



Wave 1 Initial Findings – Briefing No. 5

Health Impacts and Behaviours

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Highlights

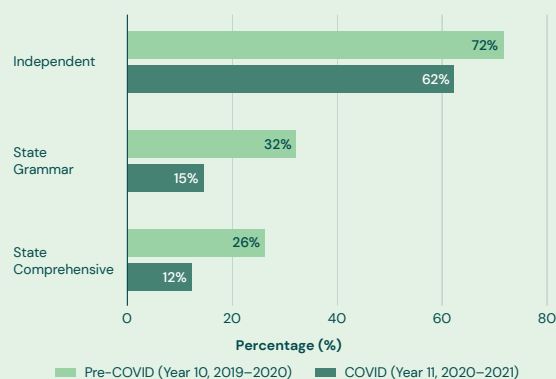
COVID infection and vaccination rates

- Between October 2021 and March 2022, 48% of young people in the study reported having COVID-19. Of this group, 1 in 5 said they had long COVID (equating to 9% of the sample overall). 70% of these participants said that this limited their daily activities – 26% said activities were limited ‘severely’ (2% of the population overall). Those from the most deprived parts of the country (determined by IDACI quintile groups, an area-level measure for disadvantage) who had contracted the virus were more likely to report symptoms of long COVID, at 25% of those infected compared to 18% of those from the least deprived areas.
- 8% of participants said they were asked to shield at some point during the pandemic. Shielders were more likely to take part in catch-up activities like tutoring and weekend catch-up classes, compared to those not asked to shield.
- Controlling for background characteristics and prior attainment, suffering from long COVID that severely limits daily activities and being asked to shield were associated with lower teacher assessed GCSE grades. The experience of being seriously ill in hospital (not only due to COVID-19) is also negatively associated with teacher assessed GCSE attainment.

Health behaviours in the pandemic

- Taking part in sports organised by school was considerably more common at independent schools (at 72% pre-pandemic) than in state comprehensives (26%) and grammars (32%). Provision by schools fell across all school types during the pandemic, although participation rates fell the least in independent schools, reducing by 9 percentage points, compared to 18pp in grammars and 14pp in state comprehensives.
- 23% of young people reported having smoked a cigarette, lower than the 33% who reported having used e-cigarettes. The use of e-cigarettes was more prevalent among young people from disadvantaged family backgrounds and state comprehensive schools compared to their more advantaged peers.

Whether a young person took part in sports or exercise outside of PE organised by their school, by school type (pre- and during pandemic)



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Context

The COVID-19 pandemic affected the health of millions of people across the country – at the time of publication, there have been over 20 million confirmed cases of the virus in England and just over 170,000 deaths within 28 days of a positive test,¹ and the ONS estimate that 71% of the population have contracted the virus.² Thinking about young people specifically, just over 1.3 million 15- to 19-year-olds are estimated to have had COVID-19 since February 2020.³

Socio-economic circumstances, like working in a routine occupation, being a key worker and living in overcrowded conditions have previously been found to be associated with increased risk of exposure, with those living in the 10% most deprived areas almost four times as likely to die from the virus compared to those in the least deprived areas.⁴ People with Black, Asian or other minority ethnicities are also at increased risk both of catching COVID-19 and having more severe symptoms.⁵

Long COVID – defined as when an individual who suffered from a COVID-19 infection experienced symptoms more than 4 weeks after they first had the virus (which were not explained by something else) emerged as an additional risk from COVID-19 infection. Research is ongoing to investigate the implications of having long COVID for young people, as well as to understand key symptoms⁶ including headaches and fatigue.⁷ The most common symptoms for children have been identified as fatigue, headache, tummy pain and muscle aches.⁸ Incidence of other conditions has also been linked to having long COVID, such as Paediatric Acute-Onset Neuropsychiatric Syndrome (PANS).⁹

This briefing explores the incidence of COVID-19 and long COVID among our cohort, as well as how many young people were asked to shield during the pandemic, comparing patterns by socio-economic background. It considers how this has affected young people's education, including GCSE attainment using linked National Pupil Database (NPD) data.

Aside from COVID-19 directly, we also investigate patterns in exercise, smoking, alcohol and drug use among young people. Compared to cohorts of young people before the pandemic, previous research has found smoking and drug use appears to be declining, whilst e-cigarette use is increasing,¹⁰ with cigarette, alcohol and drug use more common for those who had more social interactions outside of school and the home during the pandemic.¹¹ Existing research suggests participation in sport and exercise during the pandemic

also declined, particularly for those from deprived backgrounds, who had less access to outside space.¹²

Parent and guardian responses are also analysed relating to their health behaviours, as well as their behaviour in relation to self-isolation and COVID-19 vaccination.

How did patterns of COVID-19 vary by socio-economic status?

COVID-19

At the time they took the survey, 48% of participants reported having had COVID-19, with 28% of participants reporting definitely having had the virus, and 19% saying they probably had it but had not had a test to confirm. Since the fieldwork for this study was carried out between October 2021 and March 2022, patterns of COVID-19 infections have fluctuated, particularly after the arrival of the Omicron strain in late 2021.¹³ Thus, it is fair to assume that these figures, as well as the following figures for self-reported long COVID, are now higher.

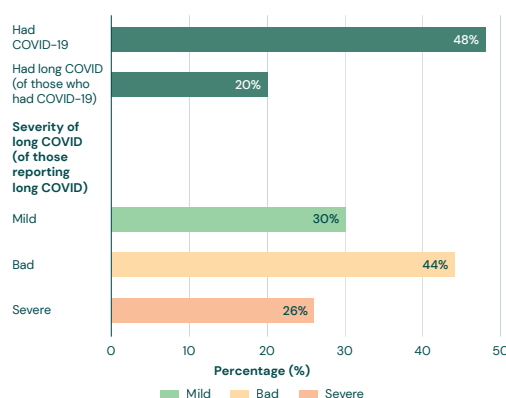
No patterns appear when looking at who reported having COVID-19 by socio-economic status.

