

Statistical bulletin

COVID-19 Schools Infection Survey, England: attitudes to vaccines and preventative measures, November to December 2021

Analysis of COVID-19 vaccines and preventative measures findings from the Schools Infection Survey's headteacher, parent and pupil questionnaires. The Schools Infection Survey is jointly led by the London School of Hygiene and Tropical Medicine, UK Health Security Agency and the Office for National Statistics.

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1 . Main points

- Helping to protect other people from getting coronavirus (COVID-19) was the main motivation for teenagers getting a COVID-19 vaccine.
- For 24% of pupils aged 5 to 11 years, their parents said they were unlikely to agree to their child having a COVID-19 vaccine, and reasons for not wanting to vaccinate their children included worrying about the side effects (54%) and waiting to see how it works (49%).
- Nearly three-quarters (74%) of secondary school headteachers said pupils wearing face coverings in communal areas was a measure implemented in their school.
- Over three-quarters (76%) of headteachers said that they were "very willing" to use CO2 monitors in their schools' classrooms, and 87% of headteachers said that they had been supplied with CO2 monitors.

2 . Vaccine sentiment

This section contains analysis of the parent and pupil surveys collected between 11 November and 15 December 2021. More information on the collection of data, including sample sizes and weighting, can be found in the [Measuring the data section](#).

Secondary school-aged pupils' attitudes to vaccination

We found that 70% of pupils in school Year 7 to school Year 13 (aged 12 to 18 years) said they had been vaccinated. [Official published figures](#) suggest that on 15 December 2021 when the study closed, 45.9% of 12- to 15-year-olds and 61.5% of 16-to 17-year-olds had received a coronavirus (COVID-19) vaccine. The higher prevalence of self-reported vaccination in our study is likely because of the selection bias of participating students. In our study, COVID-19 vaccine take-up was similar by gender (69% of boys and 71% of girls) but showed differences by age (84% for those aged 16 years and over and 67% for those aged 12 to 15 years). This matches the trend in the official data where COVID-19 vaccine take-up increases with age but is very similar across gender.

When asked for all the reasons why they decided to have a COVID-19 vaccine, "I am helping to protect other people from getting coronavirus" was a motivation for 63% of pupils. Other motivations included "it will protect me from getting coronavirus" (56%) and "my family have had the vaccine" (47%). Around 1 in 10 (11%) pupils said someone they respect encouraged them to get the vaccine. When asked to write who this respected person was, the majority of pupils wrote parents, with some stating their family member being vulnerable as the reason.

Of those who had not received a COVID-19 vaccine, over half (52%) of pupils said they were "very" or "fairly likely" to get a COVID-19 vaccine this winter if it was offered to them.

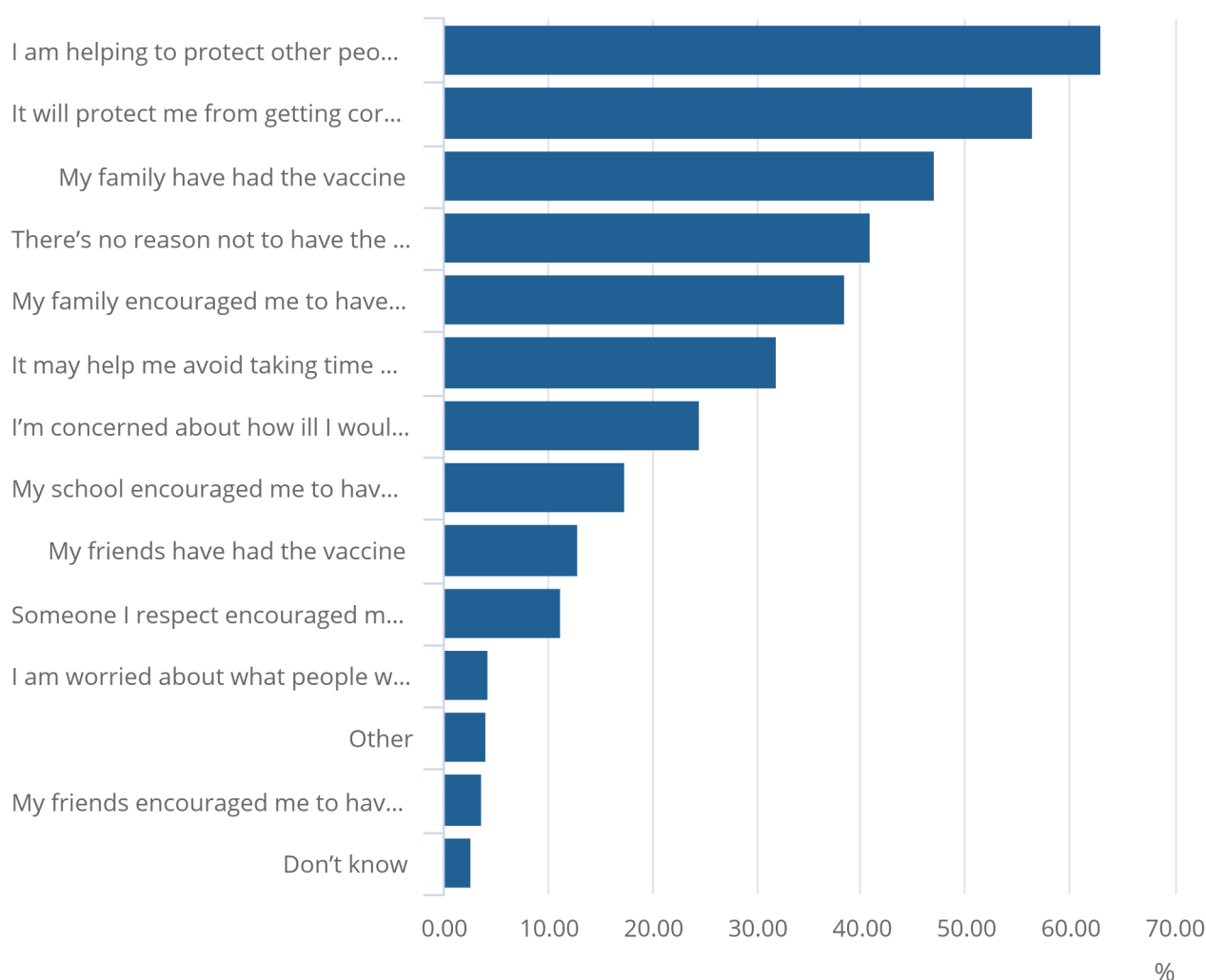
Of those who would be "fairly" or "very" unlikely to have the vaccine if offered, over half (51%) said they wanted to wait and see how the vaccine works. Other reasons include being worried about the side effects (42%) and "I don't think I need a COVID-19 vaccine" (34%).

