

NHS Digital Data Publications Smoking, Drinking and Drug Use among Young People in England

Smoking, Drinking and Drug Use among Young People in England, 2021

Publication, Part of Smoking, Drinking and Drug Use among Young People in England

# Smoking, Drinking and Drug Use among Young People in England, 2021

National statistics

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Geographic Coverage: England

**Geographical Granularity:** Regions, Country, Government Office Regions

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### Summary

This report contains results from the latest survey of secondary school pupils in England in years 7 to 11 (mostly aged 11 to 15), focusing on smoking, drinking and drug use. It covers a range of topics including prevalence, habits, attitudes, and wellbeing. This survey is usually run every two years, however, due to the impact that the Covid pandemic had on school opening and attendance, it was not possible to run the survey as initially planned in 2020; instead it was delivered in the 2021 school year.

In 2021 additional questions were also included relating to the impact of Covid. They covered how pupil's took part in school learning in the last school year (September 2020 to July 2021), and how often pupil's met other people outside of school and home. Results of analysis covering these questions have been presented within parts of the report and associated data tables.

It includes this summary report showing key findings, excel tables with more detailed outcomes, technical appendices and a data quality statement. An anonymised record level file of the underlying data on which users can <u>carry</u> out their own analysis will be made available via the UK Data Service later in 2022 (see link below).



### Access the code used to create this report

The code used to create the outputs for this report is available on our NHS Digital GitHub webpage

Click here to access the code

### Key Facts

### Based on the 2021 survey:

# There has been a decrease in the prevalence of smoking cigarettes

12% of pupils had ever smoked (16% in 2018), 3% were current smokers (5% in 2018), and 1% were regular smokers (2% in 2018)

# Current e-cigarette use (vaping) has increased to 9%, up from 6% in 2018

Around 1 in 5 (21%) 15-year old girls were classified as current ecigarette users

### 40% of pupils said they had ever had an alcoholic drink Prevalence increases with age, from 13% of 11 year olds to 65% of 15 year olds

### 6% of all pupils said they usually drank alcohol at least once per week, the same as in 2018 The proportion increases with age, from 1% of 11 year olds to 14% of 15 year olds



#### Give us your feedback on this publication

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### **Data Sets**

ightarrow Smoking, Drinking and Drug Use among Young People in England, 2021: Data tables

#### Resources

Smoking, drinking and drug use among young people, England, 2021: Questionnaire (smoking and alcohol focus) PDF 1 MB

Smoking, drinking and drug use among young people, England, 2021: Questionnaire (drug use focus) PDF 1 MB

**Pre-Release Access List** 

PDF 109 KB

ARTICLE

Apply for access to the anonymised underlying dataset via the UK data service

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Introduction

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### Introduction

This is the most recent survey in a series that began in 1982. Each survey since 1998 has included a core set of questions on smoking, drinking and drug use. In 2000, the survey questions changed to focus on smoking and drinking or on drug use in alternate years and in 2016, the survey reverted back to including both drinking/smoking and drugs focused questions in one survey.

The 2021 survey was conducted by Ipsos Mori, and questioned 9,289 year 7 to 11 pupils, mostly aged 11 to 15, between September 2021 and February 2022, across 119 schools. In previous years the survey has been conducted by external interviewers, however due to the Covid pandemic and visitor restrictions, schools were offered the choice of an interviewer attending or guidance to run the survey themselves; 60 schools chose interviewer led and 59 schools teacher led.

Full details of the survey design and data collection are given in the Appendix to this report.

Each survey now includes a core section of questions covering the following:

- pupils' experience of smoking, drinking and drug use;
- consumption of cigarettes and alcoholic drinks in the last week;
- awareness and availability of specific named drugs; and
- small sections on wellbeing and family affluence

More detailed questions were also asked but the sample was split in two in order to make it possible for pupils to complete the questionnaire in one school period. Half the pupils were asked additional questions on smoking and drinking and the other half were asked additional questions on drug use. The additional questions included:

- where pupils get cigarettes, alcohol and drugs;
- attitudes of pupils and their families to smoking, drinking and drug taking;
- impact of school lessons and other sources of information about smoking, drinking and drug taking. dependence on smoking;
- exposure to second-hand smoke;
- where and with whom pupils drink;
- experience of drunkenness; and
- types of drugs taken.

#### **Estimates from surveys**

This survey, in common with other surveys, collects information from a sample of the population. The sample is designed to represent the whole population as accurately as possible within practical constraints, such as time and cost. Consequently, statistics based on the survey are estimates, rather than precise figures, and are subject to a margin of error, also known as a 95% confidence interval. <u>Appendix B</u>, section 2 covers how sampling errors were calculated.

For example the survey estimate might be 24% with a 95% confidence interval of 22% to 26%. A different sample might have given a different estimate, but we expect that the true value of the statistic in the population would be within the range given by the 95% confidence interval in 95 cases out of 100. Confidence intervals are affected by the

size of the sample on which the estimate is based. In general, the larger the sample, the smaller the confidence interval, and hence the more precise the estimate.

For key measures in this report, the confidence intervals have been quoted in brackets after the estimated prevalence. Confidence intervals for other key survey estimates are available in an Excel appendix table that accompanies this report.

Where differences are commented on, these reflect the same degree of certainty that these differences are real, and not just within the margins of sampling error. These differences can be described as statistically significant, implying no more than a 5% chance that any reported difference is not a real one but a consequence of sampling error. Some apparently large differences which are not statistically significant have been annotated in the report so users are aware of this.

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**Previous Chapter** Overview

**Next Chapter** Part 1: Smoking prevalence and cigarette consumption

# Part 1: Smoking prevalence and cigarette consumption

### Introduction

Extensive research has demonstrated the harmful effects that smoking has on health. Smoking contributes to a variety of health conditions, including cancers and respiratory, digestive and circulatory diseases, whilst also impairing the development of teenage lungs. Moreover, smoking causes more preventable deaths than any other single cause; in 2019, 74,600 preventable deaths in England were estimated to be attributed to smoking:

### NHS Digital: Statistics on Smoking, England – 2020

Tobacco use remains one of the most significant public health challenges in the UK. One of the national ambitions in the government's tobacco control plan published in 2017, was to reduce the number of 15 year olds who regularly smoke to 3% or less by 2022. This ambition was measured via the Smoking, Drinking and Drugs survey.

### Tobacco control plan for England

All pupils were asked about their cigarette smoking behaviour. Pupils were categorised in three ways based on the responses given:

- Regular smokers (defined as usually smoking at least one cigarette per week).
- Occasional smokers (defined as usually smoking less than one cigarette per week).
- Non-smokers.

The term 'current smoker' used in this report includes regular and occasional smokers.

'Ever smoked' includes 'current smokers" plus 'ex-smokers" and those who have 'tried smoking once'.

This part includes information on smoking prevalence, patterns of cigarette consumption, and factors associated with regular smoking.

### Pupils who have ever smoked

#### Pupils who have ever smoked, by year

In 2021, 12% (confidence interval 10-13%) of 11-15 year old pupils had ever smoked, down from 16% of pupils in 2018, and is the lowest level ever recorded by this survey.

There has been a steady decline since 1996, when 49% of pupils had smoked at least once.



### Smoking status of pupils who have ever smoked

The 12% of pupils who had ever smoked consisted of regular smokers (1% of pupils), occasional smokers (2%), those who used to smoke (2%), and those who have tried smoking (7%).

Regular and current (regular plus occasional) smoking prevalence are covered further in the following sections.



#### Pupils who have ever smoked, by sex and age

Compared to 2018 there was a drop in the proportion ever having smoked for both boys and girls, though the drop was greater for boys (from 16% to 10%).

Girls were now more likely to have ever smoked than boys; 13% of girls compared to 10% of boys.

The proportion of pupils who had ever smoked increased with age from 2% of 11 year olds, to 25% of 15 year olds. However, the proportion for 15 years olds has dropped from 31% in 2018.



For more data relating to this section:

Tables 1.1 and 1.2, Smoking, drinking and drug use among young people, 2021

### Pupils who are current smokers

### Pupils who are current smokers, by year

In 2021, 3% (confidence interval 2-4%) of pupils were classified as current smokers. This is a fall from 5% in 2018, and continues a general decline since 1996, when 22% of pupils were current smokers.



### Pupils who are current smokers, by sex and age

Prevalence of current smoking was 2% for boys and 4% for girls (not a statistically significant difference).

Smoking, Drinking and Drug Use among Young People in England, 2021 - NHS Digital

The proportion of current smokers increased with age: from less than 1% of 11 year olds to 9% of 15 year olds.



### Factors associated with current smoking

A logistic regression model was used to explore which characteristics might be associated with current smoking. This identifies associations, not causes; in other words, factors which identify pupils with an increased or decreased likelihood of being smokers. See Appendix B for more information on the regression model used.

The 8 factors (explanatory variables) shown below had a significant association with current smoking. The size of the circles represents an estimate of the relative contribution to the model. See <u>Appendix B3.4</u> for details of how this has been determined (additionally <u>data table</u> 1.10 shows the odds ratios for each possible value of each variable in the model).

It was estimated that e-cigarette use had the strongest association, followed by drug use, and having friends who smoke.



For more data relating to this section:

Tables 1.1, 1.2, 1.11, 1.10 and 1.15 Smoking, drinking and drug use among young people, 2021

### Pupils who are regular smokers

### Pupils who are regular smokers, by year

In 2021, the proportion of pupils who were classified as regular smokers has dropped to 1% (confidence interval 0.2-0.7%), down from 2% in 2018.

The government's tobacco control plan aims to reduce the number of 15 year olds who regularly smoke to 3% or less. In 2021, 3% of 15 year olds were regular smokers, down from 5% in 2018, and from 30% in 1996.



#### Pupils who are regular smokers, by sex and age

Prevalence of regular smoking was the same for boys and girls (1%).

Regular smoking prevalence was less than 1% for all ages, expect 15 year olds for whom it was 3%.



For more data relating to this section:

Tables 1.1 to 1.3, Smoking, drinking and drug use among young people, 2021

### Smoking in the last week

### Smoked cigarettes in the last week, by sex and age

This measure differs from regular smoking as it may include some occasional smokers who had smoked in the last week, and may exclude some regular smokers who did not smoke in the last week.

2% of pupils said they had smoked in the last week, down from 4% in 2018.

2% of boys and 3% of girls smoked in the last week, which is not a statistically significant difference.

The proportion increased with age, from less than 1% of 11 to 13 year olds, to 7% of 15 year olds.



### Total cigarettes smoked in the last week (regular smokers)

A third (33%) of regular smokers said that they had smoked more than 20 cigarettes in the last week. This is down from 45% in 2018.



### Mean cigarettes smoked in last week (regular smokers)

In 2021, mean consumption of cigarettes in the last week by regular smokers was 19.5, down from 24.7 in 2018, and from 44.1 in 2007.