Black pupils were the most likely to report that they definitely did not have COVID, while White and Mixed pupils the least likely to do so.

Long COVID

Of those who said they definitely or probably had COVID-19 (N=5,568), 1 in 5 (20%) said they currently had, or had recovered from long COVID (Figure 1). This equates to 9% of the sample population overall.¹⁴

Figure 1: Proportion reporting COVID-19, long COVID (of those who had COVID-19) and severity of long COVID experience (of those with long COVID)

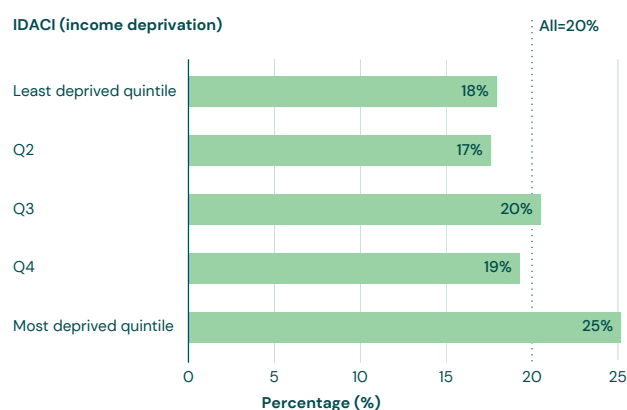


Notes: For proportion who had COVID-19 N=11,755, for proportion who had long COVID N=5,568 and for severity of long COVID N= 984. Analysis is weighted for sampling design and young person non-response.

Females were slightly more likely to report suffering from long COVID than males, at 22% compared to 18% respectively.

20% of state school comprehensive students who said they had COVID-19 either currently had or had previously recovered from long COVID, which is more than those at grammar schools (16%) and independent schools (also 16%). Those from the most deprived parts of the country (determined by IDACI quintile groups) were more likely to report long COVID, at 25%, compared to 18% of those from the least deprived areas (Figure 2). This deprivation gradient in long COVID mirrors findings from the ONS on prevalence data for the whole population¹⁵

Figure 2: Proportion reporting long COVID (of those who had COVID-19) by deprivation quintile group



Notes: N=5,087. 'All' line refers to all respondents who said they had had COVID-19. Analysis is weighted for sampling design and young person non-response.

Again considering only those who had COVID-19, 22% with parents in a routine/manual occupation (or who had never worked) reported long COVID, vs 18% of those with a parent in a higher managerial/professional occupation. Similar differences were also seen for those whose parents were not degree educated (21% v 17% for those with a parent holding a degree), and by housing tenure, with 24% of participants who reported having COVID-19 and living in social housing reporting long COVID, compared to 21% of those living in private rented accommodation and 18% of those living in owner-occupied homes.

The reasons for these differences in long COVID prevalence are not clear, especially given we still have relatively limited knowledge of what causes long COVID, as well as how best to avoid the condition.¹⁶ Anecdotally, sufficient rest alongside a managed and steady return to activity appears to be important for

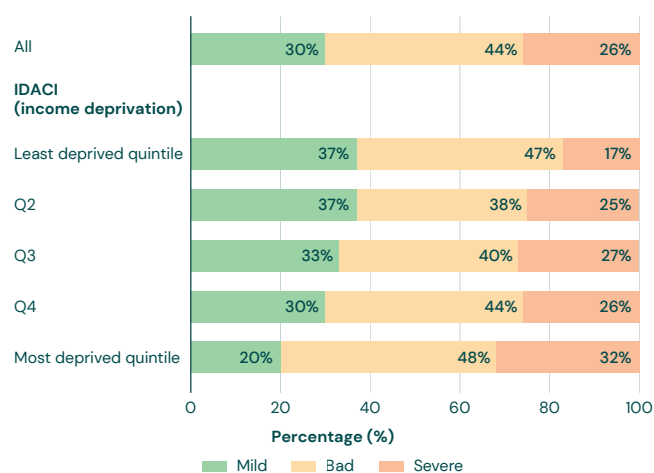
COVID-19 recovery.¹⁷ It may be that getting this rest and a careful, managed return to activities is easier for certain groups than others. Differences may also be due to differing overall health levels pre-infection between groups. For example, previous research has found long COVID risk to increase with body mass index.¹⁸ This may help to explain differences by socioeconomic group, with young people from lower socioeconomic backgrounds at increased risk of obesity.¹⁹

Severe long COVID

70% of those who said they had long COVID (including those who had now recovered) said it limited their ability to carry out daily activities. Just over a quarter (26%) said that their ability was reduced a lot (defined throughout the rest of this briefing as having 'severe' long COVID), equating to 2% of the sample population overall.²⁰ 44% said their ability was reduced a little ('bad' long COVID) (also shown on Figure 1), and 30% saying their ability was not reduced ('mild' long COVID). Females who reported having long COVID were slightly more likely to say it was severe (28%) than males (23%).

As shown by Figure 3, those living in more deprived areas were nearly twice as likely to say their long COVID was severe, at 32%, compared to 17% of those from more affluent areas. 32% of those with a parent in a routine/manual occupation (or who had never worked) reported this, compared to 19% of those with a parent in a higher managerial/professional occupation.

Figure 3: Severity of long COVID by deprivation



Notes: N= 984. Analysis is weighted for sampling design and young person non-response.

Differences were also seen by housing tenure. 37% in social housing who reported long COVID said it was severe, nearly twice as many as the 20% of those in homes that were owned. 29% living in private rented accommodation said their long COVID was severe.