Figure 1: The most common motivations for secondary school pupils getting a COVID-19 vaccine were protecting themselves and protecting others

England, December 2021

Figure 1: The most common motivations for secondary school pupils getting a COVID-19 vaccine were protecting themselves and protecting others

England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "Why did you decide to have the coronavirus (COVID-19) vaccination?"
2. Base: all pupils aged 12 to 18 years who had already received a COVID-19 vaccination.
3. Respondents could select more than one option.

Parent attitudes to vaccinating their primary school-aged children

We asked parents of children aged 5 to 11 years how likely they were to agree to their child having a COVID-19 vaccine if it was offered to them. For 62% of pupils, parents said they were "fairly" or "very likely" to agree to their child having a COVID-19 vaccine. For 24% of pupils, parents said they were "fairly" or "very unlikely" to agree to their child having a COVID-19 vaccine. The remaining responses indicated that parents were undecided whether their child should have a COVID-19 vaccine, or that their child already has received a COVID-19 vaccine. Our results on the likelihood of parents to vaccinate their children are similar to those found in the [Coronavirus and social impacts in Great Britain dataset](#).

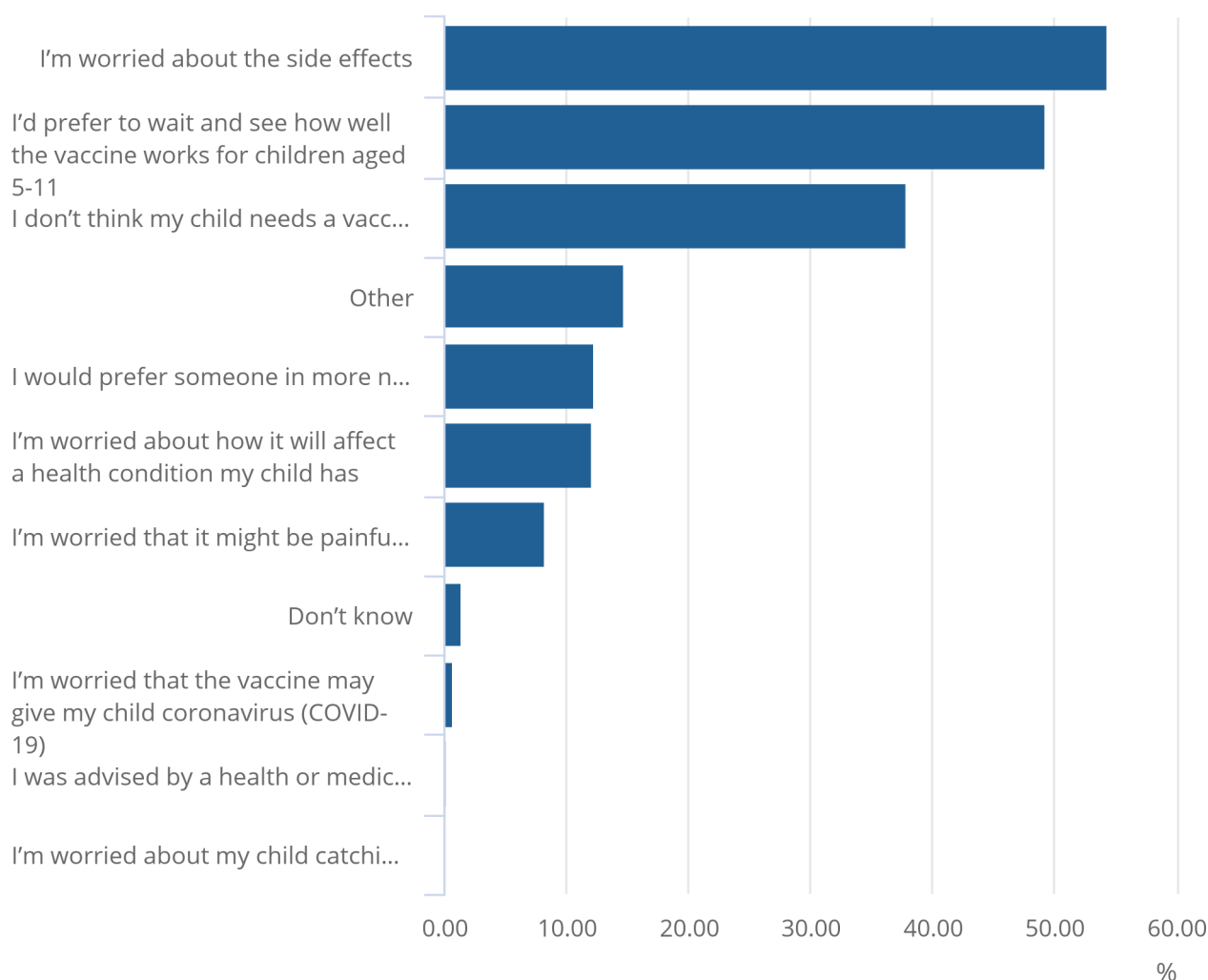
Of those who said they were unlikely to vaccinate their child if offered, the main reasons for not agreeing to get a COVID-19 vaccine were being worried about the side effects (54%) or waiting to see how well the COVID-19 vaccines work (49%).