For more data relating to this section:

Tables 1.4, 1.5 and 1.6 Smoking, drinking and drug use among young people, 2021

### Impact of Covid lockdowns on smoking prevalence

Pupils who are current smokers, by how many times they met people outside of home/school in the last four weeks

Pupils who met people outside of home/school more often in the last four weeks were more likely to be current smokers; 9% for pupils who had met other people every day, compared to 3% for pupils who met people once a week, and 1% for pupils who had never met other people.



### Pupils who are current smokers, by how they took part in school learning in the last school year

Pupils who continued to go to school all the time in the last school year were more likely to be current smokers (8%), than those who had studied at home during lockdowns or all/most of the time (2%).



For more data relating to this section:

Tables 1.17 and 1.18 Smoking, drinking and drug use among young people, 2021

### Estimates of smoking from other data sources

The Health Survey for England (HSE) is an annual survey carried out in the respondent's home. We would expect the estimates from HSE to be lower than SDD as children seem to be less likely to admit to risky behaviours such as smoking, drinking and drug taking when completing surveys at home. This is evident in the 2019 HSE results which are much lower than those from SDD, with 10% of 13-15 year olds saying they had ever smoked.

### Health Survey for England 2019

Estimates for Scotland are available from the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS). SALSUS is also carried out in schools under exam conditions but it only covers 13 and 15 year olds. SALSUS showed that in 2018 2% of 13 year olds and 7% of 15 year olds in Scotland were regular smokers compared to 1% and 5% respectively from SDD in England in 2018.

### Scottish Schools Adolescent Lifestyle and Substance Use Survey

Estimates from Wales are available from the Student Health and Wellbeing In Wales report, which like SDD covers children in years 7 to 11. In 2019/20 the survey showed that 4% of young people were current smokers, which compares to 3% of pupils in England from SDD 2021.

Student Health and Well-being Survey

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**Previous Chapter** Introduction

Next Chapter Part 2: Young people who smoke

## Part 2: Young people who smoke

### Introduction

This part focuses on the behaviour of pupils who are categorised as current and/or regular smokers.

As presented in Part 1: Smoking prevalence and cigarette consumption, only 1% of young people were regular smokers in 2021, and the detailed questions on smoking are only answered by around half of the children participating in this survey (see Appendix A1 for further details). This means that the number of regular smokers who have provided answers to many of the questions reported on in this section of the release is very small and it is not possible to calculate reliable estimates for these break downs (see the Accuracy and Reliability section of the <u>Data</u> <u>Quality Statement</u> for details of how estimates from small bases are shown in the data tables). Therefore, the commentary presented in this section of the report is smaller than in previous surveys. More detailed information is presented in the accompanying data table file.

Current smokers include regular smokers (defined as usually smoking at least one cigarette per week) and occasional smokers (defined as usually smoking less than one cigarette per week). The category of occasional smokers includes pupils who said that they did not smoke but who recorded some cigarette consumption in the last week.

Three things should be kept in mind when considering the findings in this part.

- The findings are based on a small proportion of 11 to 15 year olds.
- The profile of current smokers is weighted towards girls: 58% of current smokers were girls<sup>1</sup>.
- Almost three quarters of current smokers were aged 15 (72%). 19% were aged 14 and 9% were aged between 11 and 13<sup>1</sup>.

1. Based on weighted data.

### Where pupils get cigarettes

#### Usual sources, by year (current smokers)

Pupils could give more than one answer for this measure and only the most common sources are shown. A longer time series based on regular smokers can be seen in the data tables (table 2.1b), but it is current smokers who are discussed here as the sample size for regular smokers in 2021 was very small.

In 2021, the most common source of cigarettes for current smokers was to be given them by friends (46%).

The proportion buying cigarettes from shops was 32% (the increase since 2018 shown on the chart is not statistically significant).

Of pupils who tried to buy cigarettes from a shop in the last year, 59% were refused at least once, and 33% on the most recent occasion (see tables 2.8 and 2.9)



For more data relating to this section:

Tables 2.1a, 2.8 and 2.9, Smoking, drinking and drug use among young people, 2021

### Help or services used to give up smoking

### Approaches and services used to help give up smoking, by smoking status

This measure includes pupils who have stopped smoking or tried to do so. Pupils could give more than one answer.

Most current and ex-smokers had used one of the services or approaches asked about (89% and 80% respectively).

E-cigarettes were the most common form of help used, with 58% of ex-smokers and 78% of current smokers, saying they used them to help give up smoking.



For more data relating to this section:

Tables 2.23 and 2.24, Smoking, drinking and drug use among young people, 2021

### Family knowledge of pupil smoking

This measure excludes 'reclassified' occasional smokers; pupils who recorded some smoking in the past seven days, but described themselves as non-smokers and so were not given the opportunity to record whether their families knew they smoked.

### Family knowledge by pupil smoking status

Of the pupils that currently smoke, 43% were secret smokers.



For more data relating to this section:

Tables 2.25 and 2.26, Smoking, drinking and drug use among young people, 2021

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#### **Previous Chapter**

Part 1: Smoking prevalence and cigarette consumption

#### **Next Chapter**

Part 3: Young people and smoking: the context

# Part 3: Young people and smoking: the context Introduction

This part focuses on the context of young people and cigarette smoking, specifically the circumstances that may influence whether they smoke.

It looks at:

- Smoking behaviours of families and friends.
- Exposure to second hand smoke.
- Pupil and family attitudes to smoking.
- From what sources pupils' get useful information about smoking.

Where pupils have seen cigarettes on display in shops is also discussed. The Tobacco Advertising and Promotion (Display) (England) Regulations 2010 led to a staged prohibition of the display of cigarettes and other tobacco products in shops:

### The Tobacco Advertising and Promotion (Display) (England) Regulations 2010

Specifically, the display of tobacco was banned in April 2012 for large shops and the ban was extended to small shops in April 2015.

### Whether family or friends smoke

#### Smokers pupils know, by smoking status

Almost all current smokers had a friend who smoked, compared with around a third of non-smokers. Current smokers were also more likely to have a family member who smoked (72%) than non-smokers (58%).

Only 3% of current smokers reported not knowing anyone who smoked, compared with 30% of non-smokers.



#### Whether pupil smokes, by smokers pupil lives with

Pupils were more likely to be current smokers themselves if they lived in a household with other smokers.

The proportion of pupils who smoked increased as the number of smokers in the household increased. 16% of pupils who lived with three or more smokers were current smokers themselves, compared to 9% who live with two smokers, and only 1% in households with no other smokers.



For more data relating to this section:

Tables 3.1 to 3.3, Smoking, drinking and drug use among young people, 2021

### Exposure to second hand smoke

In the last year, 52% of pupils reported being exposed to second hand smoke in a home, including both at home or at someone else's home, or in a car. This is down from 60% in 2018.

#### **Exposure at home**

The proportion of pupils reporting exposure to second hand smoke at home or someone else's home was 48%, down from 55% in 2018. 11% were exposed every day or most days.

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Smoking, Drinking and Drug Use among Young People in England, 2021 - NHS Digital



### Exposure at home, by smoking status

Current smokers were far more likely to be exposed to second hand smoke in the home than non-smokers. 39% were exposed on every or most days in the last year, compared to 10% of non-smokers.



### Exposure in a car

A ban on smoking in cars with under 18s present was introduced in October 2015.

The proportion of pupils reporting exposure to second hand smoke in a car was 20% in 2021, similar to 2018 but down from 34% in 2014. 2% were exposed every day or most days.



### Exposure in a car, by smoking status

Current smokers were also more likely to be exposed to second hand smoke in a car than non-smokers; 11% were exposed on every or most days in the last year, compared with 2% of non-smokers.



For more data relating to this section:

Tables 3.4 to 3.6, Smoking, drinking and drug use among young people, 2021

### Attitudes to smoking

These measures include responses from pupils who smoke and whose families know they do, pupils who smoke and who think their families don't know, and those who don't smoke.

### Perceived family attitudes to smoking over time

73% of pupils reported that their family do or would try and stop them smoking. A further 19% reported that their Family do/would try and persuade them to stop. These levels are similar to recent years.



#### Perceived family attitudes to smoking, by smoking status

Smokers are less likely to have a family that do/would try to stop them smoking, or do/would try and persuade them to stop, than non-smokers; 75% of current smokers compared to 92% of non-smokers.



### Pupils' attitudes towards smoking, by year

23% of pupils reported that it was OK to try a cigarette to see what it was like, and 8% reported that it was OK to smoke once a week.

These are similar levels to recent years, though prior to 2016 there had been a general decline in positive attitudes towards smoking.



### Pupils' attitudes towards people of their own age smoking, by age

Younger pupils were less likely to think that it was OK to try smoking to see what it was like; 4% of 11 year olds, compared with 42% of 15 year olds, or that it was OK to smoke once a week; 3% and 16% respectively.



### Perceptions of how many people of pupil's age smoke (15 year old's only)

In 2021, current smoking prevalence for 15 year olds was 9%.

34% of 15 year old pupils had an exaggerated perception of how many people of their own age smoked, saying all/most of them, or about half of them.

59% of 15 year old pupils said that 'only a few' of people of their own age smoked.

Perceptions for pupils of other ages and all pupils can be found in table 3.19.



#### Beliefs about why people their own age smoke

Pupils could give more than one answer.

The most common reasons given as to why pupils believed others their own age smoke was 'to look cool in front of friends' (81%), because 'they were addicted to cigarettes' (73%) and 'their friends pressure them into it' (72%).



For more data relating to this section:

Table 3.7 to 3.21, Smoking, drinking and drug use among young people, 2021

### Sources of helpful information about smoking

#### Sources of helpful information about smoking

Pupils could give more than one answer.

Pupils were most likely to cite parents (75%) and teachers (70%) as providing helpful information about smoking.

In relation to different forms of media, the Internet (64%), television (57%), and social media (53%) were common sources of helpful information.

Some sources, like friends, the Internet and social media became more common as pupils got older (see table 3.23).



For more data relating to this section:

Tables 3.22 to 3.24, Smoking, drinking and drug use among young people, 2021

### Where cigarettes are seen on display

### Where pupils have seen cigarette packets on display in the last year

In 2010, the law was changed to provide for a phased ban on retailers having tobacco products on open display. Large premises, including supermarkets, were prohibited from displaying tobacco products for sale from April 2012. The ban was extended to all shops from April 2015.

In 2021, over half of pupils saw cigarettes on display in newsagents/tobacconists/sweet shops (53%), petrol stations (52%), and supermarkets (50%). In all cases these proportions are lower than in 2012, with supermarkets and newsagents/tobacconists/sweet shops continuing to fall since 2018.

29% reported having seen them on display in another type of shop.

19% of pupils had not seen cigarettes on display at any shop in the last year (not shown in chart).