Looking at differences by ethnicity, Black young people were the most likely to report that they had severe long COVID (32%), while those describing their ethnicity as Mixed or 'Other' were more likely to report having had bad long COVID compared to their peers (56%) (as shown in Table 1).

Table 1: Severity of long COVID (for those with long COVID) by ethnicity

Ethnicity	Severity of long COVID (%)			
	Severe	Bad	Mild	Total
White	26	44	30	100
Asian	29	47	24	100
Black	32	38	30	100
Mixed/Other	23	56	21	100

Notes: Reporting row percentages. Analysis is weighted to account for sampling design and non-response. The 'Mixed' and 'Other' ethnic groups are combined in a single category for statistical disclosure control reasons. N = 831.

As discussed, long COVID is still an emerging phenomenon, with research ongoing to understand how to diagnose the condition and what the key symptoms are.²¹ Other studies have found a wide range of different estimates for long COVID in children, and there are limitations to the findings here, given both COVID infection and long COVID are self-reported and not independently verified.

However, figures here do fall within a reasonable expected range based on findings of other studies,²² including analysis from a large follow up study of 3,000 11 to 17 year-olds, which tested for COVID-19 and then asked for reports of symptoms of ill health (for example, unusual tiredness or headaches) and estimated that 1 in 7 (14%) young people who had COVID-19 developed long COVID, a similar figure to that found here for those with symptoms interfering with day-to-day life (in COSMO, 13% of students who said they had COVID-19 said they had long COVID which limited their ability to carry out daily activities). However, it should be noted that the follow-up study looked at 15 weeks post-infection, rather than the 4 weeks post-symptom onset measure used in this study.²³

Shielding

Almost 59,000 children and young people (aged up to 17) were identified on the Shielded Patient List (SPL) in the pandemic's early stages.²⁴ Pre-existing medical conditions among this group meant that they were at the highest risk of severe illness if

they contracted COVID-19. They were therefore advised to take additional measures to minimise contact with those from outside their households.

8% of COSMO participants reported they were asked to shield.²⁵ Males were slightly more likely to be asked, at 9%, compared to 7% of females. 8% of state comprehensive school students were asked to shield, compared to 4% of grammar school pupils and 4% of independent school pupils.

Those living in the most deprived parts of the country (determined by IDACI quintile) were just over twice as likely to be asked to shield, at 12%, compared to 5% of those living in the least deprived parts. 10% of participants with a parent in a routine/manual occupation (or who had never worked) were asked to shield, compared to 5% of those with a parent in a higher managerial/professional occupation. 9% of those without a parent holding a degree were asked, compared to 5% of those with a parent with a degree.

How did experiences of education during the COVID-19 pandemic differ for those with long COVID and those who shielded?

While most students returned to schools once they re-opened, this was not universal, with persistent issues with absences continuing. Days missed outside of lockdowns varied by schools' and pupils' characteristics – for instance, 20% of those at state schools with the most deprived intakes (based on Free School Meal (FSM) eligibility) missed 20 days or more, compared to 14% of those at schools with the least deprived.

There are many plausible reasons for this, including isolating due to contracting COVID-19 and feeling anxious to return to school, as well as non-COVID related reasons.

More breakdowns of this data can be found in the COSMO briefing on [Education Recovery and Catch Up](#).²⁶

GCSE attainment

To explore how elements of health had an impact on GCSE attainment for the COSMO cohort, COSMO data has been linked to administrative records from the National Pupil Database (NPD), enabling the authors to control for pupils' socio-economic background and their prior Key Stage 2 (KS2) educational attainment.

This data has been used to construct linear regression models (a modelling technique to determine the relationship between one variable and other explanatory variables) to evaluate the association between COVID-19 related experiences and young people's GCSE attainment (as measured by Centre Assessed Grades), taking into account pupils' background characteristics and prior attainment.

Looking at the association between pupils' reported shielding status on its own and their teacher assessed GCSE attainment (Figure 4), we find that pupils having been asked to shield is associated with roughly a 0.6 standard deviation decrease in their GCSE scores. After adding pupils' background characteristics and prior attainment at KS2 into the model, this association becomes weaker, but pupils having been asked to shield is still linked with approximately 0.3 standard deviation decrease in their scores.

Considering the idea that pupils' COVID-19 infection status might act as a proxy for their shielding status, we added in pupils' COVID-19 status in the last model here. After further controlling pupils' COVID-19 infection status, shielding status is still associated with approximately 0.3 standard deviation drop in scores. This indicates that young people who were asked to shield achieved lower scores compared to those who were not asked to shield, other things being equal.

Furthermore, whilst having any form of long COVID overall was not associated with having lower GCSE attainment, when considering the severity of long COVID, it is apparent that having long COVID with a severe effect on everyday life is consistently associated with lower GCSE scores. Having severe long COVID is linked with

about 0.3 standard deviation decrease in teacher assessed GCSE scores.