Figure 2: Reasons for parents of children aged 5 to 11 years not wanting their children to get a COVID-19 vaccine

England, December 2021

Figure 2: Reasons for parents of children aged 5 to 11 years not wanting their children to get a COVID-19 vaccine

England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "Why are you unlikely to get the coronavirus (COVID-19) vaccination for your children aged 5-11?"
2. Base: children aged 5 to 11 years whose parents responded "very unlikely" or "fairly unlikely" to the question "How likely are you to agree to your children aged 5-11 having the coronavirus (COVID-19) vaccination this winter, if it is offered to you?"
3. [c]: data are suppressed because of low base sizes.
4. Respondents could select more than one option.

3 . Preventative measures in schools

This section contains analysis of the headteacher survey. More information on the collection of data, including sample sizes, can be found in the [Measuring the data section](#).

The data in this section are unweighted.

Headteachers in participating schools were asked which infection preventative measures were being implemented at their school in November to December 2021. Implementation of preventative measures may have changed since cases of the Omicron variant started rising in mid-December 2021 after this survey closed. Data has been provided separately for primary and secondary schools in cases where there are substantial differences by type of school, but caution should be used because of small sample sizes.

Distancing and bubbles

Around 9 in 10 (92%) headteachers said that their pupils were sat less than one metre apart from each other in the classroom. Primary schools showed the least distancing, with 95% of primary school headteachers and 84% of secondary school headteachers saying their pupils were sat less than one metre apart.

Two-thirds of headteachers (67%) said they were not keeping children in consistent groups or "bubbles" (62% of primary schools and 81% of secondary schools). The percentage of primary schools who said they keep pupils in the same classroom all day was 71%. This is likely to reflect how primary schools functioned before the coronavirus (COVID-19) pandemic. At the time of collection, there was no policy in place to sit pupils one meter apart or to keep pupils in bubbles.

The majority of primary school headteachers (62%) said they were still putting a stop to large gatherings of pupils such as assemblies. This was 45% for secondary schools.

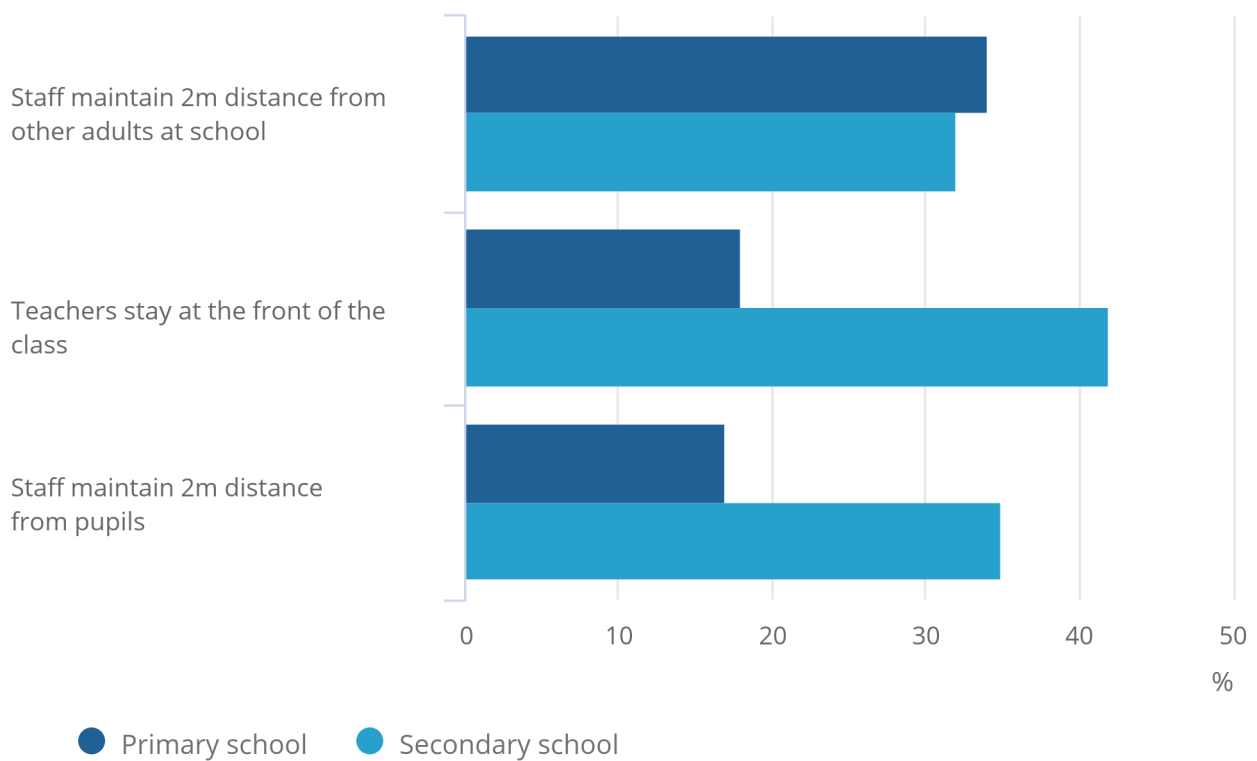
Staff distancing measures, such as staying at the front of the class (42%) and maintaining a two-metre distance from pupils (35%), are more frequently used in secondary schools. This again is likely to reflect pre-coronavirus conditions, where primary school teachers tend to move around the classroom more.

