aged 12 to 15 years. Experimental statistics.

Contact:  
Alison Judd  
schools.infection.survey@ons.  
gov.uk  
+44 208 039 0326

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# 1 . Main points

- As of 9 January 2022, 52.5% of pupils aged 12 to 15 years and 69.7% of pupils aged 16 to 17 years in state-funded schools in England have received at least one dose of a coronavirus (COVID-19) vaccine, while 5.8% and 46.0% respectively have received two doses.

Among those aged 12 to 15 years in state-funded schools in England:

- Vaccination uptake varied between ethnic groups; Chinese and Indian pupils were most likely to have received at least one dose (75.5% and 65.7% respectively), while Gypsy or Roma and Black Caribbean pupils were least likely (both 12.4%); although this is in part related to different levels of deprivation, large differences in the likelihood of being vaccinated by ethnic group still exist after accounting for available deprivation measures.
- Pupils eligible for free school meals (FSM) had much lower vaccination coverage than those not eligible (35.9% compared with 58.9%); schools with higher proportions of pupils eligible for FSM also had lower vaccination coverage.
- Pupils living in more deprived areas were much less likely to have been vaccinated; in the 10% most deprived areas of England (in terms of children living in income-deprived families) the vaccination rate was 36.1%, compared with 70.3% in the 10% least deprived areas.
- The South East had the highest vaccination uptake (60.7%), while London had the lowest (40.8%); however, the North West had the lowest likelihood of vaccination after controlling for demographic and socio-economic differences between regions; there is also a large variation in vaccination uptake between schools within the same region.
- Pupils who speak English as an additional language (EAL) are much less likely to have been vaccinated (38.2%), compared with 55.5% of those who speak English as a first language.
- Pupils with an identified special educational need (SEN) had a lower vaccination coverage (48.1%) compared with those with no identified needs (53.5%).

## 2 . Overview

The vaccination data presented in this release are produced using the linked English Schools Census (ESC) and National Immunisation Management System (NIMS) datasets. This dataset covers pupils in state-funded schools only (including special schools and sixth forms attached to schools. Due to the English Schools Census taking place in the 2020 to 2021 academic year on 21 January 2021, we have calculated age as of 31 August 2021 in order for it to be applicable for the current academic year and to determine which school year group they are most likely to be in. Therefore, the majority of pupils aged 12 to 15 years in our dataset will be in years 8 to 11 in the current (2021 to 2022) academic year, and pupils aged 16 to 17 years will be in years 12 and 13. See [Section 11](#) for further information on the coverage and data linkage. Therefore, the data will differ from the administrative data on vaccinations published weekly by [NHS England](#), which cover all vaccinations given to individuals who have an NHS number and are currently alive in the resident population.

Not all children will be eligible for a vaccine, for example, those who had received a positive coronavirus (COVID-19) test within the previous 12 weeks. It should not be assumed that those who are recorded as unvaccinated in this analysis have refused a COVID-19 vaccination.

### **3 . Coronavirus vaccination uptake by age and number of doses**

Our findings (Figure 1) show coronavirus (COVID-19) vaccination uptake increased with age. The proportion of pupils who had received at least one vaccine dose was highest among those aged 17 years (77.2%), and lowest among those aged 12 years (48.7%). The vaccination uptake rose between pupils aged 15 years (56.4%) and aged 16 years (66.7%). This was consistent with all pupils aged 16 to 17 years being offered the vaccine from 20 August 2021 and the rollout for all pupils aged 12 to 15 years starting later from 22 September 2021.

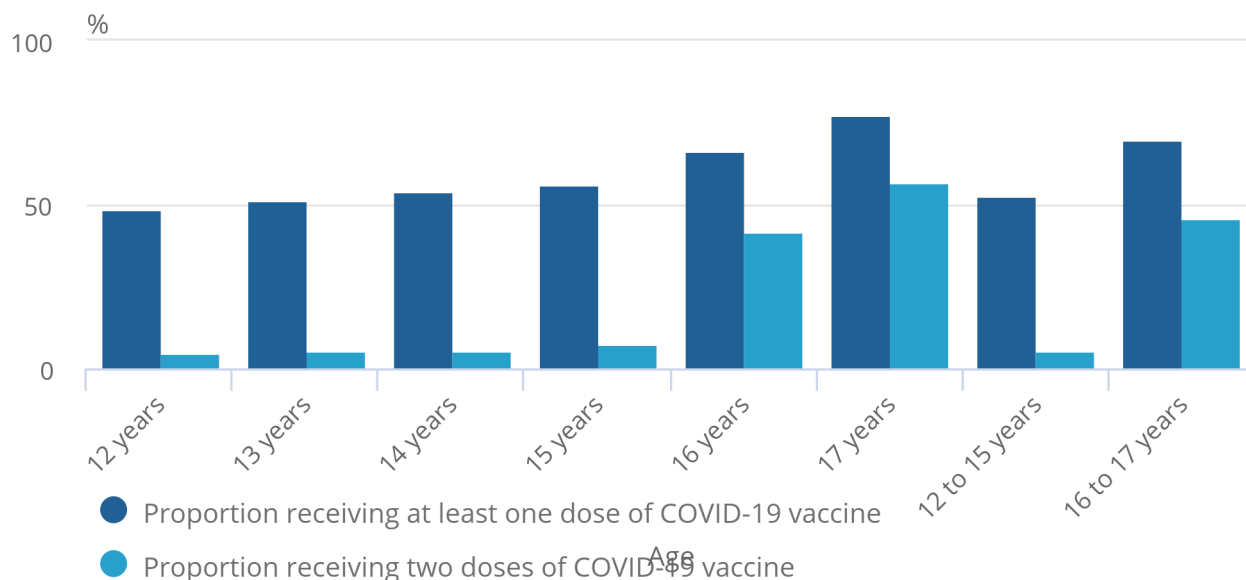
As of 9 January 2022, 52.5% of pupils aged 12 to 15 years and 69.7% of pupils aged 16 to 17 years have received at least one dose of vaccine, while 5.8% and 46.0% respectively have received two doses.

