Evidence Summary

Coronavirus (COVID-19) - children, young people and education settings

July 2021
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Introduction

At every stage since the start of the pandemic, decisions across education and childcare have been informed by the scientific and medical evidence – both on the risks of coronavirus (COVID-19) infection, transmission and illness, and on the known risks to children and young people not attending education settings – balancing public health and education considerations.

The Government’s priority is for all children and young people to continue to be able to attend schools, colleges\(^1\) and early years settings, and for those settings to be able to deliver face-to-face, high quality education. The evidence is clear that missed face-to-face attendance causes significant harm to children and young people’s education, life chances and mental and physical health. This harm disproportionately affects children and young people from the most disadvantaged backgrounds.

To keep settings open and maximise the opportunity for children and young people to attend, over the last year education leaders, staff, pupils, students and parents have worked tirelessly to implement measures which have helped to minimise the transmission of COVID-19 and to support the safety and wellbeing of children, young people and staff.

This summary sets out the evidence relevant to, and in support of, the Government’s decision to revise the guidance on the COVID-19 safe working and protective measures that have been used within schools, colleges and early years settings in England during the pandemic. While much of the evidence comes from school settings, the same broad infection and transmission risks and mitigation principles apply to young people in colleges as to those in school sixth forms however, it must be recognised that the further education sector is diverse, with differences for example in the age of students and the combination of study and work, such that during the pandemic there have been some different considerations for colleges. The risks within early years settings for children and staff are lower because young children are generally less susceptible to the virus and play a lesser role in transmission; throughout the pandemic there have been a different set of safe working measures in early years settings. This summary does not cover universities, where largely the same principles apply as to the rest of the adult population.

In making this decision, the Government has balanced education and public health considerations – weighing the impact of these measures on teaching, educational attainment, the health and wellbeing of children, pupils, students and staff and the functioning of schools, colleges and early years settings, against the COVID-19 risks in a context that has now fundamentally changed due to the success of the vaccination programme. As COVID-19 becomes a virus that we learn to live with, there is now an

\(^1\) Refers to state-funded further education colleges in England
imperative to reduce the disruption to children and young people’s education, particularly given that the direct clinical risks they face are extremely low. The balance of risks has shifted and as measures are eased in the rest of the economy and society, it is appropriate to step down measures in early years, schools and colleges so that children, young people, staff and settings can return to normal as far as possible. In doing so, the aim is to minimise the burden of implementing COVID-19 measures on staff and parents, as well as the impact these measures have on children and young people’s educational experience.

This decision is in the context of the Government’s wider plans for the final Step 4 of the roadmap in England, if and when the “four tests” for easing COVID-19 restrictions are met. These plans are supported by the publication of findings from the Government’s social distancing and certification reviews. A decision on Step 4 will be confirmed on 12 July 2021, following a review of the latest data – having been delayed by up to 4 weeks so that every adult could be offered a vaccine, around two thirds of adults could receive a second dose, and so more data could be assessed on the Delta variant which is now dominant in the UK. The latest data and scientific modelling suggest that cases will continue to rise as restrictions are eased, but the link to hospitalisations and deaths has been weakened due to vaccinations. Hospitalisations, serious illness and deaths from COVID-19 will continue, albeit at a much lower level than prior to the vaccination programme, which is protecting adult age groups, whilst children are already at very low risk from COVID-19.

The World Health Organisation states that data suggest that “children and adolescents are followers, not drivers of the pandemic, with a slower dynamic in younger children”. Throughout the pandemic, evidence continues to suggest that children and young people’s susceptibility to COVID-19 infection is lower than adults, particularly for younger children. Current data shows that whilst case rates and prevalence are higher in children and young people than in older, more vaccinated populations – reflecting protection afforded by vaccination – the risks of severe illness or death from COVID-19 are extremely low in children and young people.

Equally, throughout the pandemic, case rates within education settings have been shown to reflect those in the local community. The system of controls in education will have contributed to reducing the risk of infection within settings and testing has also helped to break chains of transmission. That is why, whilst some measures are eased, others will remain; these will maintain a baseline of protective measures while maximising attendance and minimising disruption to education. If necessary, in response to localised

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outbreaks, education settings will need to be prepared to reintroduce other protective measures, subject to local or national public health advice.

The Department for Education regularly reviews data, analysis and advice from a number of different sources including the Scientific Advisory Group for Emergencies (SAGE), Public Health England (PHE), the Office for National Statistics (ONS), and the Joint Biosecurity Centre (JBC). We also work closely with the Department of Health and Social Care, PHE and the JBC as well as local authorities and their Directors of Public Health to inform our planning and response.