For more data relating to this section:

Table 3.25 and 3.26, Smoking, drinking and drug use among young people, 2021

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**Previous Chapter** Part 2: Young people who smoke

Next Chapter Part 4: Electronic cigarette use (vaping)

## Part 4: Electronic cigarette use (vaping)

### Introduction

In 2014, pupils were asked for the first time about e-cigarettes, with further questions added in 2016.

New legislation came into force in England and Wales on 1 October 2015, introducing a minimum age of sale of 18 for e-cigarettes and prohibiting the purchase of these products on behalf of someone under the age of 18.

In 2015, Public Health England (PHE) published an independent evidence review on electronic cigarettes which concluded that the devices are significantly less harmful than smoking. The review also found no evidence that electronic cigarettes act as a route into smoking for children or non-smokers:

E-cigarettes: an evidence update

Pupils were asked about awareness, frequency and length of use, sources of e-cigarettes, success in obtaining them from shops, and attitudes to use.

Current e-cigarette users were categorised as follows:

- Regular users (defined as usually using an e-cigarette at least once per week);
- Occasional users (defined as using an e-cigarette sometimes but less than once per week, but excluding those who had tried them just once or twice in total)

Lifetime use (ever used an e-cigarette) additionally includes ex e-cigarette users, and those who had only tried them once or twice.

The majority (88%) of pupils were aware of e-cigarettes. Pupils who said they weren't aware were not asked any further questions on e-cigarettes.

### **E-cigarette prevalence**

### E-cigarette prevalence, by year

The proportion of pupils classified as current e-cigarette users has increased from 6% in 2018, to 9% (confidence interval 7-10%) in 2021.

The rise in current use was not seen for lifetime use. 22% (confidence interval 20-24%) of pupils reported they had ever used e-cigarettes, compared to 25% in 2018 (not a significant change).



### E-cigarette prevalence, by sex

For girls, prevalence of both regular and current users has increased since 2018.

Girls were now more likely than boys to be current e-cigarette users; 10% for girls compared to 7% for boys. Regular use was now similar (4% for boys and 5% for girls).



### Current e-cigarette use, by age

Current e-cigarette use increased with age; from 1% of 11 year olds, to 11% of 14 year olds and 18% of 15 year olds.

Current e-cigarette use for 15 year old girls increased from 10% in 2018 to 21% in 2021 (not shown on chart - see table 4.3).



### E-cigarette prevalence, by cigarette smoking status

Pupils who had ever smoked were much more likely to also have ever used an e-cigarette, than those who had never smoked.

56% of ex-smokers were current e-cigarette users.

Most regular smokers (92%) reported having ever used e-cigarettes. This compares to just 13% of pupils who had never smoked.

Regular smokers who were regular e-cigarette users has more than doubled; from 29% in 2018 to 61% in 2021. Only 1% of pupils who had never smoked were regular e-cigarette users.



For more data relating to this section:

Tables 4.1 to 4.4, Smoking, drinking and drug use among young people, 2021

### Sources of e-cigarettes

Sources of e-cigarettes (regular users)

Pupils could give more than one answer.

61% of regular e-cigarette users said other people gave them e-cigarettes, the most common of whom were friends (45%).

Buying from any kind of shop increased from 29% in 2018, to 57% in 2021, with newsagent the most common type of shop (41%).



### Difficulty buying from shops

#### All pupils

There was a rise in pupils who had asked someone else to buy them e-cigarettes or refills from a shop in the last year, from 5% to 9%.

Of these pupils, 79% were successful.

#### Current e-cigarette users

61% of current e-cigarette users had asked someone else to buy them e-cigarettes or refills from a shop in the last year, compared to 40% in 2018.

Of these users, 87% were successful.

For more data relating to this section:

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Tables 4.6 to 4.12, Smoking, drinking and drug use among young people, 2021
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### Attitudes to e-cigarette use

### Attitudes to e-cigarette use by people of pupil's age, by age

Despite the increase in prevalence of current e-cigarette use, the proportion of pupils who thought it was ok to try or use e-cigarettes has fallen compared to 2018.

32% of pupils thought it was ok for people of their own age to try an e-cigarette to see what it's like, and 20% thought it was ok to use an e-cigarette once a week, compared to 36% and 24%, respectively, in 2018.

Positive attitude increased with age; 5% of 11 year olds thought it was ok for someone of their own age to use an ecigarette once a week, compared to 35% of 15 year olds.

OK to try an e-cigarette to see what it's like OK to use an e-cigarette once a week



For more data relating to this section:

Tables 4.13 and 4.14, Smoking, drinking and drug use among young people, 2021

### Impact of Covid lockdowns on e-cigarette prevalence

Pupils who are current e-cigarette users, by how often they met other people outside of home/school in the last four weeks

Pupils who met people outside of home/school more frequently in the last four weeks were far more likely to be current e-cigarette users. 23% of pupils who said they met people every day were classified as current e-cigarette users, compared to only 1% for those who never met people outside of home/school.



#### Pupils who are current e-cigarette users by how they took part in school learning in the last school year

Pupils who continued to go to school all the time in the last school year were twice as likely to be current e-cigarette users (14%), than those who had studied at home all or most of the time (7%).



For more data relating to this section:

Tables 4.15 and 4.16, Smoking, drinking and drug use among young people, 2021

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**Previous Chapter** 

Part 3: Young people and smoking: the context

#### **Next Chapter**

Part 5: Alcohol drinking prevalence and consumption

# Part 5: Alcohol drinking prevalence and consumption Introduction

In 2009, the Chief Medical Officer of England published the first official guidance on alcohol aimed specifically at children and young people.

Guidance on the consumption of alcohol by children and young people. A report by the Chief Medical Officer

It recommended that the healthiest and safest option was for children to remain alcohol free up to age 18. If they did drink alcohol it should not be at least until the age of 15. For young people aged 15 to 17, it was suggested they should only drink in a supervised environment, and no more than once a week.

The guidance was based on a body of evidence that drinking at a young age, and particularly heavy or regular drinking, can result in physical or mental health problems, impair brain development, and put children at risk of alcohol-related accident or injury. More broadly it is also associated with missing or falling behind at school, violent and antisocial behaviour, and unsafe sexual behaviour<sup>1</sup>.

The 2012 Alcohol Strategy had a particular focus on excessive drinking by adults, but also included the ambition to achieve 'a sustained reduction in both the numbers of 11 to 15 year olds drinking alcohol and the amounts consumed'.

#### Government alcohol strategy 2012

Attempting to accurately measure alcohol consumption among young people presents similar challenges to surveys of adults. Recall of their drinking can be erroneous and the majority of pupils' drinking is in informal settings where the quantities they drink are not necessarily standard measures. They are also not very knowledgeable about the alcoholic strength of different drinks. See appendix B for more background on the methods that were used to measure alcohol consumption.

This part includes information on drinking prevalence, frequency, and alcohol consumption levels including drunkenness.

#### Changes to question to establish whether a pupil had drunk alcohol (2016)

Prior to 2016, the question used to establish whether a pupil had drunk alcohol was:

'Have you ever had a proper alcoholic drink – a whole drink, not just a sip? Please don't count drinks labelled low alcohol'.

Before the 2016 survey took place the questionnaire was tested with a group of pupils and this question caused confusion. In general, pupils thought the use of the word 'proper' meant the question referred to spirits only. They were also unaware of what would be considered a 'low alcohol' drink and some assumed low alcohol would include beer, cider, cocktails and alcopops.

In light of this feedback, the question was changed in the 2016 survey to:

"Have you ever had an alcoholic drink - a whole drink, not just a sip?"

Whilst this means the survey now gives an improved picture of the proportion of young people who have drunk alcohol, comparisons with years prior to 2016 are not possible. However, large directional changes such as whether prevalence has decreased over a long period of time can be made as the impact of the new wording is small in comparison, (although the exact size of the change cannot be calculated).

This change to the initial alcohol question may also have had an impact on the more detailed questions which follow. This is because some of these were only asked of those pupils who answered 'yes' to the initial question on drinking alcohol, so the change to this question may lead to a slightly different group of pupils answering the more detailed questions than in earlier years.

1. Viner R, and Taylor B, (2007) Adult outcomes of binge drinking in adolescence: findings from a UK national birth cohort. Journal of Epidemiology and Community Health, 61: 902-907.

## Pupils who have ever had an alcoholic drink

Ever had an alcoholic drink, by year

Between 2003 and 2014 there was a decline in the proportion of pupils who had ever had an alcoholic drink.

Data prior to 2016 is not comparable due to a change in the survey question.

In 2021, 40% (confidence interval 37-44%) of pupils said they had ever had an alcoholic drink, compared to 44% in 2018 (confidence interval 41%-46%).



### Ever had an alcoholic drink, by sex and age

Prevalence of having ever had an alcoholic drink was 39% for boys and 42% for girls (not a statistically significant difference).

It increases with age, from 13% of 11 year olds to 65% of 15 year olds.



#### Usual frequency of drinking, by age

6% of all pupils said they usually drank alcohol at least once per week, the same as in 2018. A further 11% of pupils said they usually drank between once a fortnight and once a month; making a total of 16% (based on rounded percentages) who said they usually drank alcohol at least once a month.

The proportion usually drinking once a week increased with age, from 1% of 11 year olds to 14% of 15 year olds.



For more data relating to this section:

Tables 5.1, 5.2, 5.6, 5.7, 5.27 and 5.29 Smoking, drinking and drug use among young people, 2021

### Pupils who had an alcoholic drink in the last week

### Had an alcoholic drink in the last week, by year

Between 2003 and 2014 there was a decline in the proportion of pupils who had drunk in the last week.

Data prior to 2016 is not comparable due to a change in the survey question.

In 2021, 9% (confidence interval 7-10%) of pupils said they had drunk in the last week, with no significant change since 2016.


### Had an alcoholic drink in the last week, by sex and age

8% of boys and 9% of girls had drunk in the last week (not a statistically significant difference).

The proportion increased with age, particularly after the age of 13; from 2% of 11-12 year olds and 4% of 13 year olds, to 10% of 14 year olds, and 20% of 15 year olds.



#### Had an alcoholic drink in the last week, by ethnicity

White pupils were most likely to have had an alcoholic drink in the last week, with 11% having done so. This compares to less than 4% for other ethnic groups.



#### Had an alcoholic drink in the last week, by region

The prevalence of having had a drink in the last week was significantly lower in London (3%) than any other region. Prevalence in other regions ranged from 8% to 12%.



#### When pupils drank in the last week

For this question, pupils were able to give more than one answer.

Pupils who drank in the last week were most likely to have done so on Saturday (68%). 36% drank on Friday, and 32% drank on Sunday. The proportion was 9% or less for weekdays.