**Figure 1: The coronavirus vaccination uptake among those aged 12 to 17 years increases with age for both first and second doses**

Percentage of pupils aged 12 to 17 years in state-funded schools who have been vaccinated by age and number of doses, England, up to 9 January 2022.

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Percentage of pupils aged 12 to 17 years in state-funded schools who have been vaccinated by age and number of doses, England, up to 9 January 2022.



Source: Office for National Statistics - Linked English Schools Census (DfE) and National Immunisation Management System (NIMS) dataset

**Notes:**

1. Age as of 31 August 2021.
2. Vaccine rollout among those aged 16 to 17 years began on 15 August 2021, and among those aged 12 to 15 years on 20 September 2021. Prior to these dates only children with underlying health conditions across these ages were offered a vaccine.
3. Our coverage is lower for the 16 to 17 years age group as those who enter further education colleges, sixth form colleges or leave education after KS4 are excluded from the English Schools Census.

## 4 . Coronavirus vaccinations by pupil characteristics (for pupils aged 12 to 15 years)

More detailed analysis by pupil characteristics have been restricted to those aged 12 to 15 years because of the data being more complete for this age group (see [Section 12](#) for more details on coverage).

## Vaccination uptake by ethnicity

There were large variations in coronavirus (COVID-19) vaccination uptake by ethnicity for pupils aged 12 to 15 years, with a 63 percentage point difference between the most and least vaccinated ethnic groups. Chinese (75.5%) and Indian (65.7%) pupils were most likely to have been vaccinated while Gypsy or Roma and Black Caribbean (both 12.4%) pupils were least likely to have been vaccinated (Figure 2).

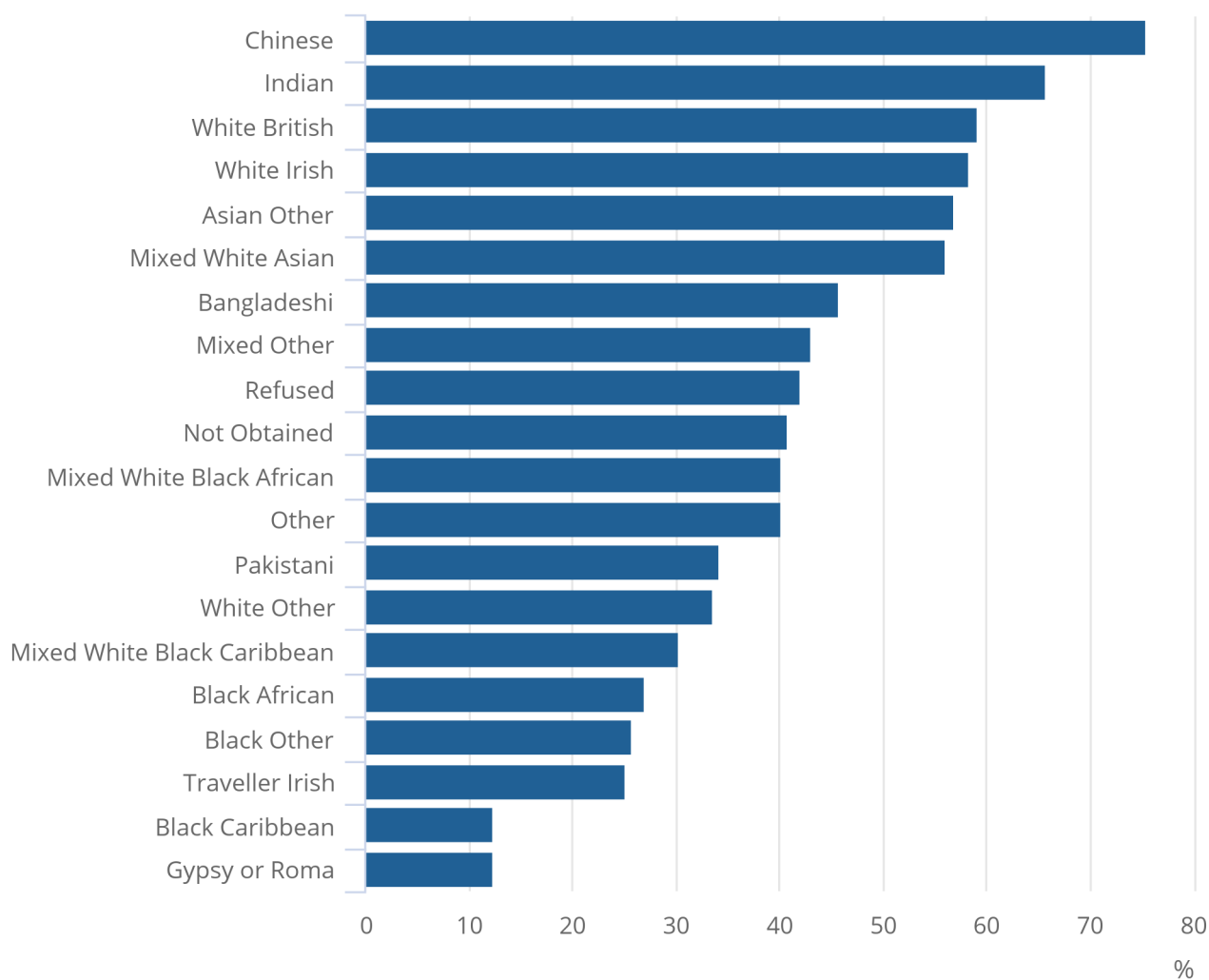
Differing population sizes mean some ethnic groups with higher vaccination uptake still have higher numbers of unvaccinated pupils than those with lower vaccination uptake. For example, 25,000 (out of 75,000) Indian pupils are unvaccinated (vaccination uptake of 65.7%), compared with 24,000 (out of 27,000) Black Caribbean pupils being unvaccinated (vaccination uptake of 12.4%). Despite a vaccination uptake of 59.1%, over 650,000 unvaccinated pupils aged 12 to 15 years are White British (out of 1,625,000), meaning 57% of all unvaccinated pupils are White British.