Figure 3: Percentage of headteachers who said the following staff distancing measures are being implemented in their school

England, December 2021

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England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "Which of the following infection preventive measures are still being implemented at your school?"
2. Base: all secondary school headteachers.

Face coverings

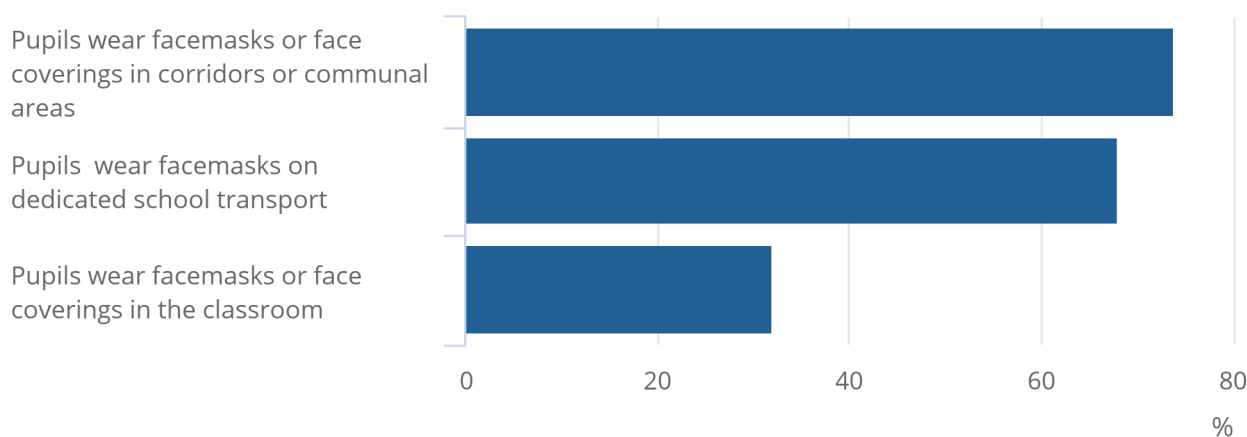
A high number of secondary schools implemented students wearing face coverings, with 74% of secondary school headteachers saying pupils wearing face coverings in communal areas was implemented in their school. The national recommendation to wear face coverings in communal areas came in on 29 November 2021. Primary schools have been excluded from this analysis as children aged under 11 years old were exempt from wearing face coverings at the time of the survey.

Figure 4: Percentage of headteachers who said the following pupil face covering measures are being implemented in their school

England, December 2021

Figure 4: Percentage of headteachers who said the following pupil face covering measures are being implemented in their school

England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "Which of the following infection preventive measures are still being implemented at your school?"
2. Base: all secondary school headteachers.

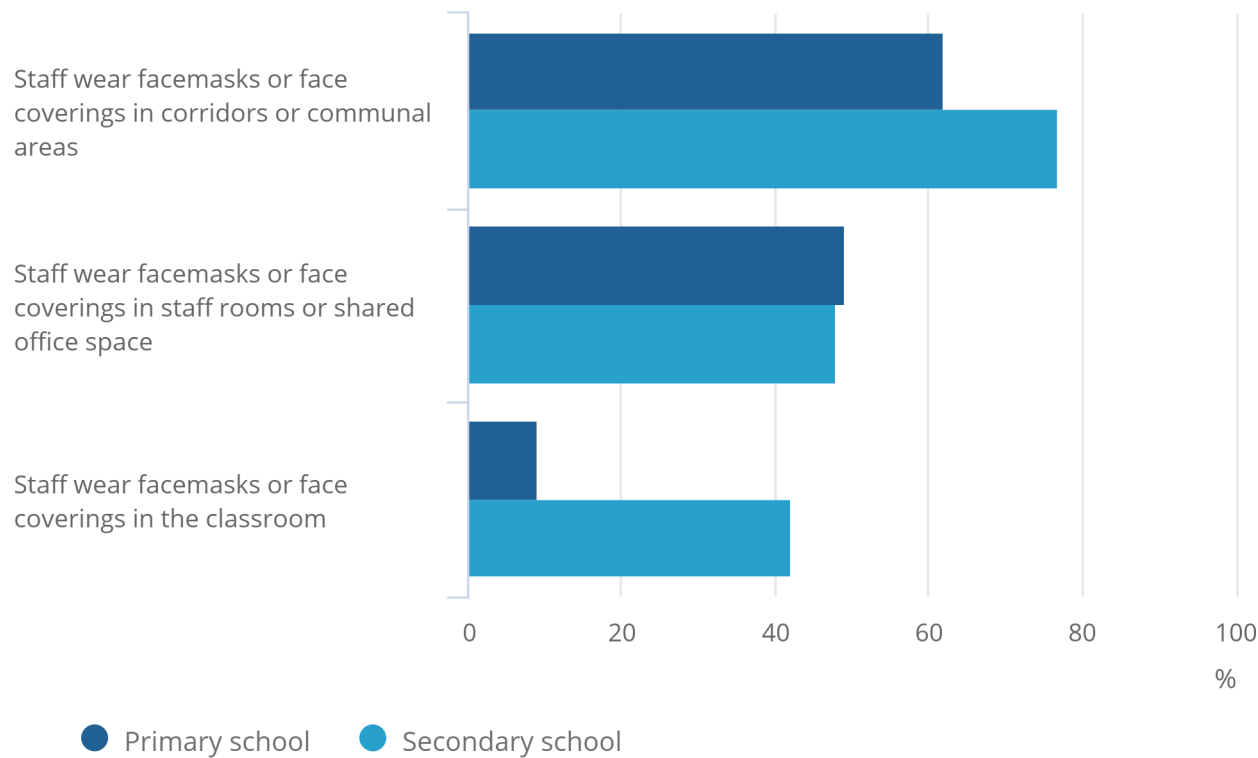
A larger proportion of secondary school headteachers reported implementing face coverings for staff in the classroom (42%) than pupil face coverings in the classroom (32%).