### Factors associated with drinking in the last week

A logistic regression model was used to explore which characteristics might be associated with drinking in the last week. This identifies associations, not causes; in other words, factors which identify pupils with an increased or decreased likelihood of having drunk alcohol in the last week. See <u>Appendix B3</u> for more information on the regression model used.

The 10 factors (explanatory variables) shown below had a significant association with having drunk alcohol in the last week. The size of the circles represents an estimate of the relative contribution to the model. See <u>Appendix B3.4</u> for details of how this has been determined (additionally <u>data table</u> 5.26 shows the odds ratios for each possible value of each variable in the model).

It was estimated that having parents who don't discourage drinking had the strongest association, followed by age (being older), and recent drug use.



The model strength was strong (c-statistic = 0.8689)

Tables 5.4, 5.5, 5.8 to 5.11, 5.26 and 5.30 Smoking, drinking and drug use among young people, 2021

### Alcohol consumption for pupils who drank in the last week

This section is based only on pupils who said they had a drink in the last week (9% of all pupils).

Quantities of alcohol were converted into units of alcohol, using a standard method described in Appendix B.

How much pupils drink (units), by age

Pupils who drank alcohol in the last week consumed an average (mean) of 8.9 units that week (confidence interval 7.7-10.2).

18% of pupils who drank in the last week were estimated to have drunk more than 15 units. Younger pupils who drank in the last week were more likely to have drunk fewer units than older pupils.



#### What pupils drink

For this question, pupils were able to give more than one answer.

Pupils who drank in the last week were now just as likely to have drunk spirits as they were beer, lager or cider. The proportion saying they had drunk spirits has risen from 60% in 2018, to 67% in 2021. This is the same proportion of pupils who said they had drunk beer, lager or cider, but this is down from 76% in 2018.

However, boys were still most likely to have drunk beer, lager or cider than other drinks (80%), with girls most likely to have drunk spirits (77%).



### What pupils drink as a proportion of total units

Beer, lager and cider accounted for around half (52%) of the alcohol units consumed by pupils in the last week, with the majority of the rest split between spirits (21%) and wine (17%).

However, beer, lager and cider only accounts for about a third of total units for girls, compared to around two thirds for boys.



For more data relating to this section:

Tables 5.12 to 5.20, Smoking, drinking and drug use among young people, 2021

### Prevalence of drunkenness

This section covers prevalence of drunkenness among all pupils. Drunkenness as a proportion of pupils who drank in the last 4 weeks is reported in the part 6 tables (6.14 to 6.17).

#### Pupils who were drunk in the last four weeks, by sex

8% of pupils said they had been drunk in the last four weeks, including 6% of pupils who had been drunk once or twice, and 2% more often. This is similar to 2018.

Girls (10%) were more likely to have been drunk in the last four weeks than boys (6%).



### Pupils who were drunk in the last four weeks, by age

The proportion of pupils who reported having been drunk in the last four weeks increased with age.

Close to 0% of 11 year olds, and 1% of 12 year olds had been drunk in the last four weeks, compared to 21% of 15 year olds.



For more data relating to this section:

### Tables 5.21 and 5.22 Smoking, drinking and drug use among young people, 2021

# Impact of Covid lockdowns on alcohol consumption and drunkeness

### Usual frequency of drinking, by how often they met other people outside of home/school in the last four weeks

Pupils who met people outside of home/school more frequently in the last four weeks were more likely to be more frequent alcohol drinkers. 12% of pupils who said they met people every day said that they usually drank alcohol at least once a week, compared to only 2% for those who never met people outside of home/school.



## Pupils who were drunk in the last four weeks, by how often they met other people outside of home/school in the last four weeks

Pupils who met people outside of home/school more frequently in the previous 4 weeks were more likely to have been drunk in the last four weeks; 18% of pupils who said they met people every day, compared to only 1% for those who never met people outside of home/school.



### Estimates of drinking from other data sources

The results from this survey can be compared with estimates for children from the Health Survey for England (HSE) which is carried out in the respondent's home.

### Health Survey for England 2019

We would expect the estimates from HSE to be lower than SDD as children seem to be less likely to admit to risky behaviours such as smoking, drinking and drug taking when completing surveys at home. In HSE 2019, 9% of 11-12 year olds, and 35% of 13-15 year olds had ever had an alcoholic drink. This compares to 44% of all pupils in the 2018 SDD survey, although this uses a different question to establish drinking prevalence than HSE, so is not directly comparable.

Estimates for Scotland are available from the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS).

Scottish Schools Adolescent Lifestyle and Substance Use Survey

Estimates from Wales are available from the Welsh government Student Health and Well-being Survey:

Student Health and Well-being Survey

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Previous Chapter Part 4: Electronic cigarette use (vaping)

Next Chapter

Part 6: Young people who drink alcohol

# Part 6: Young people who drink alcohol

### Introduction

This part focuses further on the behaviour of pupils who drink alcohol.

Topics covered include:

- where pupils get alcohol.
- where they buy alcohol.
- where they drink and who they drink with.

Most of the analysis is based on 'current drinkers': pupils who drink alcohol at least a few times a year. In 2021, 34% of pupils said that they drank alcohol at least a few times a year.

This increased sharply by age, from 8% of 11 year olds to 60% of 15 year olds, and therefore, the age profile of current drinkers is heavily weighted towards older pupils.

### Where pupils get alcohol

How pupils obtained alcohol in the last four weeks

This section is based on pupils who obtained alcohol in the last four weeks. Pupils could give more than one answer to this question.

Of pupils who obtained alcohol in the last four weeks, they were most likely to have been given it by parents (75%). Other common sources were to take it from home with permission (50%), and be given it by friends (46%).

8% said they had bought alcohol from a shop or pub in the last 4 weeks, with 15 year olds the most likely to have done so (15% - see table 6.2).



### Where current drinkers usually buy alcohol

21% of current drinkers said they usually bought alcohol from friends or relatives, the most common source. 19% said they usually bought alcohol from any retailer or licenced premises, though this was higher for older pupils; 23% of 15 year olds, compared to 14% of 11 to 12 year olds (not show on chart - see table 6.5).

66% of current drinkers said they never buy alcohol, the proportion being higher for younger pupils; 75% of 11 to 12 year olds, compared to 57% of 15 year olds (not shown on chart - see table 6.5).



Tables 6.2 to 6.6, Smoking, drinking and drug use among young people, 2021

### Where pupils usually drink

#### Where current drinkers usually drink

For this question, pupils were able to give more than one answer.

Pupil's most commonly said they usually drank at home; 76% which is an increase from 66% in 2018. Drinking at someone else's home was the next most common at 42%. 29% said they usually drank at parties with friends, which has fallen from 40% in 2018.



### Where current drinkers usually drink, by age

For this question, pupils were able to give more than one answer, and only the most common locations are shown in the chart.

Drinking at their own home was common for current drinkers of all ages. Drinking at parties with friends, and at someone else's home become more common as pupils get older; 8% of 11-12 year olds reported drinking at parties with friends compared to 42% of 15 year olds.



For more data relating to this section:

Tables 6.8 to 6.10, Smoking, drinking and drug use among young people, 2021

### Who pupils usually drink with

### Who current drinkers usually drink with

For this question, pupils were able to give more than one answer.

Two thirds (67%) of current drinkers said they usually drank with parents, and 52% said they usually drink with friends.



Pupils who said they usually drank alone rose from 3% in 2018 to 6% in 2021.

### Who current drinkers usually drink with, by age

For this question, pupils were able to give more than one answer, and only the most common responses are shown in the chart.

Younger pupils who drank were most likely to say they usually drank with their parents, whereas older pupils were more likely to say they usually drank with friends.



For more data relating to this section:

Tables 6.11 to 6.13, Smoking, drinking and drug use among young people, 2021

### Adverse consequences of being drunk

Adverse consequences of drinking for pupils who were drunk in the last four weeks

As reported in part 5, 8% of pupils had been drunk in the last four weeks.

Of these pupils, the most common adverse consequence reported was feeling ill or sick (46%). 26% said they had vomited, 17% had an argument, 15% damaged clothes or other items, and 13% lost money or other items.



Tables 6.16 and 6.17, Smoking, drinking and drug use among young people, 2021

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### **Previous Chapter**

Part 5: Alcohol drinking prevalence and consumption

### **Next Chapter**

Part 7: Young people and alcohol: the context

# Part 7: Young people and alcohol: the context

### Introduction

This part sets the context for alcohol consumption among young people.

It includes:

- drinking among other household members.
- perceived parental attitudes to drinking.
- pupils' attitudes towards what is acceptable for someone of their own age.
- beliefs about why people of their age drink alcohol.
- perceptions of how many people of their age drink alcohol.
- sources of helpful information about drinking.

### Alcohol consumption by other household members

### When last drank alcohol, by number of household members who drink alcohol

Pupils who lived with people who drank alcohol were more likely to drink alcohol themselves.

Only 1% of pupils who lived with only non-drinkers had drunk alcohol in the last week, compared to 9% who lived with two drinkers, and 22% where they lived with three or more drinkers.

There was a similar pattern for the proportion of pupils who had ever drunk alcohol.



For more data relating to this section:

Table 7.1, Smoking, drinking and drug use among young people, 2021

### Attitudes to pupils' drinking

### Perceived parental disapproval of pupil drinking, by age

49% of pupils said their parents did not, or would not like them to drink alcohol.

Perceived parental disapproval of their drinking decreased as the age of pupils increased; 63% of 11 and 12 year old pupils said their parents would disapprove, falling to 28% for 15 year olds.



#### Perceived parental disapproval of pupil drinking, by number of drinkers pupil lives with

Pupils who lived with people who drank alcohol were less likely to say their parents do not or would not like them drinking; 19% of pupils who lived with three or more drinkers, compared to 79% of pupils who lived only with non-drinkers.



Other groups where perceived parental disapproval of drinking was lower were among pupils who drank in the last week, those who were drunk in the last four weeks, and those whose family were aware that they drank alcohol (see tables 7.4, 7.7 and 7.9).

#### Pupils' attitudes to drinking by people of the same age

Pupils' attitudes to drinking alcohol by pupils of their own age were similar to 2018, though acceptance of both drinking and getting drunk have slowly increased since 2014.

In 2021, 23% thought that it was OK to drink alcohol once a week, and 9% thought it was OK to get drunk once a week.



Nearly half (48%) of 15 year olds, and nearly a third (32%) of 14 year olds, thought it was OK to drink alcohol once a week. 19% of 15 year olds thought it was OK to get drunk once a week (see table 7.11).

63% of pupils believe alcohol only harms people who drink a lot, though 79% did agree that it increased the risk of developing cancer (see table 7.14).

For more data relating to this section:

Tables 7.2 to 7.14, Smoking, drinking and drug use among young people, 2021

### Pupils' beliefs and perceptions of drinking alcohol

Pupil perceptions of how many people of their own age drink alcohol, by year (15 year olds only)

In 2021, the proportion of 15 year olds who reported usually drinking at least once a month was 36%. 14% usually drank at least weekly (see data table 5.7).