**The Government’s four tests**

Step 4 of the roadmap is expected if and when the Government’s “four tests” for easing COVID restrictions have been met. A review of the latest data against the tests is due on Monday 12 July 2021:

- The vaccine deployment programme continues successfully
- Evidence shows vaccines are sufficiently effective in reducing hospitalisations and deaths in those vaccinated
- Infection rates do not risk a surge in hospitalisations which would put unsustainable pressure on the NHS
- Our assessment of the risks is not fundamentally changed by new Variants of Concern.

The changes to the Department for Education’s guidance for education settings will only apply if the decision is taken to proceed with Step 4 of the roadmap, to be confirmed on 12 July 2021.

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Disruption to education

Children and young people’s education has been significantly disrupted as a result of COVID-19 and the infection prevention and control measures that have been in place in schools, colleges and early years settings during the pandemic, in order to minimise public health risks prior to the largescale rollout of vaccinations. The major driver of disruption when implementing the different control measures has been bubbles, contact tracing and isolation requirements, where one positive case within a school, college or early years setting can lead to many children and young people needing to isolate and consequently missing out on face-to-face education.

Analysis of learning loss conducted prior to the pandemic shows that every day of education missed matters and is likely to lead to further reduced attainment.\(^5\) Ofsted found that, despite remote education being offered, learning is still being lost when pupils and students have to self-isolate, particularly when this happens repeatedly.\(^6\) This has been reinforced recently by the World Health Organisation (WHO), emphasising the serious effects on the education, development and well-being of children and adolescents – such that updated WHO recommendations are clear that measures should be implemented that protect in-person schooling in the next academic year, including that school closures should be considered only as a measure of last resort.\(^7\)

Data from the Autumn 2020 School Census showed that 60% of pupils had some period where they did not attend school in circumstances relating to COVID-19 during the autumn term. This represents 33 million days missed, or 5 days (one week) per pupil. 31% of pupils missed 10% or more of sessions (6-7 days of school) for reasons related to COVID-19. This data excludes pupils who were ill with COVID-19, where absence is classified as illness absence. The rate of absence due to illness, including both COVID-19 related and non-COVID illness was 2.5% in the autumn term, representing about 12 million days missed.\(^8\)

Attendance data from England for the summer term 2021 shows that as COVID-19 prevalence has increased overall across the population, absence due to COVID-19 has increased rapidly in schools: at 8.5% (639,000 pupils) in state-funded schools on 1 July compared to 1.2% (90,000 pupils) on 10 June. The majority of this absence is because of isolation due to potential contact with a case of COVID-19 inside the school. On 1 July,

\(^5\) Centre for Education Policy & Equalising Opportunities, Briefing Note: School Absences and Pupil Achievement (April 2020)
\(^6\) Ofsted, COVID-19 series: briefing on schools (December 2020)
\(^8\) Department for Education, Pupil absence in schools in England: autumn term 2020/21 (1 July 2021)
6.3% of pupils (471,000) were absent for this reason. Schools are required to provide remote education for pupils unable to attend in person due to self-isolation following potential contact.

On their return to the classroom in Autumn 2020, in reading, primary-age pupils were on average around 1.8 months behind similar pupils in 2019/20, and in maths around 3.7 months behind. Secondary-age pupils were on average 1.7 months behind in reading. Primary pupils made some progress to catch-up in reading and maths during the Autumn term (0.5 months in reading, 1 month in maths) when spending time in the classroom, although they were still behind in December 2020. On their return to the classroom in the Spring, primary pupils were on average behind pupils in 2019/20 by a similar amount in March 2021 as they were in September 2020 (around 2-3.5 months). This suggests that pupils made less progress during periods when they were learning from home than when they were in the classroom, despite the provision of remote education.

Disadvantaged pupils (represented in this analysis by those eligible for free school meals) have been worse affected than their peers by time out of the classroom – falling 0.5-1 month further behind than other pupils. Pupils with English as an additional language appear to have been worse affected in terms of reading.

In addition to learning loss, missing face-to-face education is associated with considerable harm to the health and wellbeing of children and young people. A recent systematic review prepared for SAGE found that the evidence for impacts of school closures on mental health and wellbeing was substantial and consistent, with considerable impacts across the range of emotional, behavioural and restlessness/inattention problems, and overall psychological wellbeing. These harms occurred at a time when children and young people were much less visible to protective systems, and access to health and social care was reduced.
Vaccines

As the rollout of vaccination continues at pace, the majority of adults in England have now received two doses of a vaccine. All approved vaccines are effective at protecting against severe disease caused by COVID-19. They are also effective at protecting against symptomatic COVID-19 and at reducing onward transmission. Vaccination of adults indirectly protects children and young people by weakening chains of transmission and reducing onward transmission from those who have been immunised.\(^{14}\) This reduces opportunities for introduction of the virus into schools, colleges and early years settings.