Figure 5: Percentage of headteachers who said the following staff face covering measures are being implemented in their school

England, December 2021

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England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "Which of the following infection preventive measures are still being implemented at your school?"
2. Base: all primary and secondary school headteachers.

Isolation measures

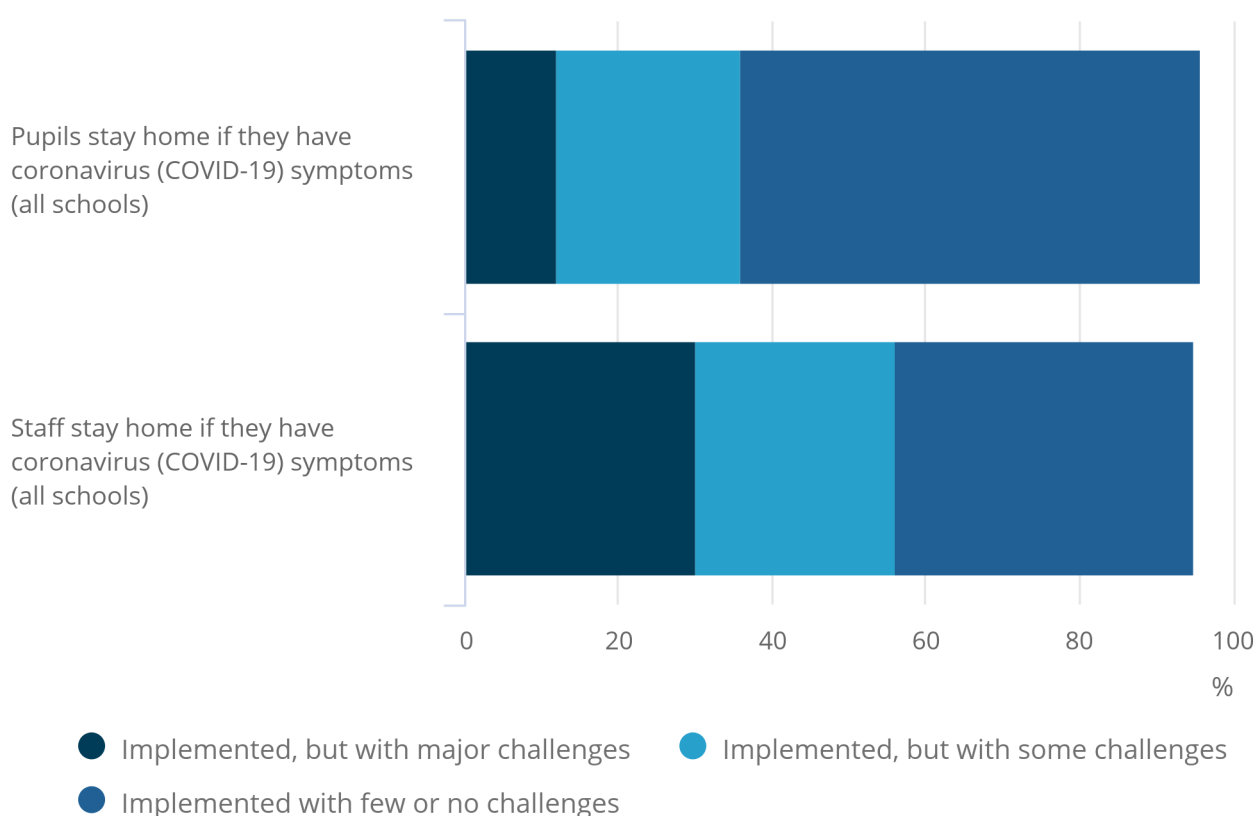
At the time of collection, the government recommended that children and staff stay at home if they show coronavirus (COVID-19) symptoms. Almost all headteachers that completed our survey said that they had implemented these measures; for example, “pupils stay home if they have coronavirus (COVID-19) symptoms” (96%) or “staff stay at home if they have coronavirus (COVID-19) symptoms” (95%). However, nearly one-third (30%) of schools said they had major challenges as a consequence of implementing staff staying at home if they have coronavirus symptoms.

Figure 6: Percentage of headteachers who said the following isolation measures are being implemented in their school

England, December 2021

Figure 6: Percentage of headteachers who said the following isolation measures are being implemented in their school

England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "Which of the following infection preventive measures are still being implemented at your school?"
2. Base: all headteachers.

Hygiene measures

Hygiene measures are widely implemented across all schools. Implementation is above 90% for all measures such as washing or sanitising hands for both pupils and staff. In secondary schools, the placement of hand sanitiser in entrance areas (100%) and classrooms (97%) is more prevalent than getting pupils to regularly wash or sanitise their hands (81%).

Cleaning and shared equipment measures

The majority of schools have increased the cleaning of frequently touched surfaces (95%), with 11% of schools saying this was implemented with major challenges. Cleaning the dining hall between groups has been implemented by three-quarters of schools (75%).

Measures with lower implementation

Some measures with low implementation generally focused on remote working for staff. The percentage of schools who allowed staff to stay away from work if they were vulnerable was 9%. The percentage of schools allowing staff to stay away from work if they lived with someone vulnerable was at 3%.

Measures focused on school processes also generally saw low implementation, but some exceptions include:

- 55% of primary schools were staggering break times
- 45% of secondary schools had one-way systems in school corridors
- 42% of primary schools were implementing social distancing measures for parents at pick-up and drop-off

More detail can be found in the [Data section](#).

4 . Ventilation and CO2 monitor usage

This section contains analysis of the headteacher survey. More information on the collection of data, including sample sizes, can be found in the [Measuring the data section](#).

The data in this section are unweighted.