45% of 15 year olds believed that most (but not all) people their own age drink alcohol, with a further 25% saying about half.

24% significantly underestimated how many people their own age drink, believing that only a few or none did so.

Perceptions for pupils of other ages and all pupils can be found in table 7.18.



#### Pupils beliefs about why people of their own age drink alcohol

Pupils could give more than one answer.

The most commonly held belief among young people was that pupils of their own age drank to look cool in front of their friends (74%). Other common beliefs were because their friends pressured them into it (66%), to be more sociable with friends (62%), and because it gave them a rush or a buzz (62%).



For more data relating to this section:

Tables 7.15 to 7.19, Smoking, drinking and drug use among young people, 2021

### Sources of helpful information about drinking

Sources from which pupils have obtained helpful information about drinking alcohol

Pupils could give more than one answer.

A large proportion of young people (77%) considered their parents to be a source of helpful information about drinking alcohol.

Teachers were the most commonly identified helpful source of information outside of the family setting (by 62% of pupils).

In relation to different forms of media, the Internet and television were the most popular sources; 57% and 53% respectively. Social media was mentioned by 48% of pupils.

Some sources, like friends, TV, the Internet and social media became more common as pupils got older (see table 7.21).



Tables 7.20 to 7.22, Smoking, drinking and drug use among young people, 2021

### Family affluence

Last time drank alcohol, by family affluence score

See Appendix B for family affluence scoring methodology.

Pupils were more likely to have drunk alcohol, either in the last week or ever, if they had a higher family affluence score; 11% and 35% respectively for higher scoring pupils, compared with 6% and 25% for lower scoring pupils.



For more data relating to this section:

Table 7.23, Smoking, drinking and drug use among young people, 2021

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#### **Previous Chapter**

Part 6: Young people who drink alcohol

#### **Next Chapter**

Part 8: Drug use prevalence and consumption

### Part 8: Drug use prevalence and consumption

### Introduction

Evidence has demonstrated immediate and long term risks to young people's health and wellbeing associated with the use of legal and illegal drugs. These risks vary with the type of drug taken.

### Advisory Council on the Misuse of Drugs (2006): Pathways to problems.

There are particular concerns about the relationship between drug use and mental health problems among young people. For example, there is evidence to suggest that young people who use recreational drugs run the risk of damage to mental health including suicide, depression, psychotic symptoms and disruptive behaviour disorders<sup>1,2</sup>. Addressing the use of drugs, particularly amongst young people, has long been a focus of government policy due to the awareness and concern over the harms described above.

This part covers the prevalence of drug use, factors associated with drug use in the last year, and the availability and awareness of drugs.

The questionnaire covered the following drugs or types of drugs: amphetamines, cannabis, cocaine, crack, ecstasy, heroin, ketamine, LSD, magic mushrooms, mephedrone, methadone, poppers (e.g. amyl nitrite), tranquillisers, volatile substances such as gas, glue, aerosols and other solvents, new psychoactive substances (NPS), nitrous oxide and 'other' drugs (not obtained from a doctor or chemist).

### Increase in drug prevalence since 2016

The following changes/issues have affected this part of the report, specifically drug prevalence measures relating to: ever taken drugs, taken drugs in the last year and taken drugs in the last month (tables 8.1 to 8.8):

- NPS (previously known as legal highs), and nitrous oxide (laughing gas) were added to the list of drugs included for overall drug prevalence measures in 2016. Both are covered by the Psychoactive Substances Act 2016 which restricts the production, and sale and supply of such substances. When psychoactive substances are removed from the 2016 measure, the overall drug prevalence figure (table 8.6c) falls by 3 percentage points (24.3% to 21.3%). This adjusted version is shown in the time series data in tables 8.6 to 8.8.
- In 2016, even when accounting for the addition of NPS to the measures, there was a large and unexpected rise in
  overall drug use prevalence; 14.6% in 2014, to 24.3% in 2016 and 23.7% 2018. Further investigations
  identified that some of this change was driven by an increased likelihood of pupils not answering questions on
  whether they had tried individual drugs. Neither the reason for this, nor exactly how much of the change in
  prevalence this accounts for is clear, though some level of genuine increase is evident.

All drug prevalence measures presented in this report are directly comparable between 2016 and 2018. However, for the reasons outlined above, it is not recommended that direct comparisons are made with drug prevalence data prior to 2016. See the Data Quality Statement (Coherence and Comparability) for further details.

<sup>1.</sup> British Medical Association, Board of Science and Education, London (2003): Adolescent Health,

<sup>2.</sup> Patton G et al (2002): Cannabis use and mental health in young people: cohort study.

### Pupils who have ever taken drugs

### Pupils who have ever taken drugs, by year

In 2021, 18% (confidence interval 16-21%) of pupils reported they had ever taken drugs, down from 24% in 2018.



### Pupils who have ever taken drugs, by sex and age

17% of boys and 19% of girls had ever taken drugs (not a statistically significant difference). Prevalence for boys fell from 25% in 2018.

The likelihood of having ever taken drugs increased with age, from 7% of 11 year olds to 32% of 15 year olds.



For more data relating to this section:

Tables 8.1, and 8.4 to 8.6, Smoking, drinking and drug use among young people, 2021

### Pupils who have taken drugs in the last year

Pupils who have taken drugs in the last year, by year

12% (confidence interval 10-14%) of pupils said that they had taken any drugs in the last year, down from 17% in 2018.



### Pupils who have taken drugs in the last year, by sex and age

In 2021, 11% of boys and 13% of girls had taken any drugs in the last year (not a statistically significant difference). These proportions have fallen from 18% and 16% respectively compared to 2018.

The likelihood of having taken any drugs in the last year increased with age, from 3% of 11 year olds to 24% of 15 year olds.



Tables 8.2, 8,5 to 8.8, and 8.38, Smoking, drinking and drug use among young people, 2021

### Pupils who have taken drugs in the last month

### Pupils who have taken drugs in the last month, by year

In 2021, 6% (confidence interval 5-7%) of pupils said that they had taken any drugs in the last month, which is a fall from 9% in 2018.



### Pupils who have taken drugs in the last month, by sex and age

Boys and girls were equally likely to have taken any drugs in the last month (6%). This has fallen from 11% for boys, and from 8% for girls compared to 2018.

The likelihood of having taken any drugs in the last month increased with age, from 2% of 11 year olds to 13% of 15 year olds.



#### Factors associated with taking drugs in the last month

A logistic regression model was used to explore which characteristics might be associated with having taken any drugs in the last month. This identifies associations, not causes; in other words, factors which identify pupils with an increased or decreased likelihood of having taken drugs in the last month. See <u>Appendix B3</u> for more information on the regression model used.

The 7 factors (explanatory variables) shown below had a significant association with having taken any drugs in the last month. The size of the circles represents an estimate of the relative contribution to the model. See <u>Appendix B3.4</u> for details of how this has been determined (additionally <u>data table</u> 8.10 shows the odds ratios for each possible value of each variable in the model).

It was estimated that being a smoker had the strongest association, followed by having a family who don't discourage drug use, and then drinking alcohol.



Tables 8.3 to 8.8, and 8.10, Smoking, drinking and drug use among young people, 2021

### Whether pupils have ever been offered drugs

### Pupils who had ever been offered any drugs, by age

In 2021, 31% of the pupils reported that they had been offered at least one of the drugs asked about.

Older pupils were more likely to have ever been offered drugs, rising from 12% of 11 year olds to around half of 15 year olds. This difference is likely to reflect accumulated experience, as well as the genuinely increased probability that older pupils will be offered drugs.



#### Pupils who had ever been offered drugs, by type

For this question, pupils were able to state more than one drug type. The chart below shows only the most common responses. For the full list see data table 8.23.

Pupils were almost twice as likely to have been offered cannabis than any other individual drug, with 17% of pupils having been offered cannabis. 9% and 8% of pupils said they'd been offered volatile substances (glue, gas, aerosols or solvents) and cocaine respectively.



Table 8.23 and 8.24, Smoking, drinking and drug use among young people, 2021

### Types of drug taken

### Drug types taken in last year, by year

For this question, pupils were able to state more than one drug type. The chart below shows only the most common responses. For the full list see data table 8.6f.

Cannabis is the drug that pupils are most likely to have taken in the last year, with 6% saying they had done so in 2021. However, this is down from 8% in 2018, and 13% in 2003.

Falls were also seen in use of nitrous oxide, volatile substances, cocaine and crack.

The proportion saying they had taken a class A drug has been around 2% to 3% since 2010.



### Number of different drugs and type of drug taken in the last year

This analysis was based only on pupils who had taken drugs in the last year.

Among those pupils who reported any drug use in the last year, two thirds (66%) took only one type of drug. This included 34% who took cannabis only, and 15% who took volatile substances only.

34% reported taking two or more types of drug, including 20% who had taken at least one class A drug.



### Types of drug taken in the last year, by number of occasions took drugs in the last year

This analysis was based only on pupils who had taken drugs in the last year.

Pupils who took class A drugs in the last year (including or excluding other drug types) were most likely to have taken drugs on more than 10 occasions, with 55% having done so. This compares to 17% for those who had only used volatile substances, and 21% for those who had only used cannabis.

Only 11% of class A users had taken a drug on just one occasion in the last year.



Tables 8.6 to 8.9, and 8.11 to 8.14, Smoking, drinking and drug use among young people, 2021

### Early experience of drug taking

This analysis was based only on pupils who had ever taken drugs. It represents both the first occasion a pupil used drugs, and any other types of drugs used when the pupil was at that age. Pupils were able to state more than one drug type.

#### Drugs taken at age of first drug use

Pupils' early experience of drug use was most likely to involve cannabis (42%) or volatile substances (39%). 10% took a class A drug at the age of first drug use.

The chart below shows only the most common responses (for the full list see data table 8.30).



### Drugs taken at age of first drug use, by age first took drugs

Pupils who tried drugs at an earlier age were more likely to report using volatile substances at that age; 69% of pupils who first took drugs at age 11. Pupils who first took drugs at an older age were more likely to report taking cannabis; 80% of pupils who first took drugs at age 15.



For more data relating to this section:

Tables 8.30 and 8.31, Smoking, drinking and drug use among young people, 2021

### Impact of Covid lockdowns on drug use prevalence

Drug use prevalence, by how many times pupils met people outside of home/school in the last four weeks

Prevalence for drug use in the last month was much higher for pupils who had met other people outside home/school most often over the last four weeks; 19% for pupils who had met other people every day, compared to 5% for pupils who met people once a week, and 2% for pupils who had never met other people.