Every adult aged 18 and over is now eligible to receive a COVID-19 vaccine. Clinically extremely vulnerable young people aged 16 and over and those in an at-risk group aged 16 and over are also eligible. The Government’s green book, which has the latest information on vaccines and vaccination procedures, makes clear that vaccination may already be considered for children with severe neuro-disabilities who tend to get recurrent respiratory tract infections, particularly those who spend time in specialised residential care settings for children with complex needs.\(^{15}\)

As of 5 July 2021, 86.1% of adults in England have received at least one dose of a vaccine, 64.2% have received two doses.\(^{16}\) Pausing Step 4 for an additional 4 weeks has so far (up to 2 July) allowed the NHS to vaccinate 2,775,826 more people with a first dose and provide another 2,441,844 second doses.\(^{17}\) This will continue to rise as we move towards Step 4. Among the school workforce, the ONS Schools Infection Survey published 1 July 2021 estimates that 86.7% of school staff had received at least one dose of a vaccine by the end of May 2021, while 43.1% had received two doses.\(^{18}\)

The Government is accelerating the rollout further, by reducing the vaccine dose interval for under 40s from twelve weeks to eight. This will mean every adult has the chance to have two doses by mid-September. The Government is also ensuring preparations are in place to offer third “booster” doses to everyone aged over 50 and the most vulnerable to boost their immunity over the winter months, based on interim advice from the Joint Committee on Vaccination and Immunisation (JCVI).

Vaccines provide increased protection at individual and population level by reducing the risk of transmission, hospitalisations and deaths from the dominant virus strains currently

\(^{16}\) Government Coronavirus Dashboard, *Vaccinations in England* (July 2021)
\(^{17}\) Cabinet Office, *Social distancing review: report* (5 July 2021)
\(^{18}\) Office for National Statistics, London School of Hygiene & Tropical Medicine, Public Health England *COVID-19 Schools Infection Survey, England: Round 5 May 2021* (1 July 2021)
circulating in the UK. Evidence from PHE shows that the vaccines currently deployed are effective against symptomatic infection from the Alpha and Delta variants.¹⁹ Vaccine effectiveness is higher for more severe outcomes such as hospitalisations, but data are still emerging as to the extent of the effectiveness.

Public Health England (PHE) analysis suggests one dose of either the Oxford/AstraZeneca or Pfizer/BioNTech vaccine reduces the risk of symptomatic disease with the Delta variant by ~35%, and hospitalisations by ~80%. A second dose boosts protection to ~79% against symptomatic disease and ~96% against hospitalisation.²⁰

PHE has also found that one dose of the Pfizer or AstraZeneca vaccines reduce transmission from vaccinated but infected people to household members who develop symptoms. PHE found a reduction of 35-50% after one dose of AstraZeneca or 45-50% after one dose of Pfizer in secondary cases in households where index cases had received a vaccine, compared with index cases who had not been vaccinated.²¹ These results are for the Alpha variant and a single dose. PHE will continue to update findings.

Modelling from PHE and the University of Cambridge suggests that up to 19 June the vaccination programme has prevented 7.2m infections and 27,000 deaths in England.²²

The Medicines and Healthcare products Regulatory Agency (MHRA) authorised the use of the Pfizer/BioNTech vaccine for 12-15 year olds in the UK on 4 June 2021, following a rigorous review of the safety, quality and effectiveness of the vaccine in this age group by the MHRA and the Government’s independent advisory body, the Commission on Human Medicines. Multiple other countries have also authorised its use for 12-15 year olds. UK trials of the AstraZeneca vaccine in children have been paused due to concerns about side effects in young adults. Moderna trials are ongoing. The Government has asked the independent experts at the JCVI²³ to advise whether routine vaccination should be offered to younger people aged 12 to 17. JCVI will provide advice to the Government on the vaccination of children and young people, balancing the medical risks and benefits to individuals of vaccinating.