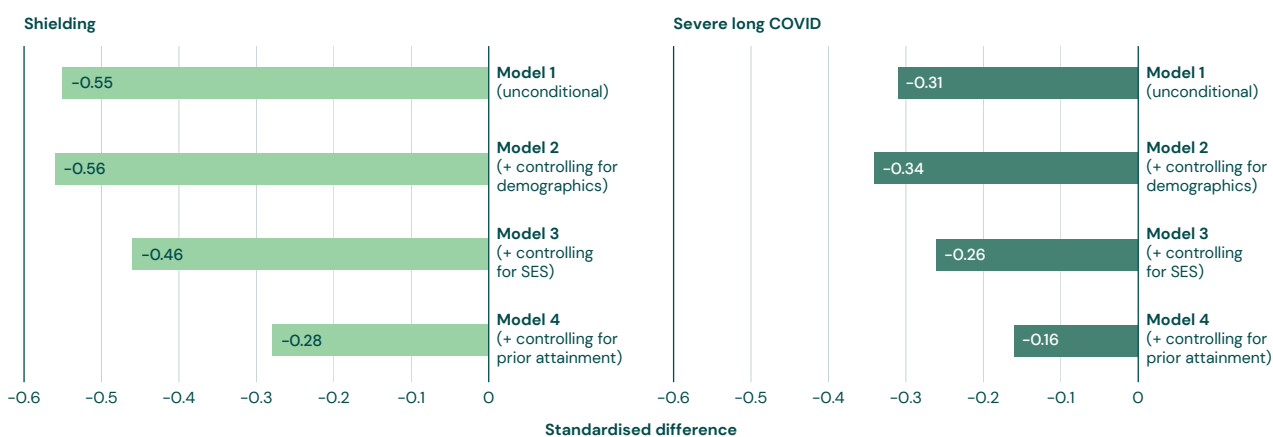
This association remains roughly at -0.3 when pupils' gender, ethnicity and family background factors are added in. After further controlling for pupils' prior attainment, the association becomes smaller, but is still about -0.2 standard deviations (also shown on Figure 4).

The findings show that pupils with long COVID with a severe effect on everyday life achieved lower GCSE scores than their peers who did not suffer from this experience, when all other variables are held constant. Severe long COVID is therefore a risk factor for young people's educational attainment. The long-term disruption to young people's education, daily life and potentially to their mental health of having severe long COVID may be a possible explanation for this pattern.

A further regression model, considering major life events that included being seriously ill, found that although the effect of serious illness in hospital on educational attainment is not significant on its own, after controlling for pupils' background characteristics and prior attainment, it is shown to be negatively linked to pupils' GCSE scores. Pupils being seriously ill in hospital during the COVID-19 pandemic is linked to a 0.3 standard deviation decrease in total teacher assessed GCSE score.

It is important to keep in mind that GCSE grades for this year group were determined by teacher assessments, rather than exams. Overall, they are likely to show real differences in attainment, but there is a chance differences seen could in part be due to the method used to carry out assessments.

Figure 4: Changes in Teacher Assessed GCSE attainment associated with young people's shielding and severe COVID status, conditional on pupils' characteristics



Notes: Shielding status N = 4,285; Severity of long COVID N = 4,398. Results for shielding are compared to those asked not to shield. Results for those reporting severe long COVID are compared to those who said they have not had COVID-19. Model 1 only includes shielding indicator (for shielding status analysis) or severe long COVID indicator (for severity of long COVID analysis), Model 2 adds gender and ethnicity (demographics), Model 3 adds parental education and parental occupation (SES), and Model 4 adds KS2 prior attainment.

For example, it may have been that pupils shielding or who suffered from long COVID were seen less by their teachers, so may have had fewer opportunities to demonstrate their potential to them. These issues will be explored in more detail in a forthcoming briefing.

Catch-up activities

Once schools re-opened after the first national lockdown, the government provided funding for schools to run catch-up activities (an issue covered in more detail in the [Education Recovery and Catch Up COSMO briefing](#)).²⁷ Looking at participation in catch-up activities offered by a school, those who reported having long COVID were more likely to say that they had taken part in catch-up activities like one-to-one tuition, at 59%, compared to 53% of those who didn't report having COVID-19.

59% of those who were asked to shield took part in a catch-up activity, compared to 53% of those not asked. Notable differences in participation were for:

- One-to-one tuition or support (24% vs 12% of those not asked to shield)
- Extra tuition/support in pairs or small groups (27% vs 20% of those not asked)
- Online classes to watch outside of lesson time (37% vs 30% of those not asked)
- Additional classes during school holidays and/or weekends (20% vs 13% of those not asked)

When considering take-up of any type of tutoring (both individual and group):

- 35% of those who said they were asked to shield took part, compared to 25% of those not asked to shield.
- There were no differences in take-up when looking at private tuition in the same time period.

Looking at the proportions who either said they took up an offer of catch-up or said they were offered it but did not take it up suggests that many catch-up activities (apart from additional in-person classes) were targeted towards those who were shielding. This is likely to involve the fact that those from more deprived backgrounds are more likely to both take part in catch-up activities and have been asked to shield.

41% of those who were asked to shield agreed that their school, employer or training provider were providing additional catch-up support

due to the pandemic, whilst 31% of those who were not asked to shield said the same.

Catch-up concerns

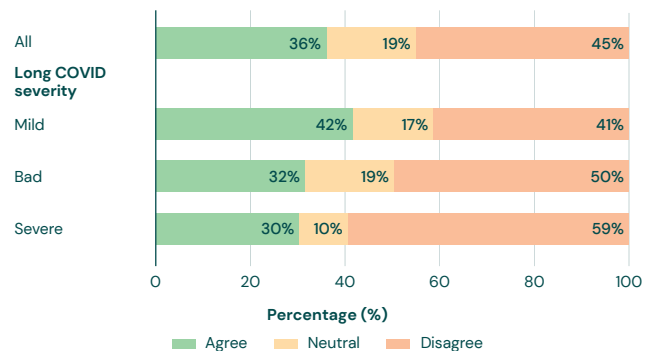
Many young people in the COSMO cohort were concerned about their readiness for their next steps in education and training, an issue examined in more detail in the [Education Recovery and Catch Up COSMO briefing](#).²⁸

Respondents who reported having had long COVID or who were asked to shield were more likely to say they had changed their future plans, both in terms of their education and their career, because of the pandemic. More information can be found in the COSMO briefing on [Future Plans and Aspirations](#).²⁹

Thinking about their own educational progress, those who reported having long COVID were also more likely to say that they had not caught up with lost learning.