**Figure 2: There is a large variation in coronavirus vaccination uptake between different ethnic groups**

Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated by ethnicity, England, up to 9 January 2022

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Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated by ethnicity, England, up to 9 January 2022



Source: Office for National Statistics - Linked English Schools Census (DfE) and National Immunisation Management System (NIMS) dataset

Notes:

1. Age as of 31 August 2021.

## Vaccination uptake by special educational needs

Pupils with special educational needs (SEN) were less likely to have been vaccinated against COVID-19 (48.1%) than those without SEN (53.5%).

## Vaccination uptake by sex

There was little difference in the COVID-19 vaccination rate between the sexes, with 52.4% of males and 52.8% of females having received a vaccination.

## Vaccination uptake by English as an additional language

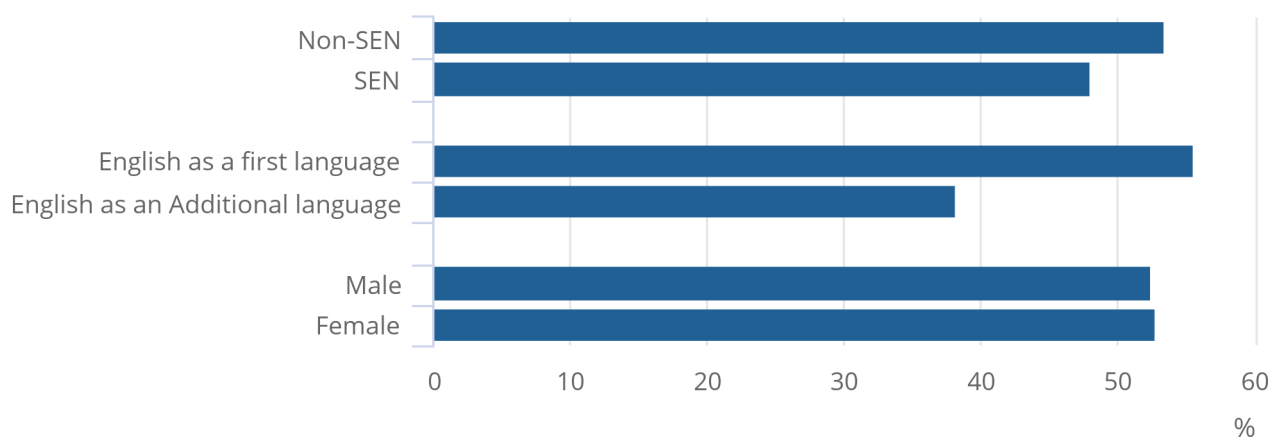
Pupils recorded as speaking English as an additional language (EAL) were less likely to have been vaccinated against COVID-19 (38.2%) than those not recorded as speaking EAL (55.5%).

### Figure 3: Pupils with special educational needs, and who speak English as an additional language both had lower coronavirus vaccination uptake

Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated against coronavirus by special educational needs status, sex and English as an additional language status, England, up to 9 January 2022

### Figure 3: Pupils with special educational needs, and who speak English as an additional language both had lower coronavirus vaccination uptake

Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated against coronavirus by special educational needs status, sex and English as an additional language status, England, up to 9 January 2022



Source: Office for National Statistics - Linked English Schools Census (DfE) and National Immunisation Management System (NIMS) dataset