¹⁹ Public Health England, COVID-19 vaccine surveillance report (June 2021)
²² Public Health England, University of Cambridge MRC Biostatistics Unit, PHE monitoring of the effectiveness of COVID-19 vaccination (28 June 2021)
²³ The role of the JCVI is to advise UK health departments on immunisations for the prevention of infections and/or disease following due consideration of the evidence on the burden of disease, on vaccine safety and efficacy and on the impact and cost effectiveness of immunisation strategies. JCVI consider and identify factors for the successful and effective implementation of immunisation strategies. JCVI also identify important knowledge gaps relating to immunisations or immunisation programmes where further research and/or surveillance should be considered.
Children, education settings and transmission

Evidence on schools, colleges and early years settings and transmission set out in the evidence summary published in February 2021 remains accurate. Transmission to children and young people can occur in household, community, and in educational settings. The infection risk from behaviours and contacts within schools, colleges and early years settings cannot be separated from the wider 'end to end' behaviours and contacts associated with attendance but taking place outside of these settings. Educational settings vary significantly, both in terms of the physical setting and interaction with the wider community.

Both observational evidence and modelling suggests that infection and transmission within school settings increases or decreases with community prevalence. The most recent round of the Schools Infection Survey showed that current infection rates in secondary staff and pupils were lower still in May 2021 compared with November 2020. Further evidence on transmission, including to contacts of confirmed cases, will be available when findings of daily contact testing trials in schools and colleges are published.

Evidence on the role of children and young people in transmission to adults is mixed. For example, one study found that during the first wave of the pandemic in England, for adults aged 65 years and under living with children, there was no evidence of a markedly increased risk of COVID-19 infection or severe outcomes. During the second wave, there was evidence of increased risk, however, this did not translate into a materially increased risk of COVID-19 mortality, and absolute increases in risk were small. Another study analysing ONS COVID-19 Infection Survey data found that the risk of bringing COVID-19 infection into households was higher amongst 12-16 year olds than for adults during periods when schools were allowing most or all pupils to attend; the difference was less marked for primary school children. Potential transmission from children to adults is mitigated by vaccination of the adult population, with all adults now eligible for vaccination.

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27 Cornell University, Inferring Risks of Coronavirus Transmission from Community Household Data - NASA/ADS (harvard.edu) (April 2021)
28 SAGE Children’s Task and Finish Group: Update to 17th December 2020 paper on children, schools and transmission (10 February 2021)
Regular data published by PHE shows that since the return of schools and colleges to full attendance in March 2021, COVID-19 outbreaks linked to school settings have broadly reflected what is happening in the wider community.\textsuperscript{29} In the week commencing 21 June, there were 194 confirmed clusters or outbreaks in primary and secondary schools, which represents around 0.8% of all primary and secondary settings.\textsuperscript{30}

Since 8 March 2021, when school attendance once again became mandatory for all pupils of compulsory school age, settings have reported low levels of pupil absence due to confirmed cases of COVID-19, at 0.4% or less in state-funded schools.\textsuperscript{31} Overall pupil COVID-19 absence rates (including due to confirmed and suspected cases; isolation due to potential contact with a case; and COVID-19-related school closures) are currently increasing and stood at 8.5% on 1 July, primarily driven by pupil isolation due to contact within the setting (6.3% pupils on 1 July).\textsuperscript{32} Between 8 March and 1 July 2021, overall pupil COVID-19 absence has remained below the highest levels seen in the autumn, which peaked at up to 11% in late November 2020.

\begin{itemize}
\item \textsuperscript{29} Public Health England, \textit{SARS-CoV-2 variants of concern and variants under investigation - Technical Briefing 16 (June 2021)}
\item \textsuperscript{30} Public Health England, \textit{National flu and COVID-19 surveillance reports} (1 July 2021)
\item \textsuperscript{31} Department for Education, \textit{Attendance in education and early years settings during the coronavirus (COVID-19) outbreak} (July 2021)
\item \textsuperscript{32} Absence figures from 7 June exclude year 11-13 pupils identified as not in attendance because they are off-site for approved purposes. They are therefore not directly comparable to previous rates of reported COVID absence.
\end{itemize}
Impact of COVID-19 safe working and protective measures

Decisions by the Government need to consider the balance of risks and harms, including the potential direct clinical risks to children and staff from COVID-19 and the risks to educational attainment, development, mental health, wellbeing, and lifetime health outcomes.

The rollout of the vaccination is an important measure to control and minimise infection and transmission. Alongside this, the core principles of a hierarchy of control measures to reduce transmission by all routes – close-range, airborne, and surface – are well-established. SAGE 86 highlighted that ongoing baseline measures and sustained long-term behavioural change will be required to control a resurgence in infections. The findings of the Government’s social distancing review set out wider consideration of transmission pathways and controls to supress transmission. However, there is limited evaluation of the effectiveness of interventions in schools, colleges and early years settings, and it is not possible to isolate the impact of any individual element of the system of controls. Evidence mainly from observational studies (which have no comparator group) consistently suggest that transmission within schools can be limited when infection prevention and control measures are in place.