Drug use prevalence, by how pupils took part in school learning during the last school year

Prevalence for drug use in the last year was higher for pupils who continued to go to school all the time during the last school year; 20% compared to 10% for pupils who studied from home all or most of the time.

The differences for drug use in the last month were not significant.



For more data relating to this section:

Tables 8.40 to 8.44, Smoking, drinking and drug use among young people, 2021

### Estimates of drug use prevalence from other data sources

The Crime Survey for England and Wales provides information on drug use for adults aged 16 or over. In 2019/20, around one in five adults aged 16 to 24 years had taken a drug in the last year, with no changes in last-year drug use for the majority of individual drug types.

Drug misuse: findings from the 2019 to 2020 Crime Survey for England and Wales

Estimates for Scotland are available from the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) which covers 13 and 15 year olds. It reports that in 2018, 6% of 13 year olds and 21% of 15 year olds had ever used drugs.

### Scottish Schools Adolescent Lifestyle and Substance Use Survey

Estimates from Wales are available from the Welsh government Student Health and Well-being Survey, which covers children aged 11 to 16. In 2019/20 the survey reported that 15% of young people reported having ever used drugs in their lifetime with laughing gas (nitrous oxide) and cannabis the most commonly used drugs.

### Student Health and Well-being Survey

Results from the National Drug Treatment Monitoring System (NDTMS) reported that there were 14,291 young people in contact with alcohol and drug services between April 2019 and March 2020, a 3% reduction on the number the previous year and a 42% reduction on the number in treatment since 2008 to 2009.

National Drug Treatment Monitoring System: Substance misuse treatment for young people, 2019 to 2020

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#### **Previous Chapter**

Part 7: Young people and alcohol: the context

#### **Next Chapter**

Part 9: Young people who have taken drugs

### Part 9: Young people who have taken drugs Introduction

This part focuses further on the behaviour of pupils who have taken drugs at least once.

Topics covered include

- from whom pupils get drugs;
- where pupils were when they got drugs;
- with whom they took them, and
- ease of obtaining drugs.

Some of the analysis is only based on pupils who said they had taken drugs on more than one occasion. Pupils who had not taken a drug within the last year are excluded as they were not asked on how many occasions they had taken drugs.

### From whom pupils got drugs

From whom pupils got drugs on the first occasion, by type of drug (grouped)

On the first occasion they tried drugs, 49% said they had got the drugs from a friend, most of these being from a friend of the same age. 61% of pupils who only took cannabis on the first occasion, got it from a friend.

Overall 16% said they got drugs from a dealer, but this was 29% where a class A drug was taken.

Overall 6% said they got drugs from a shop, with these mostly involving volatile substances.

Only selected responses for whom the pupil got drugs are shown in the chart below (see table 9.1 for the full list of responses).



### From whom pupils got drugs on the most recent occasion

Analyses in this section are based on pupils who have taken drugs on more than one occasion.

As with the first occasion, drugs taken on the most recent occasion were most commonly obtained from friends; 51% from any friend, including 34% from friends of their own age.

26% of pupils said they got drugs from a dealer.



For more data relating to this section:

Tables 9.1 to 9.8, Smoking, drinking and drug use among young people, 2021

### Where pupils get drugs

### Where pupils got drugs on the most recent occasion

Analysis is based on pupils who have taken drugs on more than one occasion.

45% of pupils said they were outdoors (in a street, park or other outdoor area) when they last obtained drugs, by far the most common type of location.

5% of pupils obtained drugs whilst at school, a decrease from 12% in 2018. Conversely, there was a rise in pupils obtaining drugs at home, 15% compared to 8% in 2018.



Tables 9.9 to 9.12, Smoking, drinking and drug use among young people, 2021

### With whom pupils take drugs

#### With whom pupils took drugs on the most recent occasion

Analysis is based on pupils who have taken drugs on more than one occasion.

72% of pupils said they were with a friend(s) when they last took drugs.

19% said they took drugs alone on the most recent occasion, up from 11% in 2018, and 7% in 2016.



For more data relating to this section:

Tables 9.13 to 9.16, Smoking, drinking and drug use among young people, 2021

### Perceived ease of getting illegal drugs

### Perceived ease of getting illegal drugs, by age

Analysis is based on all pupils. 'Easy' category included pupils who perceived it 'very easy' or 'fairly easy' to get drugs; 'Difficult' category includes pupils who perceived it 'very difficult' or 'fairly difficult' to get drugs.

26% of pupils perceived it to be easy to get illegal drugs, down from 31% in 2018.

The proportion who thought it would be easy to get drugs increased with age; 48% of 15 year olds thought it would be easy to get illegal drugs, compared with 5% of 11 year olds.



For more data relating to this section:

Tables 9.17 and 9.19, Smoking, drinking and drug use among young people, 2021

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### **Previous Chapter**

Part 8: Drug use prevalence and consumption

### Next Chapter

Part 10: Young people and drugs: the context

### Part 10: Young people and drugs: the context

### Introduction

This part sets the context for drug taking among young people.

It looks at:

- why pupils take drugs.
- attitudes and perceptions about drug use.
- where pupils get information about drugs.

Some of the analysis is only based on pupils who said they had taken drugs on more than one occasion. Pupils who had not taken a drug within the last year are excluded as they were not asked on how many occasions they had taken drugs.

### Why pupils take drugs

In this section:

- 'why taken on first occasion' is based on pupils who had ever taken drugs
- 'why taken on most recent occasion' is based on pupils who had taken drugs on more than one occasion and at least once in the last year.

### Why pupils took drugs on the first and most recent occasion

Pupils could select more than one reason. The category 'other reasons' is not shown on the chart.

There were differences in the reasons pupils gave for taking drugs on the first occasion and on the most recent occasion.

Pupils who took drugs on the first occasion were most likely to say they took them 'to see what it was like' (52%), whilst on the most recent occasion they were most likely to say 'to get high or feel good' (50%).



### Why pupils took drugs on the first occasion by drug taken (most common reasons)

Pupils taking cannabis, volatile substances or Class A drugs all most commonly gave the reason 'to see what it was like'.

The reasons 'to get high or feel good' and 'to forget my problems' were also commonly given by pupils who took cannabis and Class A drugs, but not by those who used volatile substances.

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### Smoking, Drinking and Drug Use among Young People in England, 2021 - NHS Digital

Though never the most common reason, 'because friends were doing it' does feature in the top four reasons for all the drug types examined.



For more data relating to this section:

Tables 10.1 to 10.9, Smoking, drinking and drug use among young people, 2021

### Attitudes to taking drugs

### Attitudes to people of pupil's own age taking drugs

10% of pupils thought that it was OK for someone their own age to take cannabis to see what it was like, down from 13% in 2018. 9% said they thought it was ok to try sniffing glue, and 3% to try cocaine.

There was lower tolerance of regular drug use (taking once a week); 6% of pupils thought it was OK for cannabis, 3% for sniffing glue, and 1% for cocaine, similar levels to 2018.

Smoking, Drinking and Drug Use among Young People in England, 2021 - NHS Digital



#### Attitudes to people of pupil's age taking drugs, by age

The proportion of pupils who thought it was OK for someone their age to try drugs increased with age, as did the proportion who thought it was OK to take cannabis once a week (not shown on chart).

25% of 15 year olds thought it was OK to try cannabis, and 14% thought it was OK to use it once a week.


#### Perceived number of people of pupils' age who take drugs (15 year old's only)

78% of 15 year olds thought that none or only a few people their own age took drugs; prevalence of drug use amongst 15 year olds in the last year, as reported in this survey, was 24%.

8% of 15 year olds significantly overestimated drug use by pupils their own age (those who thought most or all people their own age took drugs in the last year).



For more data relating to this section:

Tables 10.10 to 10.14, Smoking, drinking and drug use among young people, 2021

### Sources of helpful information about drug use

#### Sources from which pupils have obtained helpful information about drug use

Pupils could give more than one answer for this measure.

Pupils were most likely to have obtained helpful information about drug use from parents (70%) and teachers (66%). Other people from whom pupils got helpful information were other relatives (42%), friends (42%) and police in schools (38%).

Of the different forms of media, the internet was the most popular source of helpful information about drug use (56%), followed by TV (50%), then social media (48%).

Smoking, Drinking and Drug Use among Young People in England, 2021 - NHS Digital



For more data relating to this section:

Tables 10.19 to 10.21, Smoking, drinking and drug use among young people, 2021

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**Previous Chapter** Part 9: Young people who have taken drugs

Next Chapter Part 11: Multiple behaviours

# Part 11: Multiple behaviours

# Introduction

In previous parts of this report, smoking, drinking and different types of drug use have been examined independently of one another. This part looks at the relationships between these behaviours, by comparing prevalence rates and examining overlaps. This part also looks at the impact of covid lockdowns on recent behaviours, and compares attitudes towards smoking, drinking and drug use.

Smoking cigarettes, drinking alcohol and taking drugs all pose significant individual health risks to young people. However, those who engage in more than one of these expose themselves to an increased level of risk<sup>1</sup>.

To recap from earlier parts:

- 12% of pupils had ever smoked. 1% were regular smokers, equivalent to around 35 thousand young people<sup>2</sup> (confidence interval 22 thousand – 48 thousand).
- 40% had ever drunk alcohol. 9% had drunk alcohol in the last week, equivalent to around 288 thousand young
  people (confidence interval 244 thousand 332 thousand).

- 18% had ever taken drugs. 6% had taken drugs in the last month, equivalent to around 216 thousand young people (confidence interval 179 thousand 252 thousand)
- 1. British Medical Association, Board of Science and Education, London (2003): Adolescent Health.
- 2. Based on Office for National Statistics mid-year 2020 population estimates for 11 to 15 year olds in England.

### Smoking, drinking or drug use prevalence

#### Ever smoked, drunk alcohol or taken drugs

51% of pupils said that they had smoked, drunk alcohol or tried drugs on at least one occasion. This is similar to 2018.

The likelihood of pupils having ever smoked, drunk alcohol or taken drugs increased with age, from 19% of 11 year olds to 74% of 15 year olds.



#### Recently smoked, drunk alcohol or taken drugs

'Recently' indicates smoking or drinking in the last week, or drug use in the last month.

16% of pupils said that they had recently smoked, drunk alcohol or taken drugs. This is a decrease from 20% in 2018.

The likelihood of pupils having recently smoked, drunk alcohol or taken drugs increased with age, from 4% of 11 year olds to 32% of 15 year olds.



For more data relating to this section:

Tables 11.1 to 11.4, Smoking, drinking and drug use among young people, 2021

### **Overlapping behaviour**

Overlapping behaviour of having recently smoked, drunk alcohol or taken drugs

1% of pupils had recently smoked, drunk alcohol and taken drugs.

A further 3% had done any two of these behaviours.

9% had only carried out one of these behaviours, with drinking being the most common.

88% had not recently exhibited any of these behaviours (not shown on image).