#### Notes:

1. Age as of 31 August 2021.

## 5 . Coronavirus vaccinations by deprivation measures (for pupils aged 12 to 15 years)

### Vaccination uptake by Income Deprivation Affecting Children Index

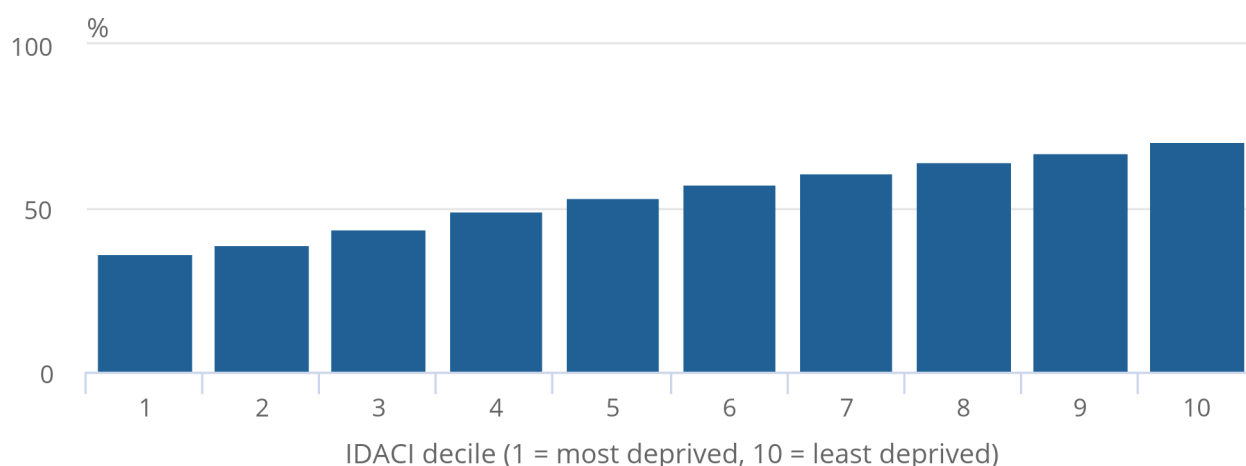
Pupils aged 12 to 15 years living in more deprived areas were less likely to have received a coronavirus (COVID-19) vaccination. Using the Income Deprivation Affecting Children Index (IDACI) deciles vaccination uptake increased as the IDACI deprivation level decreased. For example, 36.1% of pupils in IDACI decile 1 (most deprived) had been vaccinated, compared with 70.3% in IDACI decile 10 (least deprived), see Figure 4. Further information on how the IDACI deciles are derived is available in Section 9.

#### Figure 4: Pupils living in more deprived areas were less likely to have been vaccinated against coronavirus

Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated against coronavirus by IDACI deprivation deciles, England, up to 9 January 2022.

### Figure 4: Pupils living in more deprived areas were less likely to have been vaccinated against coronavirus

Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated against coronavirus by IDACI deprivation deciles, England, up to 9 January 2022.



Source: Office for National Statistics - Linked English Schools Census (DfE) and National Immunisation Management System (NIMS) dataset

#### Notes:

1. Age as of 31 August 2021.
2. The IDACI (Income Deprivation Affecting Children Index) calculates deprivation deciles by ranking the 32,844 lower super output areas (LSOA) in England from most deprived to least deprived and dividing them into 10 equal groups.



## **Vaccination uptake by free school meals**

Pupils eligible for free school meals (FSM) had a lower COVID-19 vaccination uptake (35.9%) than those not eligible for FSM (58.9%). Pupils were defined as “FSM eligible” if they accessed FSM within the last six years from the English Schools Census date (21 January 2021).

## **6 . Coronavirus vaccinations by region (for pupils aged 12 to 15 years)**

## Vaccination uptake by region

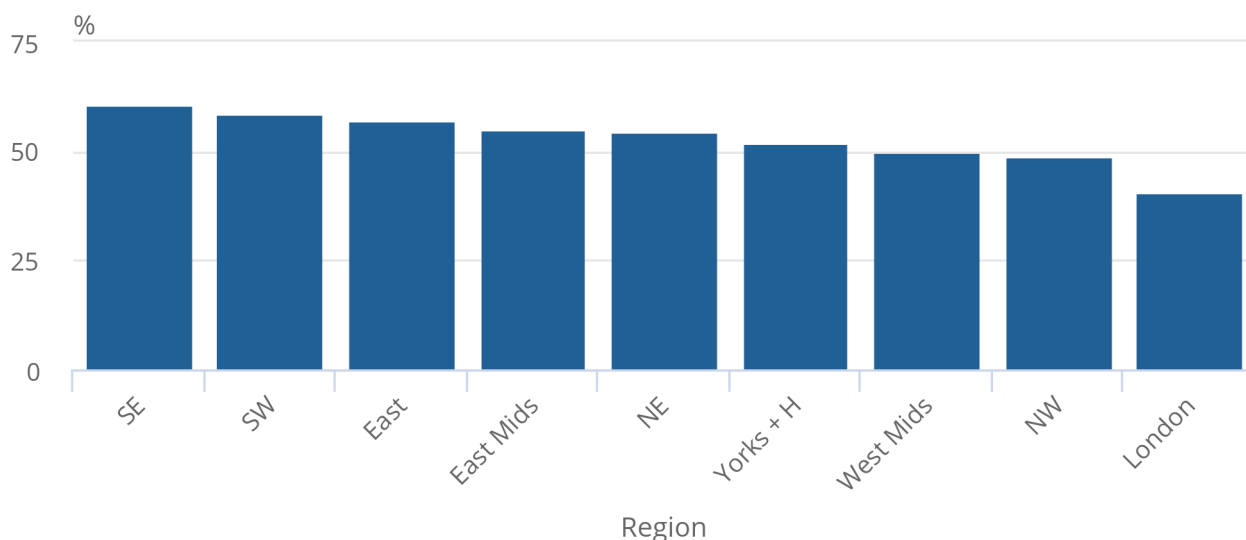
There was variation in coronavirus (COVID-19) vaccination uptake between regions (Figure 5). The South East had the highest uptake (60.7%) among secondary school pupils aged 12 to 15 years, while London had the lowest uptake (40.8%). Rural pupils had a higher vaccine uptake (62.6%) than pupils in urban areas (51.2%). More information on breakdowns by area characteristics is available in the underlying datasets.