Evidence, mainly from modelling studies, suggests that implementing a combination of measures might reduce the likelihood and size of outbreaks – measures considered in a range of academic studies have included testing, isolation of cases, reduced mixing and closure of extra-curricular activities, in addition to other mitigations such as hygiene measures, cleaning, face coverings, and increased ventilation. A study using data from a large online survey in the United States found that with the exception of desk shields (which were associated with increased risk), having a greater number of mitigations in place led to a greater reduction in risk of COVID-19-related outcomes among respondents living with a child attending school.

World Health Organisation guidance has recently been updated to strongly reflect the role of aerosols in COVID-19 viral transmission. This emphasises the importance of ventilation, such as keeping windows open, and the relative safety of outdoor settings.

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33 Sage 86, Minutes (8 April 2021)
34 Cabinet Office, COVID-19 Response - Spring 2021: roadmap reviews, social distancing review (5 July 2021)
36 ScienceMag.org, Household COVID-19 risk and in-person schooling (4 June 2021)
Indeed, there is accumulating evidence that transmission is lower outdoors.\textsuperscript{38} Respiratory and hand hygiene are helpful for reducing the risk of transmission of many diseases, not just COVID-19.

Qualitative evidence from stakeholders within the education system suggests that some interventions are, however, detrimentally affecting schools’ and colleges’ ability to teach a full curriculum, particularly practical subjects and those that require specialist staff or equipment. There is also evidence of a detrimental impact on the wellbeing of some staff and children and young people.

Bubbles have been used in education to reduce contact and mixing between pupils and students, and to make tracing contacts easier in the event of a positive case. According to the COVID-19 School Snapshot Panel in May 2021, most primary schools reported using bubbles of between 21 and 50 pupils, while half of secondary schools reported bubbles of 101 to 200 pupils.\textsuperscript{39}

Further evidence gathered through the COVID-19 School Snapshot Panel survey showed bubbles and social distancing as the most commonly reported challenge to operating in a COVID-19 secure way. Fewer teachers and leaders reported keeping on top of hygiene and cleaning measures as a challenge. Mental health and wellbeing were also flagged by some teachers and leaders among a number of other challenges.

The implementation of COVID-19 safety measures has impacted schools’ ability to run breakfast and after school clubs: 40\% of respondents have had to cancel clubs entirely, with others reducing availability or the number of children that are able to attend in order to comply with bubbles and social distancing. Issues caused by bubbles have also been highlighted by Ofsted.\textsuperscript{40} These include limiting access to science, art and music rooms; difficulty providing support for pupils with SEND; and physical fatigue of teachers (particularly in secondary schools) from having to move resources from classroom to classroom, as well as isolation.

Given the above, and the evidence that wider measures do have an impact, measures with the greatest disruptive impact will be stepped down following Step 4 of the Government roadmap, whilst others will be retained. The Department for Education’s COVID-19 operational guidance documents set out these changes.\textsuperscript{41} The contingency framework guidance also sets out how these would be stepped back up in certain areas as part of outbreak management if required. In making this decision, the Government has

\begin{itemize}
\item \textsuperscript{38} Oxford Academic, The Journal of Infectious Diseases, Outdoor Transmission of SARS-CoV-2 and Other Respiratory Viruses: A Systematic Review (29 November 2020)
\item \textsuperscript{39} See Annex A
\item \textsuperscript{40} Ofsted, COVID-19 series: briefing on schools, November (15 December 2020)
\item \textsuperscript{41} Department for Education, Actions for schools during the coronavirus outbreak (6 July 2020)
\end{itemize}
weighed the public health considerations alongside education and wider health considerations for children, young people and staff, factoring in the progress towards removing restrictions in wider society and the need for consistency in the restrictions facing children and young people and adults. This is about ensuring children and young people are not more severely impacted by more stringent measures – which have impacted their education, mental health and wellbeing – particularly when the direct clinical risks from COVID-19 are lower for children and young people than for adults. It is also about moving to a “steady state” that minimises the burden of implementing a system of controls on staff and parents, and the impact those measures have on children and young people’s educational experience.

The latest data and scientific modelling suggest that cases will continue to rise as restrictions are eased, but the link to hospitalisations and deaths has been weakened due to the vaccination programme. As the epidemiological picture continues to evolve, it will be a priority to address instances of enduring transmission (geographical areas with high rates that remain above the national average for long period of time), as while the virus continues to circulate in any community, there is a greater risk of variants arising. As more of the population is vaccinated, levels of immunity in the population rise and prevalence declines, we increasingly expect to be dealing with localised outbreaks that require decisive local-led action.