Ventilation

Three-quarters of headteachers (75%) said that they thought ventilation was “very important” in reducing the spread of coronavirus (COVID-19) in schools, and 70% said they thought ventilation was “very important” for general health and well-being.

When asked how often headteachers take actions to improve ventilation in their schools, the majority of schools reported opening windows or external doors either periodically or having them open for most of the school day, on a daily basis. For both primary and secondary schools, 93% reported opening windows or external doors periodically every day.

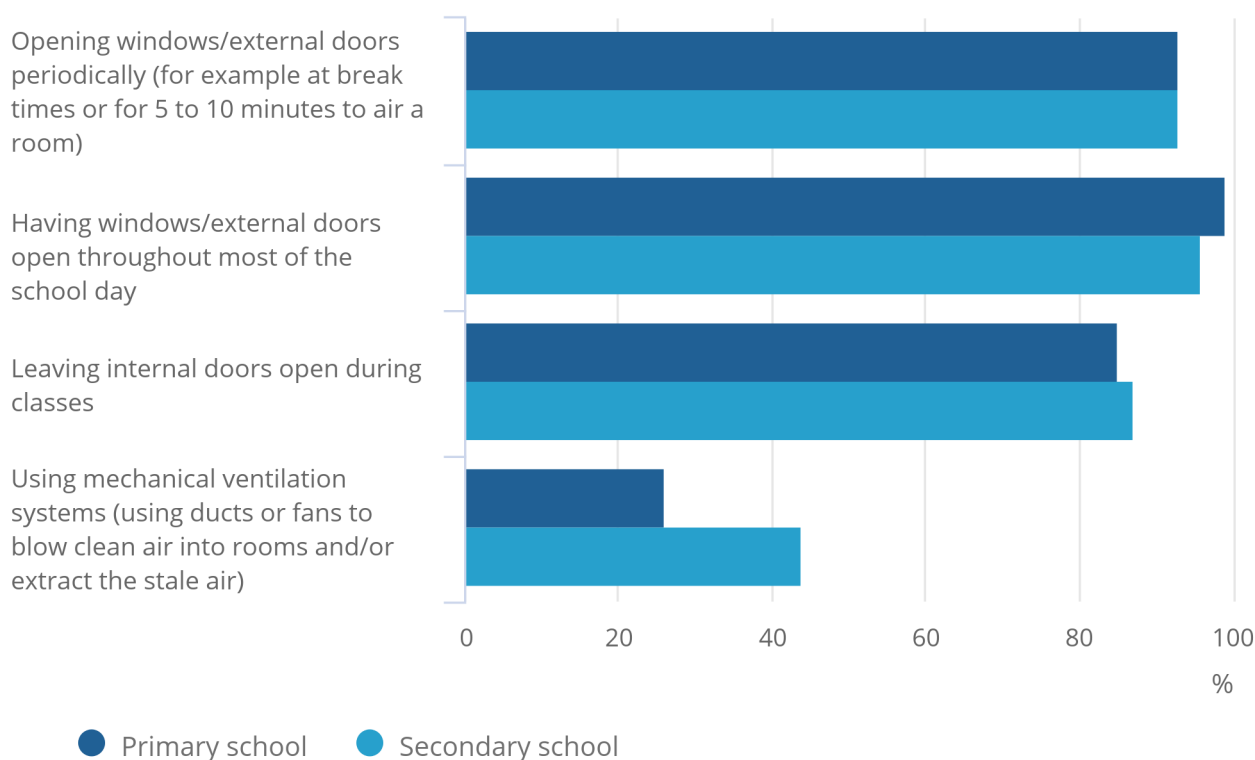
The daily use of ventilation systems was more prevalent in secondary schools than primary schools, with 44% of secondary schools reporting using mechanical ventilation systems daily, compared with 26% of primary schools.

Figure 7: Most schools implement these measures to improve ventilation on a daily basis

England, December 2021

Figure 7: Most schools implement these measures to improve ventilation on a daily basis

England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "How often do you take the following actions to improve ventilation in your school?"
2. Base: all primary and secondary school headteachers.

Headteachers were also asked how challenging each of these measures were to implement. Secondary schools were more likely to report that opening windows or external doors periodically was “very challenging”, with 29% of secondary schools saying this was very challenging to implement, compared with 9% of primary schools. Nearly half (46%) of primary schools implementing mechanical ventilation systems said they found them “very challenging”, compared with 18% of secondary schools. Having windows or external doors open throughout most of the school day was reported to be “not challenging at all” by 51% of primary schools and 38% of secondary schools.