**Figure 5: The South East region had the largest proportion of pupils vaccinated against coronavirus, while London had the smallest**

Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated against coronavirus by region, England, up to 9 January 2022

Figure 5: The South East region had the largest proportion of pupils vaccinated against coronavirus, while London had the smallest

Percentage of pupils aged 12 to 15 years in state-funded schools who have been vaccinated against coronavirus by region, England, up to 9 January 2022



Source: Office for National Statistics – Linked English Schools Census (DfE) and National Immunisation Management System (NIMS) dataset

### Notes:

1. Age as of 31 August 2021.
2. Regional abbreviations:
  - SE – South East
  - SW – South West
  - East – East of England
  - East Mids – East Midlands
  - NE – North East
  - Yorks + H – Yorkshire and the Humber
  - West Mids – West Midlands
  - NW – North West.

## 7 . Logistic regression for factors affecting coronavirus vaccination uptake

The available characteristics associated with coronavirus (COVID-19) vaccination status are all interlinked. For example, 49% of Black Caribbean pupils are eligible for free school meals (FSM) compared with 11% of Indian pupils.

Multivariable statistical modelling can be used to estimate the relative effect of each characteristic on the likelihood of vaccination, while controlling for other factors. We used logistic regression to estimate the odds ratios of being vaccinated associated with each demographic, socio-economic and geographical factor. The odds ratio is a measure of how likely an outcome is given a particular characteristic, compared with a baseline.

The following factors were entered separately into a model, along with age and sex, to get the baseline impact of each factor after accounting for any difference because of age and sex (these two variables were found to have little impact on the odds of being vaccinated between each category):

- ethnicity
- special educational needs status
- English as an additional language status
- free school meals status
- Income Deprivation Affecting Children Index decile
- region
- urban/rural

"A "fully adjusted" model was then fitted by including all factors simultaneously in the model. This allowed us to check the association between each factor and the likelihood of vaccination, once we accounted for differences because of all other variables in the model. Results for all the models produced can be found in the underlying dataset.

Figure 6 compares the baseline model for ethnicity and the impact of ethnicity after controlling for all available factors in the "fully adjusted" model. After accounting for differences in demographic, socio-economic and geographical factors, the likelihood of vaccination for each ethnic group that initially had a lower likelihood of vaccination in the baseline model moves closer to that of the baseline category (White British). This means that part of the difference in likelihood of vaccination between ethnicities is explained by the different distribution of other factors by ethnic groups. For example, different patterns of deprivation measures available across ethnic groups, and different distribution of ethnic groups between urban and rural areas. Socio-economic variables, such as English as an additional language (EAL) and FSM status, had a greater impact on the odds ratios than the geographic variables (region and urban/rural status).

Bangladeshi pupils see the biggest impact (see Figure 6). However, large differences in the likelihood of being vaccinated for each ethnic group still exist after controlling for all the available factors.

### **Figure 6: Controlling for demographic and socio-economic factors has an impact on the odds of coronavirus vaccination for each ethnic group**

**Odds ratio of pupils being vaccinated by ethnicity, England, up to 9 January 2022**

**Notes:**

1. Age as of 31 August 2021.
2. The baseline model contains ethnicity, age and sex. The fully adjusted model contains, ethnicity, age, sex and in addition EAL, special educational needs (SEN), FSM, Income Deprivation Affecting Children Index (IDACI), region, urban/rural.
3. The odds ratio is a measure of how likely an outcome is given a particular characteristic. A value greater than one indicates that people in that group are more likely to be vaccinated than those in the relevant baseline category. For example, the odds ratios for the ethnic groups in the graph show whether pupils in each ethnic group are more or less likely to have been vaccinated compared with White British pupils, assuming that their characteristics in the other variables in the model are the same.

#### Download the data

[.xlsx](#)

The odds ratios for the remaining variables in the “fully adjusted” model are given in Figure 7. After controlling for demographic and socio-economic characteristics, variations between regions remained but pupils in the North West had a lower likelihood of being vaccinated than pupils in London, whereas in the baseline model for region, pupils in London had the lowest likelihood of vaccination.

### **Figure 7: Regional variation in coronavirus vaccine uptake still exists when controlling for differences in pupil characteristics**

**Odds ratio of pupils being vaccinated by demographic, socio-economic and geographic characteristics, England, up to 9 January 2022**

#### Notes:

1. Age as of 31 August 2021.
2. The odds ratio is a measure of how likely an outcome is given a particular characteristic. A value greater than one indicates that people in that group are more likely to be vaccinated than those in the relevant baseline category. For example, the odds ratios for the regions groups in the graph show whether pupils in each region are more or less likely to have been vaccinated compared with the London region, assuming that their characteristics in the other variables in the model are the same.
3. Ethnicity was included in the model presented in this chart, but is not presented in this figure. The odds ratios for ethnicity for this model are presented in Figure 6.