Of those that had long COVID, 59% of those with severe long COVID disagreed they had done so, compared to 50% of those reporting bad long COVID and 41% of those reporting mild long COVID (Figure 5).

Figure 5: Whether participant agreed they had caught up with lost learning during the pandemic by severity of long COVID



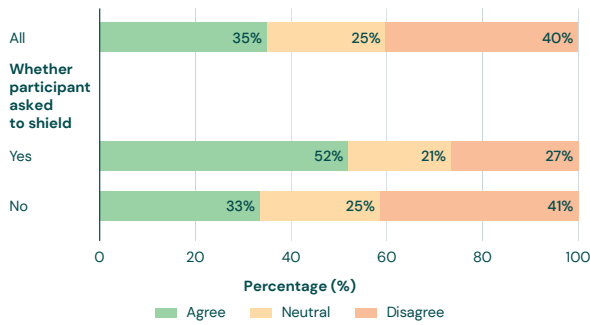
Notes: N=12,149 for all and N=969 for severity of long COVID. Analysis is weighted for sampling design and young person non-response.

43% of those who reported long COVID felt they had fallen behind their classmates due to the pandemic, compared to 34% of those who said they have not had COVID-19. This figure was higher for those who reported severe long COVID (58%), compared to 39% for bad long COVID and 36% for mild long COVID.

Young people who were asked to shield were also more likely to say they had fallen behind their classmates, at 52%, compared to 33% of those who were not asked to shield (Figure 6).

This group were more than twice as likely to strongly agree, at 27% compared to 12% of those not asked to shield.

Figure 6: Whether participant agreed they had fallen behind their classmates by shielding status



Notes: N=11,330. 'All' refers to all respondents who answered the question about being asked to shield.

Those who were asked to shield were 15 percentage points more likely to say their GCSE grades were lower than they expected, at 36%, compared to 21% of those who were not asked. This may be due to a perception by teachers that these pupils were not re-engaging in education, with this group perhaps more anxious about being back in school in person.

How did the pandemic impact on other health behaviours?

Across the pandemic, the population faced national lockdowns and many restrictions on their social activities, with several months spent isolated at home. Restrictions meant that places to exercise, like sports clubs, were often closed, and particularly in 2020, meant that people could not travel very far to access leisure and sport activities. This section looks at exercise patterns of this cohort, with a focus on provision available through schools, and how this has been impacted by the pandemic.

This section also looks at rates of behaviours like drinking alcohol and smoking for the COSMO cohort, comparing findings to other cohort studies to see if patterns have changed over time.

Concerns were raised that the mental toll of the pandemic could lead to increased risk-taking amongst young people (such as substance abuse), but other research indicates these concerns have not come to fruition,³⁰ perhaps because of limited opportunities to take part in this type of behaviour during restrictions.

Rates of exercise

60% of young people reported taking part in sport

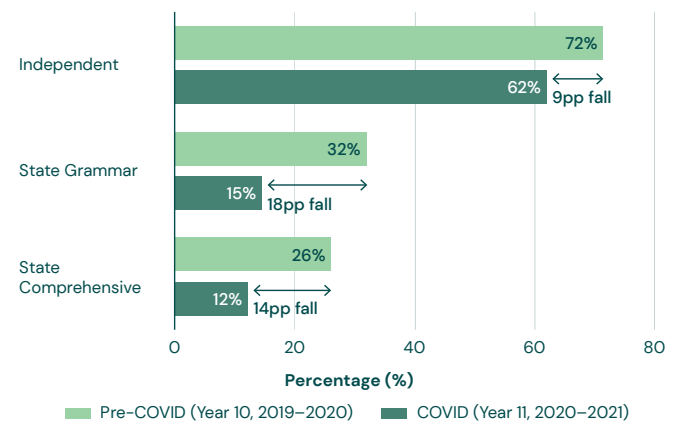
or exercise outside of their PE lessons before the pandemic, when the cohort were in Year 10. When they returned to school in Year 11, this had fallen to just 44%.

Activities organised by schools fell by 13 percentage points (from 28% taking part pre-pandemic to 15% post), with a smaller 8 percentage point fall for those organised externally (from 42% to 34%).

Taking part in sports organised by school was considerably more common at independent schools (at 72% pre-pandemic) than in state comprehensives (26%) and grammars (32%). Provision by schools fell across all school types during the pandemic, although participation rates fell the least in independent schools, reducing by 9 percentage points, compared to 18pp in grammars and 14pp in state comprehensives (Figure 7). Within state comprehensives, reported participation was similar between schools with the most and the least deprived intakes.

In addition to the pandemic, age and the demand of schoolwork may also be contributing to these changes, although smaller falls (from what was already a very high base) in independent schools suggest that students moving into a higher demand school year cannot explain these differences alone.

Figure 7: Whether a young person took part in sports or exercise outside of PE organised by their school by school type (pre- and during pandemic)



Notes: N=6,286. Analysis is weighted for sampling design and young person non-response.

Taking part in sports organised by school was considerably more common at independent schools than in state comprehensives.

Pre-pandemic, young people from higher managerial/professional backgrounds were more likely to do sport or exercise outside of PE (70% vs 50% of those with parents in a routine/manual occupation or who had never worked). Post-pandemic, this gap remained broadly consistent, with rates reducing to 52% for students from higher managerial/professional backgrounds, and to 35% for students from routine/manual backgrounds (or had parents who had never worked).

NHS guidelines are for children and teenagers to aim for an average of at least 60 minutes of moderate or vigorous intensity physical activity per day.³¹ Only 7% of the cohort reported having completed at least 30 minutes of physical activity each day, with a total of 43% reporting exercising for at least 30 minutes 4 days or more over the last week.