Equally, even whilst the continuing vaccine rollout increases protection and reduces the risks, as long as the virus is circulating there will be cases, and these will disproportionately appear in unvaccinated and partially vaccinated groups. Children and young people currently represent the largest pool of unvaccinated people. It is important to be clear that relatively higher case rates in unvaccinated compared to more vaccinated populations does not reflect any increased susceptibility to infection or serious illness due to inherent properties of the virus in children and young people. The SAGE Scientific Pandemic Influenza Group on Modelling (SPI-M) projections indicate that case rates are expected to continue to rise during the third wave this summer. This means that hospitalisations, serious illness and deaths from COVID-19 will continue, albeit at a much lower level than they would have prior to the vaccination programme, which has reduced but not eliminated the risks.

42 Prime Minister’s Office, 10 Downing Street, Slides and datasets to accompany coronavirus press conference (5 July 2021)
Safety and risks to children and young people

The risk of hospitalisation and intensive care admission in children due to COVID-19 infection is very low. In weeks 1 to 25 of 2021, on average 1.3 per 100,000 0-4 year olds and 0.4 per 100,000 5-15 year olds have been admitted to hospital for new COVID-19 positive cases per week.44 There continues to be strong evidence that children and younger people are much less susceptible to severe clinical disease than older people. Paediatric Inflammatory Multisystem Syndrome (PIMS), which is temporally associated with COVID-19, is rare and is estimated to occur in 45 cases per 100,000 SARS-CoV-2 infections in 0-14-year-olds.45 The risk of mortality in children is extremely low. ONS has recorded 16 registered deaths in 0-14-year-olds from COVID-19 up to week ending 25 June 2021.46 COVID-19 Clinical Information Network (CO-CIN) data shows no significant increase in the proportion of deaths in young people under 19 years old when comparing a time period containing wave 1 (17 January to 3 July 2020) with a time period including both waves 1 and 2 (17 January to 31 December 2020).47

Early data suggests that Delta has a similar pattern of susceptibility to Alpha in terms of age profile, meaning children and young people are not disproportionately infected by this variant. There is no evidence that the relative increase in transmission associated with Delta is greater in some settings than others, nor that it is transmitted in different ways from other variants.

Evidence continues to confirm that children can be susceptible to COVID-19 infection although a range of analyses suggest that children’s susceptibility to infection is lower than adults. The evidence is stronger that pre-school and primary aged children are less susceptible to infection than adults and more mixed for secondary-age and older children.48

A range of surveillance studies led by PHE, the ONS and others, are testing the presence of antibodies in pupils, indicating prior COVID-19 infection. Pupil antibody data are currently only available from early rounds of the Schools Infection Survey, although more recent data are expected shortly. As of December 2020, 9.1% of primary school

44 Public Health England, National flu and COVID-19 surveillance reports week 26 (1 July 2021)
45 SAGE 80, Minutes (11 February 2021)
46 Office for National Statistics, Deaths registered weekly in England and Wales, provisional (6 July 2021)
47 SAGE Children’s Task and Finish Group: Update to 17th December 2020 paper on children, schools and transmission (10 February 2021)
48 SAGE Children’s Task and Finish Group: Update to 17th December 2020 paper on children, schools and transmission (10 February 2021)
pupils and 13.5% of secondary pupils tested positive for COVID-19 antibodies, however this will have since increased.\textsuperscript{49}

This wave is different from the previous ones because of vaccine coverage and the Delta variant, which is more transmissible than previous variants. Surveillance shows a greater proportion of cases are occurring in less vaccinated, younger age groups.\textsuperscript{50}

There have been some preliminary studies on post-COVID-19 symptoms (“long COVID”) in children, but evidence is limited and due to the nature of self-reporting and the group of common symptoms it can be difficult to differentiate post-COVID-19 symptoms from other illness. Two recent studies (in pre-print) of relatively large numbers of children suggest that the scale of the problem is smaller than suggested by some survey-based analyses, such as by the ONS, and only affects a relatively small proportion of children with COVID-19. In one study, 9\% reported at least one symptom beyond 4 weeks, but importantly this compared to 10\% of children who were seronegative (i.e., were very unlikely to have had COVID-19). For symptoms beyond 12 weeks, the figures were 4\% versus 2\%.\textsuperscript{51} In the other study, 4.4\% of children had illness duration of 28 days or more, with the most common symptoms being headache, fatigue and loss of smell. This compared to only 0.9\% of children who had had an illness but tested negative for SARS-CoV-2. 1.8\% of those who tested positive and were followed for 56 days or more still had symptoms.\textsuperscript{52} Paediatric services have received some referrals for children with symptoms suggestive of long COVID.