#### Download the data

[.xlsx](#)

## **8 . Coronavirus vaccination rates: school-level analysis**

We have calculated the percentage of pupils aged 12 to 15 years vaccinated against coronavirus (COVID-19) in each school. In this section special schools were excluded as these schools tend to be smaller and therefore are more likely to have extreme vaccination rates at an individual school level.

## Percentage of pupils vaccinated per school by region

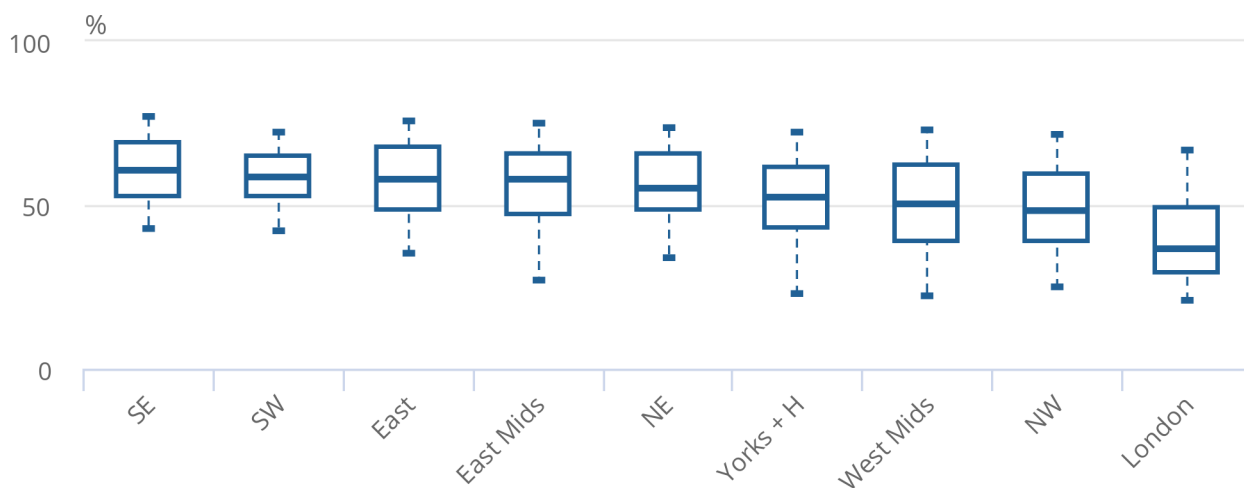
Schools in the South East had the greatest median value, with the secondary school in the middle of the distribution having had 60.7% of its pupils vaccinated against COVID-19, compared with 37.3% for the equivalent value in London (Figure 8). Vaccination rates varied greatly between schools within the same region, to a greater extent than between regions, with the greatest variation within the West Midlands region. In this region, 90% of schools had between 22.3% and 73.2% of pupils vaccinated. We will explore this intra-regional variation further in future analysis.

**Figure 8: There is large variation within regions in the proportion of pupils vaccinated against coronavirus in each school**

Percentage of pupils aged 12 to 15 years in state-funded secondary schools who have been vaccinated by region, England, up to 9 January 2022.

Figure 8: There is large variation within regions in the proportion of pupils vaccinated against coronavirus in each school

Percentage of pupils aged 12 to 15 years in state-funded secondary schools who have been vaccinated by region, England, up to 9 January 2022.



Source: Office for National Statistics – Linked English Schools Census (DfE) and National Immunisation Management System (NIMS) dataset

### Notes:

1. Age as of 31 August 2021.
2. Regional abbreviations:
  - SE – South East
  - SW – South West
  - East – East of England
  - East Mids – East Midlands
  - NE – North East
  - Yorks + H – Yorkshire and the Humber
  - West Mids – West Midlands
  - NW – North West