In Sport England's Active Lives survey, for those in years 9 to 11, 47% of young people were classified as 'active' (completing 60+ minutes of physical activity per day) for the 2021/22 academic year.³² This figure was 5.8% higher than the 41% classed as 'active' in 2020/21, and is similar to pre-pandemic levels found by the study.

Cigarette and e-cigarette use

The majority (77%) of the young people here reported having never smoked a cigarette before, and 11% had only ever tried smoking cigarettes once. However, there is still a small proportion (5%) of young people who said they smoke at least one cigarette per week. Pupils at grammar schools were more likely to have never smoked a cigarette than those who attended state non-selective schools or independent schools.

As use of e-cigarettes (electronic cigarettes) among young people in the UK has risen since 2018,³³ we also explore their use among the COSMO cohort. Compared to the overall picture of young people's use of traditional cigarettes, the general pattern for e-cigarettes use shows a different story, with more young people using e-cigarettes, and using them more frequently. Whilst 23% of young people reported having smoked a cigarette, 33% reported having used e-cigarettes. Only 67% of young people report never having used e-cigarettes (10 percentage points lower than the proportion of young people who have never smoked cigarettes), 1% smoke e-cigarettes once a day, and 5% use e-cigarettes several times a day.

The use of e-cigarettes is more prevalent among young people from disadvantaged family backgrounds, consistent with evidence from the UK Household Longitudinal Study.³⁴ Pupils from disadvantaged family backgrounds were also less likely to report that they had never used e-cigarettes and more likely to report a higher frequency of using e-cigarettes (i.e. several times a day).

Those attending grammar schools were the least likely to report that they smoke e-cigarettes. White participants were the most likely to smoke cigarettes, at 15%, compared to 11% of those of 'Mixed' ethnicity, 5% who classed their ethnicity as 'Other' and less than 3% of Asian and Black participants. These patterns by ethnicity are similar to those seen for e-cigarettes, with 23% of White participants having used e-cigarettes, compared to 20% of those of Mixed ethnicity, and less than 10% of Asian participants, Black participants and those of other ethnicities.

Alcohol consumption

63% of participants reported having had an alcoholic drink, around 22 percentage points lower than the rates using the same measure in the Next Steps study, in which participants were aged 16 and 17 in 2007.³⁵

Disadvantaged pupils were less likely to report alcohol consumption, with pupils whose parents are in higher managerial/professional occupations the most likely to report having ever had more than a sip of an alcoholic drink, at 75%, compared to 55% of those with parents in routine/manual occupations (or who have never worked).

Privately educated pupils were the most likely to report that they had had an alcoholic drink. Pupils from state comprehensive schools with lower rates of FSM eligibility (i.e., those with more advantaged intakes) were more likely to report having had an alcoholic drink before. This finding is repeated in the whole COSMO population for measures of neighbourhood disadvantage, such as IDACI and IMD.

The majority of young people who reported having ever had more than a sip of alcohol only reported drinking alcohol occasionally, with 53% drinking once a month or less, and 31% drinking two to three times a month. 8% reported they drank alcohol two to three times a week, and 4% more than four times a week.

For those who reported drinking alcohol two to three times a week and two to three times a month, there is a gradient pattern in terms of family background, school type, neighbourhood deprivation and school deprivation. Pupils from advantaged family backgrounds, those at independent schools, those from more affluent areas and those who attended state comprehensive schools with lower disadvantage intakes were all more likely to report drinking more frequently.

Whilst just over three quarters (76%) of White students and 60% of those of Mixed ethnicity report ever trying alcohol, only 30% of Black students, 28% of students with ethnicities classed as Other and 16% of Asian students said that they have tried alcohol. This may, at least in part, be explained by cultural differences in alcohol consumption between different ethnic groups.³⁶

Drug use

15% of the cohort had tried one or more types of illegal drug. 15% reported having tried cannabis, and 4% had tried another illegal substance. Young people in the least deprived areas (by IDACI) were more likely to have taken drugs than those in the most deprived (17% vs 13%).

Looking at those in state comprehensives only, young people in the least deprived schools were more likely to have taken any illegal drug (19% vs 13% in the most deprived). The same patterns were also seen when looking at cannabis consumption only.

As shown by Table 2, those of White and Mixed ethnicities are far more likely to report using drugs.

Table 2: Percentage of young people ever having used drugs by ethnicity

Ethnicity	Reported ever using drugs (%)		
	No	Yes	All
White	81	19	100
Mixed	83	17	100
Asian	96	4	100
Black	92	8	100
Other	95	5	100

Notes: Reporting row percentages. Analysis is weighted to account for sampling design and non-response. N=9,444.

What were some of the health impacts of the pandemic on parents?

Self-isolation

56% of parents said they were asked to self-isolate at some point during the pandemic. Of this group, 78% said they were asked to self-isolate once or twice, 18% said three to four and 4% five or more times.

7% of those in routine/manual occupations (or who have never worked) said they were asked to isolate 5 or more times, compared to 4% in intermediate professions and 3% in higher managerial/professional roles.

Reported compliance with self-isolation was high, with only 5% saying they did not isolate when asked. However, it should be noted that social acceptability bias here may be resulting in higher proportions saying they self-isolated than actually did so.

6% of those working in routine/manual occupations (or who have never worked) said they did not isolate, compared to 5% in intermediate professions and 2% in higher managerial/professional roles.

Of those that were asked to self-isolate, 2% said that when asked, they did not self-isolate for financial reasons. No patterns were seen when looking at socio-economic variables.