Further studies to understand the prevalence of post-COVID-19 symptoms, and how they present, in children are ongoing – including in particular, the Children & young people with Long Covid (CLoCk) study being conducted by PHE with Great Ormond Street Institute of Child Health which is tracking children, young people and families over time.

\textsuperscript{50} Public Health England, \textit{National flu and COVID-19 surveillance reports} (July 2021)
\textsuperscript{51} medRxiv, \textit{Long-term symptoms after SARS-CoV-2 infection in school children} (18 May 2021)
\textsuperscript{52} medRxiv, \textit{Illness duration and symptom profile in a large cohort of symptomatic UK school-aged children tested for SARS-CoV-2} (8 May 2021)
Safety of educational settings and risks to the workforce

Based on data from the ONS, the risks of COVID-19 infection to education staff are similar to those for most other occupations. The latest available data on COVID-19 infection across occupations remains the ONS data from 1 September 2020 and 7 January 2021. This shows that after adjusting for differences across occupations and reported ability to socially distance in the workplace and work from home, there was no statistical evidence of a difference in the likelihood of testing positive for the COVID-19 between the majority of occupations. Evidence of difference presents as a continuum, which can be seen in the comparisons between different occupations. Within this, there are a group of occupations at the upper end of the continuum, that have no significant difference with the majority of other occupations, but do show a higher probability of testing positive compared with some of those at the lower end.

ONS data on COVID-19 related deaths by occupation, covering from 9 March 2020 to 28 December 2020, showed rates of death involving COVID-19 for teaching and education professionals were statistically significantly lower than the rate of death involving COVID-19 among those of the same age and sex in the wider population. Rates of death involving COVID-19 in all teaching and educational professionals were not statistically significantly different to the rates seen in professional occupations. The rate of death involving COVID-19 specifically in male secondary education teaching professionals was statistically significantly higher than the rate of death involving COVID-19 in professional occupations in men of the same age.

Further clinical studies are needed to provide a firmer understanding of post-COVID-19 symptoms in adults, including its prevalence, severity, and duration. Evidence is limited and due to the nature of self-reporting and the group of common symptoms it can be difficult to differentiate post-COVID-19 symptoms from other illness. Work is taking place across Government to understand the impact of post-COVID-19 symptoms on absence and ability to work.

Risks to the workforce are reduced by vaccination. Everyone over 18 in the UK is now eligible to receive a vaccine and the Government is accelerating rollout by reducing the interval between doses, so the vast majority of the workforce will have the opportunity to have received two doses by September and all by mid-September. Adults aged 16 to 64 with underlying health conditions which put them at higher risk of serious disease and mortality became eligible to receive first doses on 15 February 2021.

53 Office for National Statistics, Coronavirus (COVID-19) Infection Survey (22 February 2021)
Early years

Throughout the pandemic, the Government has prioritised keeping nurseries and childminders open to all, supporting parents and delivering the crucial care and education needed for our youngest children. The earliest years are the most crucial point of child development and attending early education lays the foundation for lifelong learning and supports children’s social and emotional development. Early years settings remained fully open in January to March 2021 even while access to in-person education in schools and colleges was restricted.

Outbreaks in early years settings are at a low level, with 269 outbreak notifications to Ofsted in the latest available data for week commencing 7 June 2021 (0.5% of open settings), compared with 2,384 notifications in week commencing 1 February 2021.55

The risks within early years settings for children and staff are lower because young children are generally less susceptible to the virus and play a lesser role in transmission. PHE National flu and COVID-19 surveillance reports show that 0-4 year olds have consistently been among the lowest case rates of all age groups. In the latest data from 1 July 2021, case rates in 0-4 year olds are 56.6 per 100,000, compared to a high of 217.2 per 100,000 in December 2020. Case rates are higher in 10-19 year olds at 369.4 per 100,000, but lower in over 60s at 27.2 per 100,000, reflecting the protection afforded by vaccination to older age groups.56

55 Ofsted, Reported coronavirus (COVID-19) notifications by registered early years and childcare settings (28 June 2021)
56 Public Health England, National flu and COVID-19 surveillance reports (1 July 2021)
Annex A - School Snapshot Panel methodology

The School Snapshot Panel

The School Snapshot Panel consists of a group of teachers and leaders from state-funded primary and secondary schools who have agreed to participate in short regular research surveys on topical issues in education. Teachers and leaders agreed to be part of the panel in late 2020 and early 2021. They were recruited from school workforce census data provided by the Department for Education. This analysis is based on the May 2021 wave of the School Snapshot panel which was administered online from the 12 May to the 19 May 2021.