## Percentage of pupils vaccinated per school by free school meal band

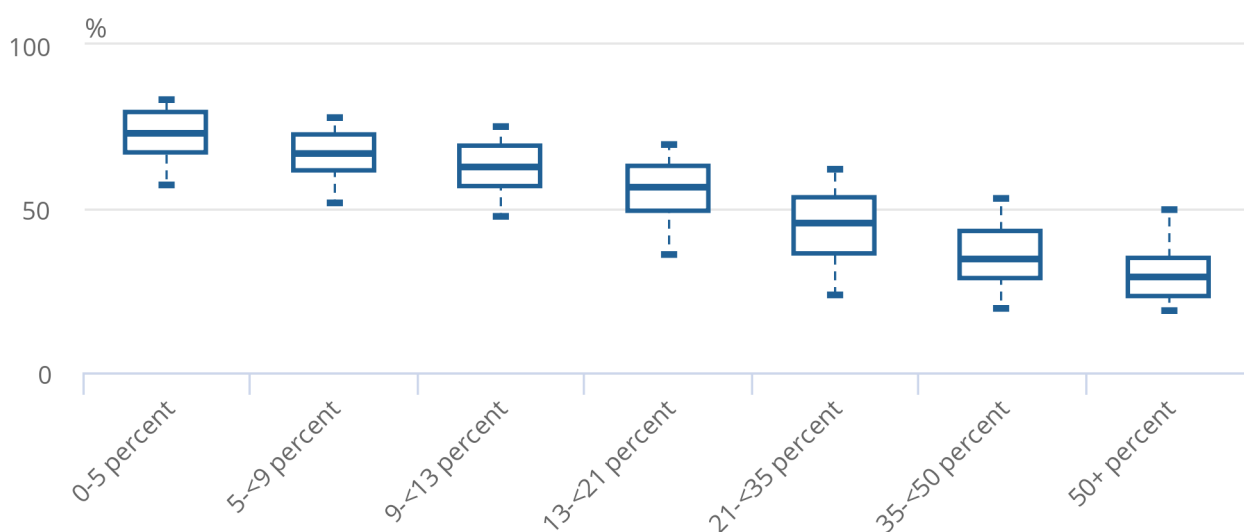
Schools with higher proportions of pupils eligible for free school meals (FSM) have lower COVID-19 vaccination rates (Figure 9). Schools with less than 5% of pupils accessing FSM had the largest median vaccination rate. The secondary school in the middle of the distribution had 73.2% of its pupils vaccinated, compared with a median rate of 29.2% for schools with more than 50% of pupils accessing FSM.

**Figure 9: Coronavirus vaccination uptake varies between schools in the same free school meal band**

Percentage of pupils in state-funded secondary schools who have been vaccinated against coronavirus grouped by the percentage of pupils accessing free school meals, England, up to 9 January 2022.

### Figure 9: Coronavirus vaccination uptake varies between schools in the same free school meal band

Percentage of pupils in state-funded secondary schools who have been vaccinated against coronavirus grouped by the percentage of pupils accessing free school meals, England, up to 9 January 2022.



Source: Office for National Statistics - Linked English Schools Census (DfE) and National Immunisation Management System (NIMS) dataset

#### Notes:

1. Age as of 31 August 2021.
2. Within each free school meal (FSM) band the percentiles for 5%, 25%, 50%, 75% and 95% were calculated and displayed in the box plots. The blue box in the charts represents the middle 50% of schools in each free school meal band and the line in the middle of the box represents the position of the school with the median score (mid-point).

## 9 . Coronavirus vaccination uptake in children and young people, England data

[Coronavirus vaccination uptake in children and young people, England](#)

Dataset | Released 1 February 2022

Figures on coronavirus (COVID-19) vaccination uptake in school pupils aged 12 to 17 years attending state-funded secondary, sixth forms and special schools, broken down by demographic and geographic characteristics, using a linked English Schools Census and National Immunisation Management System dataset, up to 9 January 2022 (Experimental Statistics).

## 10 . Glossary

### Confidence interval

A confidence interval gives an indication of the degree of uncertainty of an estimate, showing the precision of a sample estimate. The 95% confidence intervals are calculated so that 95% of the time the true unknown value would lie between the lower and upper confidence limits. A wider interval indicates more uncertainty in the estimate. Overlapping confidence intervals indicate that there may not be a true difference between two estimates.

For more information, see our methodology page on [statistical uncertainty](#).

### English as an additional language (EAL)

The [Department for Education](#) defines English as an additional language (EAL) as “if a pupil is exposed to a language at home that is known or believed to be other than English. It is not a measure of English language proficiency or a good proxy for recent immigration”. In this publication, we use information recorded about whether a pupil has EAL as recorded by schools as part of the English Schools Census.

### Free school meals (FSM)

Free school meals (FSM) is a statutory benefit available to school aged children from families who meet the qualifying criteria (predominantly based around income), which is [published by the Department for Education](#). In this publication, we define FSM as pupils having been eligible for FSM in the last six years, using information recorded by schools as part of the English Schools Census.

### Special educational needs (SEN)

The [Department for Education and Department for Health and Social Care](#) defines a child as having special educational needs (SEN) if “they have a learning difficulty or disability which calls for special educational provision to be made for him or her. A child of compulsory school age or a young person has a learning difficulty or disability if he or she: has a significantly greater difficulty in learning than the majority of others of the same age, or has a disability which prevents or hinders him or her from making use of facilities of a kind generally provided for others of the same age in mainstream schools or mainstream post-16 institutions.” In this publication, we use information recorded about whether a pupil has SEN recorded by schools as part of the English Schools Census. Pupils attending special schools are included in all analysis in this article except the school level analysis (Section 7), which focuses on secondary schools.

### Odds ratio

An odds ratio indicates the likelihood of pupils having received at least one dose of a coronavirus (COVID-19) vaccine given a particular characteristic or variable. When a characteristic or variable has an odds ratio of one, this means there is neither an increase nor a decrease in the likelihood of having received a vaccination compared with the baseline category. An odds ratio greater than one indicates an increased likelihood of having received a COVID-19 vaccination compared with the baseline category. An odds ratio less than one indicates a decreased likelihood of having received a COVID-19 vaccination compared with the baseline category.