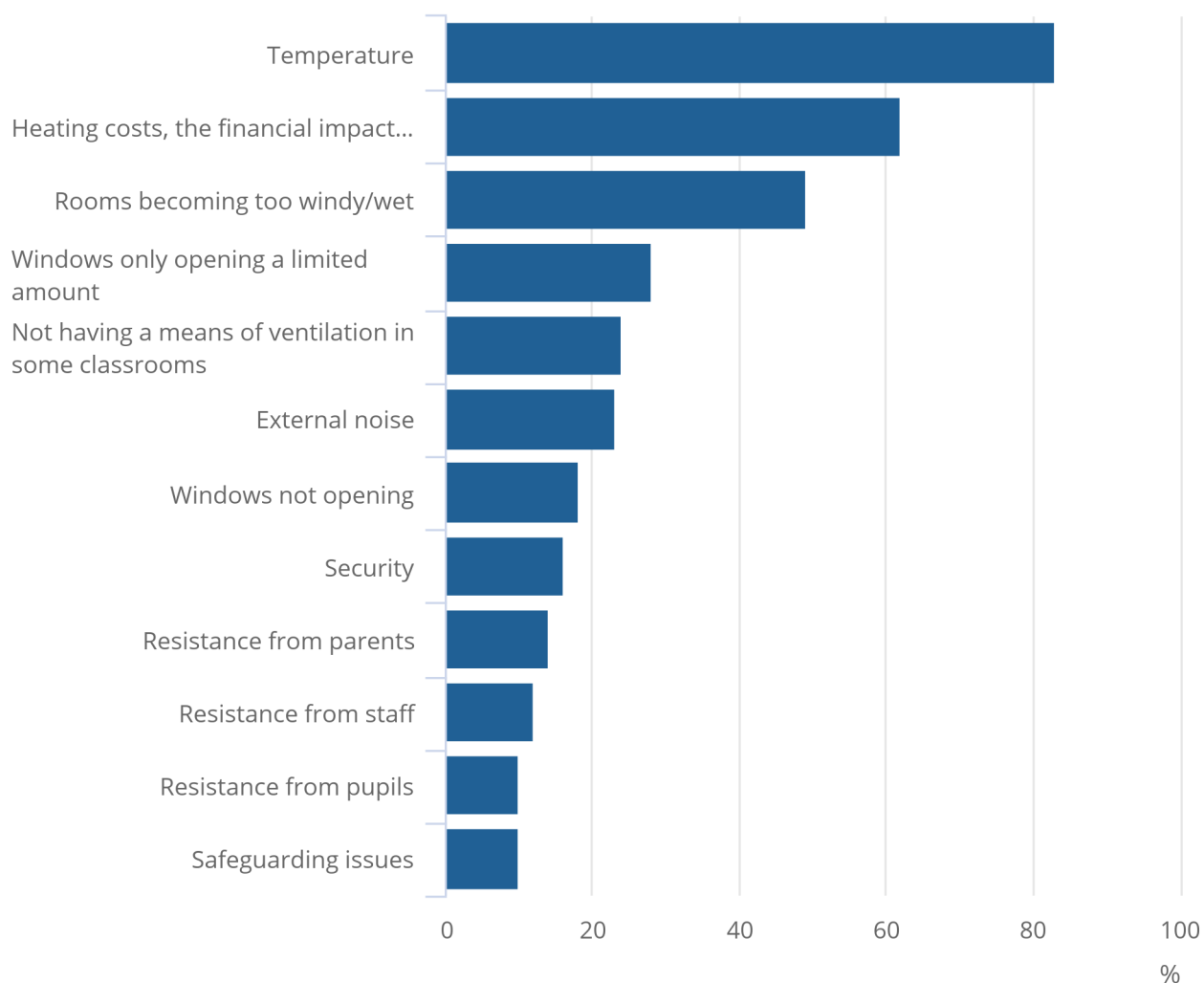
The largest barriers to improving ventilation reported by headteachers were temperature (83% stating this was a barrier), heating cost (62%), and rooms becoming too windy or wet (49%). This was similar across primary and secondary schools.

Figure 8: Temperature was the most frequently reported barrier to improving ventilation

England, December 2021

Figure 8: Temperature was the most frequently reported barrier to improving ventilation

England, December 2021



Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "To what extent, if any, do you think each of the following is a barrier to improving ventilation in your school? Where 1 is no barrier, and 5 is a significant barrier." A score of 4 or 5 has been combined to be shown on the above.
2. Base: all headteachers.

CO2 monitor usage

Over three-quarters (76%) of headteachers said that they were “very willing” to use CO2 monitors in their schools’ classrooms, and 78% said they’d be “very willing” to use them in staff only rooms. Furthermore, 87% of headteachers said that they had been supplied with CO2 monitors – 92% of primary school headteachers and 74% of secondary school headteachers. However, around half (51%) said that they had not been supplied with enough monitors to provide the coverage they would like for classrooms and other teaching spaces. Similarly, 56% said they had not been supplied with enough monitors to provide coverage for staff only areas (61% of primary schools and 39% of secondary schools). As of 10 December 2021, the Department for Education (DfE) published that [353,932 monitors had been delivered to schools](#).

Figure 9: Over half of headteachers said they had not been supplied with enough monitors for the following areas

England, December 2021

Source: Office for National Statistics – Coronavirus (COVID-19) Schools Infection Survey

Notes:

1. Question: "Have you received enough CO2 monitors to provide the coverage you would like for the spaces below?"
2. Base: all headteachers.
3. [c]: data suppressed because of small sample sizes.

Of those who had received monitors, 64% of primary school headteachers said all the monitors were in place, compared with 43% of secondary school headteachers. Of those who had put the monitors in place, 59% of primary school headteachers said they were “very easy” to set up, compared with 32% of secondary school headteachers.

Of those who had CO2 monitors in place, 19% said they had experienced consistent red readings (1500ppm CO2 concentration). Of those with red readings, 87% said they checked that the monitors worked, and 60% said it was possible to reduce the CO2 levels by increasing ventilation in these spaces. 53% of the teachers with consistent red readings said CO2 levels could not be reduced through improvement works.

At the time of collection, nearly a quarter (22%) of headteachers said they had not received any guidance on using CO2 monitors in their school, and 12% said they had received guidance but not yet read it. Of those that received guidance and had read it, we asked on a scale of one to five how useful it was, where one is "not at all" and five is "extremely useful"; 82% gave a score of three to five.

5 . COVID-19 Schools Infection Survey, questionnaire and antibody data

[COVID-19 Schools Infection Survey, questionnaire and antibody data, England](#)

Dataset | Released 1 February 2022

Indicators from the Schools Infection Survey to understand the impact of the coronavirus (COVID-19) pandemic on young people and schools in England. Including antibody data, questionnaire analysis, and breakdowns by age, sex and region where possible.

6 . Collaboration

LONDON
SCHOOL *of*
HYGIENE
& TROPICAL
MEDICINE



UK Health
Security
Agency

The coronavirus (COVID-19) Schools Infection Survey analysis was produced by the Office for National Statistics (ONS) in collaboration with our research partners at the London School of Hygiene and Tropical Medicine, and UK Health Security Agency.