For more data relating to this section:

Table 11.5, Smoking, drinking and drug use among young people, 2021

### Attitudes to smoking, drinking and drug use

Attitudes to people of pupil's own age smoking, drinking alcohol or taking drugs

Pupils were more likely to find one-off experimentation acceptable than regular use.

Pupils were more likely to think that drinking alcohol was OK (53% to try, 27% to do every week), than smoking (23% and 8% respectively).

Acceptance of e-cigarette use was higher than that of smoking, with 32% saying it was OK to try an e-cigarette, and 20% saying it was OK to use them once a week.

Drug use was the least likely activity to be seen as acceptable; 10% thought it was OK for someone of their own age to try cannabis and 6% thought it OK to take once a week. Levels of approval for sniffing glue and taking cocaine were lower still, with taking cocaine being the lowest.



See parts 3, 7 and 10 for more information on pupil attitudes to smoking, drinking and drug use by age, and over time.

For more data relating to this section:

Tables 11.6 and 11.7, Smoking, drinking and drug use among young people, 2021

# Impact of covid lockdowns on recent behaviours

#### Recent behaviours, by how many times met people outside of home/school in the last four weeks

Pupils who met people outside of home/school more frequently in the previous four weeks were more likely to have exhibited one or more of the behaviours of recently smoking, drinking alcohol or taking drugs.

For those exhibiting one behaviour, it increased from 3% for those who had not met people in the last four weeks to 15% for those who had met people every day. For two behaviours it was an increase from less than 1% to 7%, and for all three behaviours it increased from less than 1% to 4%.



For more data relating to this section

Table 11.8, Smoking, drinking and drug use among young people, 2021

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**Previous Chapter** Part 10: Young people and drugs: the context

Next Chapter Part 12: School lessons and guidance

# Part 12: School lessons and guidance

### Introduction

Pupils were asked about lessons they received on smoking, alcohol and drugs, and each school who took part in the survey also answered a questionnaire on lesson provision. These subjects are generally covered in Personal, Social and Health and Economic Education (PSHE), which is not currently part of the National Curriculum in England.

Guidance for schools was published by the Department for Education in 2013:

Personal, Social and Health and Economic Education guidance

This defines PSHE as 'an important and necessary part of all pupils' education'. As well as drug education, PSHE encompasses sex and relationship education, financial education and understanding of the way diet and exercise contribute to a healthy lifestyle.

### Pupils' recall of school lessons about smoking, alcohol and drugs

#### Pupils who said they received lessons in the last year, by school year

More than half of pupils said they received lessons on each topic during the last year, with a slightly higher proportion for drugs (60%), than smoking (56%) and alcohol (56%).

Lessons peaked in year 9, though the lower rates in year 7 will be partly due to the survey taking place mainly in the Autumn term, so year 7 pupils might only have been at the school for a few weeks.



#### Pupils who think their school has given enough information, by school year

Around half of pupils thought their school gave them enough information about smoking (52%), drinking alcohol (51%) and drug use (48%).

The proportions were lowest in Year 7, but again this will be partly due to the survey taking place mainly in the Autumn term when year 7 pupils might only have been at the school for a few weeks.



For more data relating to this section:

Tables 12.1 to 12.3, Smoking, drinking and drug use among young people, 2021

### Frequency of lessons about tobacco, alcohol and drugs

#### Frequency of lessons in each school year

Most schools reported pupils had lessons about each topic at least once a year (the combined light and dark blue areas in the chart below); between 78% and 92% of schools, depending on the school year and topic. The likelihood was highest in years 9 and 10 for all topics, and lowest in year 7.

Schools having lessons at least once a term ranged from 11% to 22% depending on the school year and topic.



For more data relating to this section:

Tables 12.5 to 12.7, Smoking, drinking and drug use among young people, 2021

https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021# 81/119

# Lesson contributors and sources of information used to prepare lessons

#### Who contributes to school lessons

Schools could select more than one option.

Teachers contributed to lessons in 99% of schools, although not necessarily a specialist PSHE teacher. In addition, most schools also drew on other contributors. These included Local Authority drug and alcohol advisors (28%), the police (25%), other school staff (23%), and school nurses (11%).



#### Sources used to prepare school lessons

Teachers drew on a range of sources to prepare lessons, most commonly the PSHE Association (87%), the Department of Education (DfE) Relationships and sex education (RSE) and health education curriculum guidance (79%), and the government-funded FRANK website (73%).



For more data relating to this section:

Tables 12.8 and 12.9, Smoking, drinking and drug use among young people, 2021

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**Previous Chapter** Part 11: Multiple behaviours

Next Chapter Part 13: Wellbeing

# Part 13: Wellbeing

### Introduction

From 2018 the survey moved to measuring wellbeing using questions recommended and used by the Office for National Statistics. These questions represent a harmonised standard for measuring personal wellbeing and are used in many surveys across the UK.

Pupils were asked to rank their feelings from 0 to 10 in relation to the following questions:

- Overall, how satisfied are you with life nowadays?
- Overall, to what extent do you feel that the things you do in life are worthwhile?
- Overall, how happy did you feel yesterday?
- Overall, how anxious did you feel yesterday?

The responses were then allocated to one of four categories per wellbeing question as shown below:

Life satisfaction, life worthwhile, and happiness scores

• 0 to 4 = Low

• 5 to 6 = Medium

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- Smoking, Drinking and Drug Use among Young People in England, 2021 NHS Digital
- 7 to 8 = High
- 9 to 10 = Very high

#### Anxiety scores

- 0 to 1 = Very low
- 2 to 3 = Low
- 4 to 5 = Medium
- 6 to 10 = High

This part provides a summary of the outcomes from these wellbeing questions, and presents them against recent behaviours; smoking in the last week, drinking alcohol in the last week, and drug use in the last month.

# Summary of wellbeing

#### Summary of wellbeing outcomes

High levels of wellbeing were most commonly reported in relation to questions on the extent to which pupils feel the things they do in life are worthwhile, as well as life satisfaction; 55% and 54% of pupils respectively reported high wellbeing for these questions (includes very high).

Low levels of wellbeing were most commonly reported in relation to questions about happiness and anxiety; 33% reporting a high level of anxiety yesterday, and 30% reporting a low level of happiness yesterday.

Overall, 23% of pupils reported a low level of life satisfaction, and 22% a low feeling in relation to the things they do in life being worthwhile.



#### Low wellbeing, by year

There have been increases in low wellbeing for each of the four measures since 2018.

The proportion of pupils reporting low wellbeing for **all four** measures (low life satisfaction, low feeling of the things they do in life being worthwhile, low happiness yesterday, and high anxiety yesterday) was 8% in 2021, compared to

5% in 2018.



#### Low wellbeing, by sex

Girls reported lower levels of wellbeing across all four measures, with 41% of girls reporting a high level of anxiety yesterday, and 38% a low level of happiness yesterday.

11% of girls reported low wellbeing for all four measures, compared to 4% of boys. This increased to 18% for 15 year olds girls (see later sections on each measure for further age breakdowns).



#### Low wellbeing, by age

Low wellbeing increased with age for all four measures.

The proportion of pupils reporting low wellbeing for all four measures increases from 3% of 11 year olds to 13% of 15 year olds.

Amongst 15 year olds, 35% reported a low level of happiness yesterday, and 40% reported a high level of anxiety. This rises to 46% and 51% respectively for 15 year old girls (see data table 13.2).



For more data relating to this section:

Tables 13.1 and 13.2, Smoking, drinking and drug use among young people, 2021

# Wellbeing by recent behaviours (smoking, drinking and drug use)

Each measure was examined against the following recent behaviours: smoking in the last week, drinking alcohol in the last week, and drug use in the last month.

#### Life satisfaction

61% of pupils who smoked in the last week reported low life satisfaction nowadays, compared to 23% for all pupils (see earlier summary section). Low life satisfaction was reported by 47% of pupils who had taken drugs in the last month, and 39% of pupils who had drunk alcohol in the last week.

The likelihood of pupils reporting a low level of life satisfaction increased with the number of recent behaviours; 18% for no behaviours, compared to 35% for one, and 57% for all three behaviours (smoking, drinking and drug use).



#### Happiness felt yesterday

60% of pupils who smoked in the last week reported a low level of happiness felt yesterday, compared to 30% for all pupils (see earlier summary section). A low level of happiness was reported by 51% of pupils who had taken drugs in the last month, and 43% of pupils who had drunk alcohol in the last week.

The likelihood of pupils reporting a low level of happiness increased with the number of recent behaviours; 26% for no behaviours, compared to 42% for one, and 57% for all three behaviours (smoking, drinking and drug use).



#### To what extent pupils feel that the things they do in life are worthwhile

69% of pupils who smoked in the last week reported a low feeling that the things they do in life are worthwhile, compared to 22% for all pupils (see earlier summary section). A low feeling was reported by 51% of pupils who had taken drugs in the last month, and 41% of pupils who had drunk alcohol in the last week.

The likelihood of pupils reporting a low feeling increased with the number of recent behaviours; 17% for no behaviours, compared to 39% for one, and 70% for all three behaviours (smoking, drinking and drug use).



#### Anxiety felt yesterday

44% of pupils who had drunk alcohol in the last week, 42% of pupils who smoked in the last week, and 42% of pupils who had taken drugs in the last month reported a high level of anxiety felt yesterday, compared to 33% for all pupils (see earlier summary section).

Though the likelihood of pupils reporting a high level of anxiety did increase somewhat with the number of recent behaviours, the difference was less than for the other measures (see earlier sections); 31% for no behaviours, compared to 41% for one, and 48% for all three behaviours (smoking, drinking and drug use).



For more data relating to this section:

#### Tables 13.15 to 13.18, Smoking, drinking and drug use among young people, 2021

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Previous Chapter Part 12: School lessons and guidance

### Next Chapter

Appendix A: Survey Methodology

# Appendix A: Survey Methodology

### A1 - Background to the survey

The survey of Smoking, Drinking and Drug Use amongst Young people in England has been running since 1982. The survey takes place in secondary schools, with pupils in curriculum years 7 to 11 (mostly aged 11 to 15). Each survey since 1998 has included a core set of questions on smoking, drinking and drug use. In 2000, the survey questions changed to focus on smoking and drinking or on drug use in alternate years, but in 2016 the survey reverted back to including both drinking/smoking and drugs focused questions in one survey. However, only about half the pupils are asked the more detailed questions on smoking and drinking, with the other half asked more detailed questions on drug use.

The 2016, 2018 and 2021 surveys were carried out by Ipsos UK on behalf of NHS Digital. The 2020 survey did not go ahead due to the Covid pandemic and was postponed to 2021. Surveys prior to 2016 were carried out by NatCen.

In 2021, 9,289 pupils in England were surveyed between September 2021 and February 2022 across 119 schools.