## Income Deprivation Affecting Children Index (IDACI)

The Income Deprivation Affecting Children Index (IDACI), used for our deprivation figures, calculates deprivation deciles based on the proportion of children aged 0 to 15 years living in deprived income households, that is households not working or working on low incomes eligible for means tested benefits. The index ranks the 32,844 small areas in England from most deprived to least deprived and divides them into 10 equal groups. For example, small area X is ranked 5,000 out of 32,844 small areas in England, where 1 is the most deprived. This means that small area X is among the 20% most deprived small areas in the country and therefore would be in IDACI decile 2. The Department for Communities and Local Government have published further information.

## 11 . Data sources and quality

### Measuring the data

Data from the English Schools Census and National Immunisation Management System were linked to produce the analysis used in this article.

Quality assurance of the linked dataset is ongoing; therefore, caution should be taken when using these figures.

### English Schools Census (ESC)

The English Schools Census (ESC) is a mandatory annual return to the Department for Education by state-funded schools and local authorities. The ESC covers pupil and school characteristics for a set date. For data in this article this was Thursday 21 January 2021. All pupils attending state-funded primary schools, secondary schools (including sixth forms attached to schools), nurseries and special schools in England are recorded. This is over 3.2 million pupils aged 12 to 17 years; approximately 92% of all those aged 12 to 15 years and 65% of those aged 16 to 17 years in England (age as at 31 August 2021). The Department for Education releases [ESC data](#) online. All demographic, geographic and personal data used in this article comes from the ESC.

### National Immunisation Management System (NIMS)

The National Immunisation Management System (NIMS) records England's coronavirus (COVID-19) vaccinations programme. The extract used contains data for COVID-19 vaccinations administered across all settings up to 9 January 2022. NIMS data are updated daily and retrospective updates can be made.

### Linked data asset: data linkage process

The linked administrative data asset in this article linked pupils in the ESC to NIMS. Pupils with ESC records were linked to their NHS number which allows onward linking to their vaccination records contained in NIMS.

The data available for analysis do not cover all pupils aged 12 to 17 years in England. Pupils will be missing for the following reasons:



- they attended an independent school or were not enrolled in a school on 21 January 2021
- they moved into England after the ESC date (conversely pupils in state schools on the ESC date who have since left England and are still registered with a GP will be included)
- coverage will be lower among those who have finished Year 11 (those aged 16 or 17 as of 31 August 2021); those studying in Years 12 or 13 in sixth forms attached to schools will be included in the ESC but those studying in further education colleges or sixth form colleges will not be included (as the latest available ESC relates to the previous academic year, we do have total coverage of Year 12 pupils (those aged 16 years) as the ESC captured them in Year 11 prior to changing educational establishment
- they have never registered with a doctor or accessed NHS services (and therefore have no NHS number) or their personal details are not recorded consistently so it was not possible to find their corresponding NHS number (an NHS number was found for 98% of those aged 12 to 17 years on the ESC)
- vaccination data will be missing if an NHS number match was not found when linking NIMS to our dataset (99% of NIMS records were matched to an NHS number on our dataset)

## Strengths

One strength of the dataset is its size. The English Schools Census (ESC) contains pupil level data collected from all state-funded schools in England. This represents over 3.2 million pupils aged 12 to 17 years and allows for potential analysis of smaller under-representative groups.

The data contains a rich source of background characteristics which allow us to analyse how rates of coronavirus (COVID-19) vaccination differ by socio-demographic group, and examine the extent to which these differences are driven by other factors.

Making use of already existing administrative data sources avoids the need of setting up bespoke surveys which can be costly and suffer from response bias.

## Limitations

The latest ESC data available relate to the previous academic year so pupils may not be recorded in the schools they currently attend. Therefore, school-level analysis only relates to those aged 11 to 14 years at the start of the previous academic year (those now aged 12 to 15 years and in year groups 8 to 11) as the majority of these pupils will still be in the same school.

Coverage is lower among those who have finished Year 11 (those aged 16 or 17 years as of 31 August 2021). Those studying in Years 12 or 13 in sixth forms attached to schools will be included in the ESC but those studying in further education colleges or sixth form colleges will not be included. Since the latest available ESC relates to the previous academic year, we do have total coverage of Year 12 pupils (those aged 16 years) as the ESC captured them in Year 11 prior to changing educational establishment.

As we are using existing administrative data sources we cannot explore the reasons for lower vaccination rates among different groups.

## 12 . Future developments

We will continue to examine the analytical potential of the linked data asset and expand on our existing analysis.

## 13 . Acknowledgments

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SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



UK Health  
Security  
Agency

This analysis was produced by the Office for National Statistics (ONS) with support from our School Infection Survey research partners at the London School of Hygiene and Tropical Medicine and UK Health Security Agency.

## 14 . Related links

### [COVID-19 Schools Infections Survey](#)

Dataset | Released 27 October 2021

Initial estimates of staff and pupils testing positive for coronavirus (COVID-19) across a sample of schools within selected local authority areas in England.

### [Coronavirus and vaccinations 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, including estimates by socio-demographic characteristic.

### [Coronavirus \(COVID-19\) Infection Survey, antibody and vaccination data, UK: 26 January 2022](#)

Bulletin | Released 26 January 2022

Antibody and vaccination data by UK country and regions in England from the Coronavirus (COVID-19) Infection Survey.

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

Interactive tool | Updated as and when data become available

A live roundup of the latest data and trends about the coronavirus (COVID-19) pandemic from the ONS and other sources.