COVID-19 vaccination status

The vast majority, 90%, of parents said that they have had the COVID-19 vaccine, and a further 1% said they are planning to have the vaccine in future. 4% said they do not want to receive the COVID-19 vaccine and 4% refused to answer the question or selected prefer not to say.

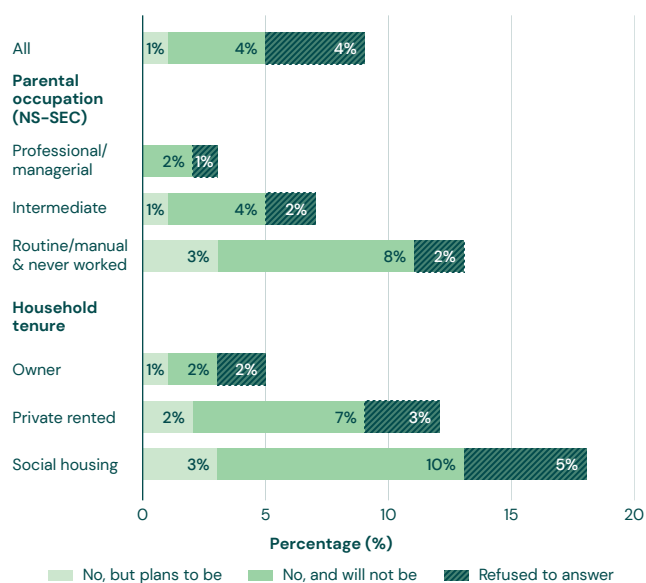
Parents who are White (92%) or Asian (91%) were the most likely to say they have had the COVID-19 vaccine. 79% of Black parents said they have had vaccine, with 8% saying they do not want to have the vaccine and a further 9% refusing to answer the question. The most notable difference is for those who are Black Caribbean: 63% of parents said they have had the vaccine – 17% said they do not want to be vaccinated and 15% refused to answer. The reasons behind these differences are complex, including historic mistrust of government and public health bodies within some ethnic minority groups, after the erosion of trust by systemic racism and discrimination.³⁷

While there have been campaigns to tackle vaccine hesitancy amongst ethnic minorities³⁸, there have been calls for an improved approach in future crises, for example greater investment in community groups better able to act as a trusted source of information.³⁹

Parents living in social housing were the most likely both to say they had not been vaccinated against COVID-19 and are not planning to be (10%, compared to 7% of private renters and 2% of homeowners). This group was also more likely to refuse to answer the question (5% compared to 3% of private renters and 2% of homeowners) (Figure 8).

8% of those working in a routine/manual occupation (or who had never worked) said they do not want to be vaccinated, compared to 2% of those in a higher managerial/professional occupation. Similarly, 6% of parents without a degree said they do not want to be vaccinated compared to 2% of those with a degree.

Figure 8: Whether participant's parent has not had the COVID-19 vaccine by socio-economic characteristics



Notes: N=9,057 for 'All', N=7,049 for NSSEC and N=8,089 for housing type. Analysis is weighted for survey design and young person/main-parent non-response.

Exercise pre- and post-pandemic

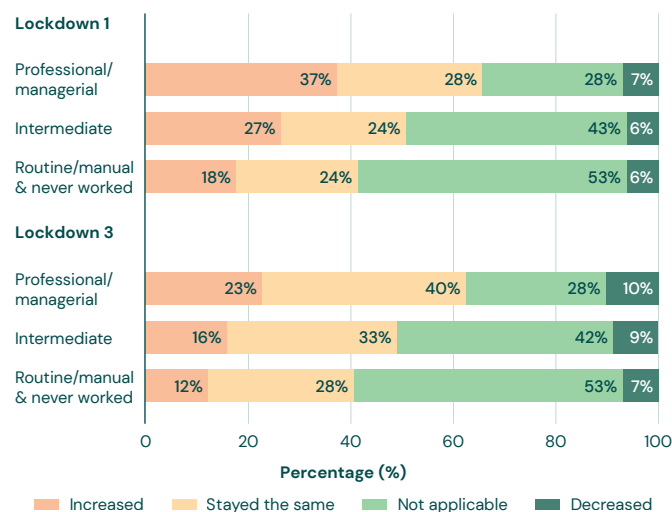
The impact of the pandemic on exercise levels of parents was mixed, 39% of parents reported the amount of exercise they were doing decreased in lockdown 1, with 20% saying it had decreased a lot. However, 36% said they had done a greater amount of exercise, with 13% saying it had increased a lot. A quarter of parents (25%) reported no changes.

Alcohol consumption

27% of parents said that during March 2020 to June 2020 (lockdown 1) their alcohol consumption increased compared to pre-pandemic, with 6% saying their consumption increased a lot. 17% reported an increase in their alcohol consumption between January 2021 and March 2021 (lockdown 3) compared to pre-pandemic.⁴⁰ Large proportions of parents who are Asian (81%) and Black (74%) reported 'not applicable' for this question, which again may be, at least in part, explained by cultural differences.

For both lockdown 1 and 3, those working in higher managerial/professional occupations were more likely to report an increase in their alcohol consumption (Figure 9). For instance, when thinking about lockdown 1, these parents were 19 percentage points more likely to report an increase in their consumption, at 37%, compared to 18% of those working in routine/manual occupations (or who have never worked). However, it should be noted that those in routine/manual roles were far more likely to choose 'not applicable' as their answer, at 53%, compared to 28% of those from higher managerial/professional occupations.

Figure 9: Change in parental alcohol consumption in COVID-19 lockdowns compared to pre-pandemic by occupation



Notes: N=6,880 for lockdown 1 and N=6,818 for lockdown 3. Analysis is weighted for survey design and main-parent non-response.