7 . Glossary

Headteachers

The headteacher questionnaire is filled out by either the headteacher of a participating school in the Schools Infection Survey (SIS) or a nominated member of school staff. The results are based on responses collected from 64 headteachers, 10 assistant or deputy headteachers, 14 leadership team members, and 19 other staff (for example, personal assistant, business administrator and office staff). We refer to the base of the results as “headteachers” even if the questionnaire was completed by someone else.

Confidence intervals

Confidence intervals are provided in reference tables for the parent and pupil surveys for an indication of the statistical uncertainty that may be present in the estimates. However, the method of calculation does not account for the complex sample design of the study, so intervals are indicative only.

CO2 monitors

CO2 monitors were supplied by the Department for Education to educational settings in England. This was to enable staff to identify areas where ventilation needed to be improved, and to provide reassurance that existing ventilation measures were working.

8 . Measuring the data

Data sources and response rates

[The Schools Infection Survey](#) (SIS) invites schools to register for the study and to ask their pupils to take part in antibody testing for coronavirus (COVID-19). Alongside testing, questionnaires are sent to headteachers, pupils and parents.

The headteacher questionnaire asks headteachers, or a nominated member of staff, to fill it out on behalf of their school. At the time of the survey going live, 134 schools had registered and been invited to complete the questionnaire, with 107 responding (80% response rate). The analysis in this publication of the headteacher questionnaire is unweighted because of the small sample of responses.

A separate questionnaire is issued to parents of all registered pupils in Year 0 (reception) to Year 11. The parents of 4,870 pupils were invited to complete the questionnaire; 3,375 parents responded, which equates to 4,128 children, as each parent can respond on behalf of multiple children enrolled in the study. This gives an 85% response rate.

A further questionnaire is issued to secondary school-aged pupils in school Year 7 to Year 13. 3,304 pupils were invited and 2,045 responded (62% response rate).

The data in this publication from the parent and pupil questionnaires are weighted to population totals for pupils in England. The coverage dates for each survey are:

- parent – 22 November to 15 December 2021
- pupil – 11 November to 15 December 2021
- headteacher – 25 November to 15 December 2021

Sampling methodology

The schools in the study were selected using a multi-stage stratified random sample, designed to achieve a sample of 180 schools. Firstly, local authorities were selected within each of the nine regions of England to achieve a representative sample both regionally and nationally. Then 117 primary schools and 63 secondary schools across England were selected (13 primary schools and seven secondary schools in each region). The sample is drawn from the Department for Education (DfE) list of state funded schools in England, therefore excluding children attending independent schools or children that are home schooled. The sample also excludes special education needs (SEN) schools.

A number of schools that participated in the Schools Infection Survey (SIS) from the 2020 to 2021 academic year were purposefully invited to take part in SIS for this academic year (2021 to 2022). This is so we can potentially complete longitudinal analysis of clinical data collected. More information on the 2020 to 2021 SIS and how it differs, can be found in [COVID-19 Schools Infection Survey: methods and further information](#).

All children and parents within registered schools were invited to participate on a voluntary basis. Parents enrol on behalf of their children in school Year 0 (reception) to Year 11. Pupils in school Year 12 and Year 13 can enrol themselves. There can be differences between those who choose to participate and those who decline, so caution should be used as our estimates may be subject to self-selection bias. Weighting has been applied to mitigate for these differences.

Weighting methodology

The weights for the parent and pupil surveys were generated separately for each survey. Firstly, design weights were computed reflecting the sample design and were equal to the inverse of the selection probability. Schools that participated in the Schools Infection Survey (SIS) in the 2020 to 2021 academic year and were invited to take part this year received a different treatment regarding their assigned design weights.

Calibration is performed with respect to school years (grouped as school Years zero to two, three to four, and five to six for primary schools; seven to eight, 9 to 11 and 12 to 13 for secondary schools), gender (two groups) and ethnicity (two groups: non-minority or white British and minority). Calibration group totals are obtained from the 2020 to 2021 school census tables. The target population for the parent survey is those with children in school Years 7 to Year 11 and is weighted to these pupil totals.

Further analysis of Schools Infection Survey questionnaire data and antibody testing results will be released in late February 2022.

9 . Strengths and limitations

This study allows for the timely production of data and statistics that can respond quickly to the changing needs of data on the school population, during the coronavirus (COVID-19) pandemic. The questionnaire content and study design has been developed in consultation with the partner organisations and with key stakeholders.

All participation (from parents, pupils and headteachers) has been invited on a voluntary basis. This means there could be some self-selection bias to those who volunteered to participate. Robust methods are adopted for the surveys' sampling and weighting strategies to limit the impact of bias, but estimation methods can contribute to the level of uncertainty in the data.

The sample size is small, meaning that detailed analyses for subnational geographies and other sub-groups are not possible. Comparisons between groups must be done with caution as estimates are provided from a sample survey; as such, confidence intervals are included in the datasets to present the sampling variability. This should be considered when assessing differences between periods, as true differences may not exist.

Data for the headteacher survey has not been weighted because the sample size is too small to do so effectively. It is important to recognise that these findings are therefore representative of the population sampled and not necessarily the headteacher population in England.

Quality assurance procedures are undertaken throughout the analysis stages to minimise the risk of error.

10 . Related links

[COVID-19 Schools Infection Survey, England: Prevalence of ongoing symptoms following coronavirus \(COVID-19\) infection in school pupils and staff: July 2021](#)

Bulletin | Released 11 August 2021

Initial estimates of prevalence of ongoing symptoms following coronavirus (COVID-19) infection in staff and pupils from the COVID-19 Schools Infection Survey (SIS) across a sample of schools, within selected local authority areas in England. SIS is jointly led by the London School of Hygiene & Tropical Medicine, Public Health England and the Office for National Statistics.