Response rates

Table 1. Response rate by key group

<table>
<thead>
<tr>
<th></th>
<th>Leaders</th>
<th>Teachers</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Primary</td>
<td>Secondary</td>
<td>Primary</td>
<td>Secondary</td>
</tr>
<tr>
<td>Starting sample</td>
<td>1,397</td>
<td>861</td>
<td>1,134</td>
<td>1,090</td>
</tr>
<tr>
<td>Complete surveys</td>
<td>662</td>
<td>351</td>
<td>527</td>
<td>527</td>
</tr>
<tr>
<td>Response rate</td>
<td>47%</td>
<td>41%</td>
<td>46%</td>
<td>48%</td>
</tr>
</tbody>
</table>

Weighting

Two types of weighting were applied to the data, depending on whether questions were asking for school-level or individual-level answers from leaders and teachers.

School-level weighting

At the analysis stage, the school-level/leaders’ data was grossed up to the overall population of schools. This process corrects for the over-sampling of secondary schools (relative to the proportion of the population that they represent) so that the findings can be interpreted as being representative of all (in scope) state-funded schools.\(^{57}\)

\(^{57}\) Note that no responses were received from secondary studio schools in the May wave, therefore responses are representative of all in scope state-funded schools \textit{excluding} secondary studio schools (secondary studio schools comprise 0.1\% of the total school population).
The population data for weighting was drawn from Get Information about Schools (GIAS).

**Teachers / individual weighting**

For the analysis on a teacher rather than a school base, the responses from leaders and classroom teachers were combined and weighted together to the overall population of teachers. The population data for the teachers weighting was taken from the Schools Workforce Census based on November 2019 data (the most current available data).

**Questions**

The following questions referred to in this evidence summary were asked to teachers and leaders:

**Roughly, what size are pupil bubbles in your school? (Asked only to leaders)**

In May 2021, schools were asked what size their pupil bubbles were on average. Most primary schools (65%) reported that their pupil bubbles included 21-50 pupils, whereas half (50%) of secondary schools reported bubble sizes of 101-200 pupils. As a proportion of all pupils, most schools (70%) reported that their pupil bubbles comprise between 1% and 20% of pupils, with the mean average at 18%.

**What, if any, challenges are your school experiencing in operating in a COVID-19 secure way for pupils and staff?**

Implementing social distancing measures in school

Of the themes emerging, the most frequently reported challenge to operating in a COVID-19 secure way was implementing social distancing and maintaining class bubbles. This was a key issue for schools that already had limited space and resources. In addition to logistical concerns about social distancing within school due to a lack of space, lunch and break times were mentioned as particularly difficult times for maintaining social distancing. Schools reported that the need to supervise social distancing and the inability to cross bubbles has placed a lot of additional pressure on staff.

Issues around staffing

School leaders also often cited staffing as a challenge. This included issues such as absences, lack of cover staff, and the lack of mixing among staff due to bubbles and social distancing. Demands on staff to maintain COVID-19 measures in schools were high, and this is exacerbated when there were staff absences due to the lack of flexibility to redeploy staff across bubbles.

Impact on time management and how education is delivered

Schools also expressed concern around the challenges of time management and education delivery, including staggered arrival, departure, and break times, and additional time needed to complete tasks. There are also limitations placed on curriculum
delivery, and many leaders felt that offering a balanced curriculum and catching up on lost learning was difficult.

Other challenges

Less frequently reported issues were around the mental health and wellbeing of pupils, parent and staff, including for example suffering from anxiety. A small number of schools also reported that challenges were encountered around pupils and staff being unable to mix with friends or colleagues, with reduced social interaction, reduced whole school gatherings such as assemblies and collective worship, and reduced access to facilities impacting on children and young people’s experiences in school.

How, if at all, has your school's implementation of COVID-19 safety measures affected your school's ability to run breakfast/after school clubs this term, compared to before the COVID-19 pandemic (March 2020)?

In May 2021, schools were asked how, if at all, their implementation of COVID-19 safety measures had affected their ability to run breakfast or after school clubs this term, compared to before the COVID-19 pandemic (March 2020). Schools most commonly reported that they had had to cancel clubs (40%) or reduce the number of places available (33%). Around one-fifth of schools had had to reduce the hours that clubs operate (21%). One in five schools reported that the implementation of COVID-19 safety measures had not had any impact on their breakfast or after school clubs (20%).

Future Publications

The Department has conducted a number of surveys with teachers and leaders since May 2020. These will be published in Autumn 2021.