Smoking and e-cigarette use

10% of all parents said the amount that they smoke or vape increased during lockdown 1 (with 4% saying it increased a lot), while 7% said it increased during lockdown 3.⁴¹

Conclusions and policy implications

COVID-19

- While estimates of long COVID rates vary, data from here and elsewhere show that a sizeable proportion of young people (20% in this study) who were infected with COVID-19 suffered from long term impacts following infection. Given the long term health impacts found for a number of young people, and their high exposure risk in schools and other education settings, more should be done to prevent risk of long COVID in this age group. The risk of long COVID falls slightly after vaccination.⁴² However, in July 2022, only 62% of 12-15 year olds and 81% of 16-17 year olds have had a first dose of the vaccine (with the figures standing at 45% and 70% respectively for at least a second dose),⁴³ lower proportions than those seen in older age groups. All young people should be encouraged to have at least 2 doses of the COVID vaccine, and the government should put in place initiatives to actively encourage vaccination take-up in this group, for example by offering vaccinations within schools.
- Funding should also continue to go to long COVID services, such as paediatric hubs, so that young people with suspected long COVID can be accurately assessed and referred to specialist services as soon as possible. Such services should include rehabilitation programmes to mitigate long COVID's impact on their ability to carry out daily activities. These services, as well as GPs, should communicate with schools so that students are supported with their long-term symptoms, to prevent them limiting or reducing their engagement with education.
- Findings here indicate that long COVID and severe long COVID are more common for those in deprived areas. Other studies have also identified this trend, as well as increased risk of dying from COVID-19 for people living in these areas.⁴⁴ However, there have been real-terms cuts to public health funding over the last few years, with greater cuts to the public health grant happening in more deprived areas.⁴⁵ Public health funding should match the higher levels of need in poorer areas, and should be delivered through a well-evidenced, cross-governmental strategy.
- Those who were asked to shield during the pandemic were more likely to report concerns about their studies, and have lower levels of attainment in their teacher assessed GCSE results. Support should continue to be available for these students as part of catch-up activities, and support should be offered to vulnerable students who voluntarily decide to shield. The impact of shielding on someone's education should also be looked at in detail if ever required again in future, for example, in the event of another pandemic.

Health behaviours

- Young people in independent schools are much more likely to take part in sports organised by their school. Given the importance of access to exercise and sport for wider health, government should make efforts to close this access gap. All young people should have access to and be encouraged to take part in sporting activities run by their school. While the government's School Sport and Activity Action plan, which will produce 400 new after-school 'satellite clubs' in disadvantaged areas,⁴⁶ is welcome, more funding is needed to support local authorities and voluntary organisations who lead sport activities, particularly targeted at deprived areas.⁴⁷

Students should be supported with their long COVID symptoms, to prevent them limiting their engagement with education.

- Only a small proportion of young people in the COSMO cohort reported being regular smokers, which indicates success in efforts to reduce smoking amongst the population. However, e-cigarette use is rising, and while still low, it is now higher than cigarette use. Research has found that e-cigarettes do not appear to be a substantial gateway to smoking tobacco. However, concerns have been raised that elements of e-cigarettes could cause pulmonary complications,⁴⁸ and potentially have long-term impacts such as an increase in asthma severity.⁴⁹ Given rising rates, research should continue to look at the impact of e-cigarette use in young people. Regulations should keep pace with emerging findings if new harms to health are identified to minimise the impact on the population's health.

About The COVID Social Mobility and Opportunities (COSMO) study

The COVID Social Mobility & Opportunities (COSMO) study is a new national cohort study generating high-quality evidence about how the COVID-19 pandemic has affected socio-economic inequalities in life chances, both in terms of short- and long-term effects on education, wellbeing, and career outcomes. A representative sample of young people in England who were in Year 11 in the 2021/2022 academic year were invited to take part in the survey, with the aim of following them as they progress through the final stages of education and into the labour market. A sample of more than 13,000 cohort members was recruited in Wave 1.

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Researchers can access data from Wave 1 of the study through the [UK Data Service](#).⁵⁰

Citing this briefing

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Sample and methods

The data for this briefing come from Wave 1 of the COVID Social Mobility & Opportunities (COSMO) study. COSMO is based on a probability sample drawn from the Department for Education's National Pupil Database (plus additional recruitment from pupils at private schools), with clustering within schools (for practicality reasons) and oversampling of certain groups using stratification.

Our analysis in this briefing is primarily based on descriptive statistics reporting averages, distributions and differences between groups. Analyses use weights to take into account the over-sampling inherent in the study design, as well as initial non-response by young people and, where relevant, their parents. Differences are only highlighted where these are found to be statistically significant at the $p < 0.05$ level. Any statistical inference testing reported also accounts for the clustering and stratification in the study design.

While our full sample of young people has $N=12,828$, the parents of participants were not as likely to respond, reducing analyses involving parents to at most $N=9,330$. As noted above, young person and parental non-response have been modelled separately, with different weights to ensure (insofar as is possible) representativeness of our analysis sample to the intended population. Item-level non-response also results in some further variation to the analysis sample, which is minimised within analyses to ensure consistency. Analyses of some groups, for example those who attended special schools or who identify as non-binary/in another way, have not been able to be reported due to small sample sizes.

Aspects of the analysis use administrative data from the Department for Education (DfE)'s National Pupil Database (NPD), where consent was gained for this linkage (73% of young people), with additional weighting carried out to ensure (insofar as is possible) representativeness of analysis using linked administrative data. This work was produced using statistical data from the DfE processed in the Office for National Statistics' (ONS) Secure Research Service (SRS). The use of the DfE statistical data in this work does not imply the endorsement of the DfE or ONS in relation to the interpretation or analysis of the statistical data. This work uses research datasets, which may not exactly reproduce National Statistics aggregates.

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COSMO

COVID Social Mobility
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