Where possible, specialist interviewers visited schools to support staff administering the survey. However, due to Covid outbreaks during the fieldwork period, this was not always feasible. Further information on measures adopted in response to Covid can be found throughout the appendices report.

Further detail on the 2021 survey methodology and all changes is provided in the following sections.

The questionnaires are available on the main publication page.

# A2 - Survey design

#### A2.1 Changes to questionnaire content in 2021

The questionnaire content remained largely unchanged in 2021. Just three questions were removed, four added and two amended. It is important to note that some of the new questions were added in response to the Covid pandemic and may warrant review for the next iteration of the survey in 2023.

Questions	Changes 2021
Did you start regularly smoking tobacco cigarettes before or after first trying e-cigarettes/vaping devices?	Added in 2021
During the last school year (from September 2020 to July 2021), which of the following best describes how you took part in school learning?	Added in 2021 (to reflect different styles of learning during the pandemic)
In the last 4 weeks, how often, if at all, have you met up in person with two or more people at a time or a group of people who you don't live with?	Added in 2021 (to understand social interactions during the pandemic)
In the last 7 days, how often, if at all, have you met up in person with two or more people at a time or a group of people who you don't live with?	Added in 2021 (to understand social interactions during the pandemic)
How often have you been excluded from school in the last 12 months?	Amended in 2021 to 'Have you

	ever been expelled / suspended from school?'
How often have you played truant (bunked off) in the last 12 months?	Amended in 2021 to 'Have you ever stayed away from school without permission (truanted/bunked off)?'
In the last four weeks, how many times have you taken drugs (including sniffing glue or solvents but not cigarettes or alcohol)?	Removed in 2021
The last time you used or took drugs, were you also drinking alcohol?	Removed in 2021
Have you ever felt that you needed to get help or treatment because you were using or taking drugs?	Removed in 2021

#### A2.2 Changes to questionnaire content prior to 2021

Questions on wellbeing, were included for the first time in 2018.

A large-scale review of the questionnaire took place ahead of the 2016 survey. A review which included the input from the project steering group, cognitive testing and extensive piloting led to the following changes to questionnaire content:

- Additional questions on e-cigarettes, nitrous oxide, new psychoactive substances (also known as legal highs), beliefs about drinking, whether pupils had ever got drunk, consequences of drinking and family affluence.
- Removal of questions on water-pipe tobacco, types of cigarette smoked, energy drinks, drinking in pubs/bars/clubs, feelings after taking drugs, and free school meals.
- Changes to some descriptions used in the questionnaire (e.g. descriptions of e-cigarettes and legal highs, street names for some drugs).

Where comparability in time series data was affected, this is highlighted in the data tables, and details are provided in the section on 'Coherence and comparability' within the Data Quality Statement.

# A3 - The sample design

The survey population comprised pupils in Years 7 to 11 in secondary schools or in an equivalent year group in middle and upper schools. At the time of sampling, most of these pupils were aged between 11 and 15, although some of those pupils in year 11 would have been 16 by the time they took part in the survey. The sample included almost all types of secondary school in both the maintained and independent sectors of education in England. Special schools and pupil referral units were excluded from the survey<sup>1</sup>.

The survey uses a multi-stage probability design, in which first schools and then classes are selected using random methods. In 2021, 1,023 schools in England were sampled. In each participating school, three classes were then sampled (one class from Years 7 and 8, and two classes from Years 9, 10 and 11). All pupils in the sampled classes were eligible for the survey. More classes were sampled from the older year groups to increase the precision of estimates (see section A3.1 on sampling classes for more information).

This sampling design follows the design adopted for the first time in 2018 of sampling three whole classes. For more information, the 2018 report can be found <u>here</u>. However, as in 2018, some schools only offered two classes, but it felt better to include these schools than exclude them and reduce the response rate. In 2021, three schools wanted whole year groups to participate, which was accommodated with results weighted down to reflect this.

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1 Pupil Referral Units were not included in the survey as only a small number would be included in the sample. This could mean that the numbers participating in the survey could vary substantially from year to year and have a disproportionate impact on the findings.

#### A3.1 School sampling

The same sampling frame was used as in the 2018 survey. The aim of the sample was to achieve an equal number of schools in each region – 23 schools in each region. To achieve this, the number of schools sampled was based on the response rate achieved in the previous year of SDD for each region.

The sampling frame was stratified by region; type of establishment (academy, voluntary, aided/controlled, community, foundation, independent); mixed or single sex; and average IMD score for all non-independent schools. In each region, schools (the primary sampling units) were selected at random from Get Information about Schools (<u>https://www.get-information-schools.service.gov.uk/</u>), the Department for Education's register of educational establishments in England and Wales.

The probability of each school being selected was proportional to the numbers of pupils in Years 7 to 11, so that larger schools within each region had a higher chance of inclusion.

The number of schools selected in each region is shown in Table 1.

#### Region Number of schools sampled East Midlands 91 180 East of England London 100 North East 67 North West 99 South East 93 South West 132 West Midlands 161 Yorkshire and the Humber 100 Total 1023

#### Table 1: Number of schools sampled by region

Table 2 shows the number of schools in each stratum and the total number of selected schools allocated to each one.

#### Table 2: Number of schools in each stratum

Type of school	Pupil population <sup>a</sup>	Total schools	Selected schools
Academy			
Boys	88,961	116	32
Girls	127,614	151	32
<sup></sup> Mixed	1,996,622	2,285	709

https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021#

Boys	16,284	22	5
Girls	21,127	28	5
Mixed	160,054	182	44
Community			
Boys	7,843	9	1
Girls	19,489	21	8
Mixed	260,131	287	70
Foundation			
Boys	5,161	7	2
Girls	4,899	6	1
Mixed	136,487	151	47
Independent			
Boys	26,120	122	12
Girls	45,462	163	9
Mixed	151,809	624	46
Total	3,068,063	4,174	1,023
•			

<sup>a</sup> Pupils in Years 7 to 11: based on National Population Database for January 2020 and DfE population estimates for independent schools.

#### A3.2 Sampling classes

In each school, three classes were selected at random: one class from Years 7 and 8, and two classes from Years 9 to 11. At this stage, pupils in larger schools had a relatively smaller chance of being selected. This counter-balanced the biased method of selecting schools which gave larger schools a higher chance of being selected. Very small schools, with fewer than 40 eligible pupils, were excluded at this stage. All pupils in the three sampled classes were then selected for the survey.

More classes were sampled from the older year groups as risk-taking behaviours are more prevalent amongst older pupils. The level of precision around any percentage estimate is related to the value of the percentage itself: estimates around 50% are measured with the least precision and as the estimate moves away from 50% the precision increases. The key prevalence estimates on smoking, drinking, and drug use collected in the survey are low for pupils aged 11 and increase with age. Sampling more classes amongst the older school years, therefore, enables comparatively more certainty (i.e. narrower confidence intervals) around the estimates for older pupils. Information on school size was based on the January 2020 Department for Education (DfE) school census data.

Appendix B has more information on how standard errors and confidence intervals are calculated.

#### A3.3 Pupil sample

Fewer 11-year-olds took part in the survey as some of those who were 11 at the start of year 7 would be 12 by the time they took part in the survey. Similarly, some pupils in Year 11 will have been 16 at the time of the survey but they have been added to the 15-year-olds in the reporting tables making this group slightly larger than the others.

### A4 - Fieldwork procedures

#### A4.1 Contacting schools

1,537 schools were sampled – 1,023 in the main sample and 514 in the reserve sample. All schools in the main sample were sent an initial letter during the summer term of 2021, explaining that they had been selected to take part in the survey and would be contacted at the start of the autumn term.

Ipsos contacted all schools again in 2021 at the start of the autumn term. Schools were invited to take part, and if they agreed, a date and time for an interviewer to visit the school were confirmed, and classes were selected. Interviewers then rang the school a few days before the survey appointment to confirm the visit time and answer any questions the school had. In 2021 schools were also given the option to administer the survey themselves with the teacher led option, questionnaires were sent to the school in advance and the recruiters would contact schools to confirm questionnaires had been completed and to arrange collection. This option was added in response to the Covid pandemic in instances where schools had restrictions on visitors to the school.

Follow-up letters, emails and calls were made to schools that did not respond to encourage them to take part in the survey. All schools in London and a random sample of schools outside of London were offered an incentive of £200 to take part. This was to assess the impact that providing an incentive has on recruitment.

However, the response rate was initially very poor, due to the ongoing impact on schools of Covid during the 2021-22 Autumn term. As such, the decision was taken to extend the incentive to all schools from November 2021.

#### A4.2 Carrying out the survey - interviewer led

Interviewers from Ipsos arranged with schools a convenient time to conduct the survey. Where possible, arrangements were made for the three classes to take part in the survey on the same day, either all in the same location at the same time, or at different times throughout the day (usually in their classroom). In some schools however, the survey sessions were completed over two separate visits.

Pupils completed the questionnaire under the interviewer's supervision. The interviewer briefly explained why the survey was being carried out, what would happen to the information given, explaining how the questionnaire should be filled in, and stressing the voluntary nature of survey participation. The questionnaires are available on the main publication page.

Interviewers alternated the drug-focused and smoking-focused questionnaires when handing them out to pupils. This meant that a pupil would not be sat next to another pupil completing the same version of the questionnaire to ensure privacy of their answers.

Questionnaires were completed in 'exam conditions'; pupils were not allowed to discuss the questions with each other or look at others' answers. Pupils could request and receive help if they did not understand questions. A teacher was present during the completion of questionnaires, but they were not allowed to see pupils' questionnaires at any stage of the survey. Interviewers stressed that pupils' answers would be completely confidential, that no names were collected on the questionnaire and that their answers would not be shared with teachers. Questionnaires were serial numbered for administrative purposes, but serial numbers were not linked to pupils' names.

In participating schools, a staff member was also asked to complete a questionnaire about how the school taught pupils about smoking, drinking alcohol and illicit drugs (the school level questionnaire).

#### A4.3 Carrying out the survey - school led

In 2021 schools were offered the option to complete the survey themselves without requiring an interviewer to come into the school. This change was made in response to the COVID-19 pandemic to allow schools to take part even if there were restrictions on visitors allowed into schools.

When a school agreed to participate, recruiters sent a pack to schools which included the questionnaires and instructions on how to administer the questionnaire. Pupils completed the questionnaire under the class teacher's supervision in exam conditions.

Once a school had completed the questionnaires, they contacted the recruiter, who would arrange for a courier to collect the questionnaires from the schools and return them to Ipsos for scanning. For the analysis all responses were treated the same regardless of whether the survey was led by an interviewer or the school. The <u>data tables</u> named 'Data quality tables - Mode of survey delivery', show the impact of survey delivery mode on key estimates for smoking, drinking and drug use.

#### A4.4 Mop-up sessions

Mop-up sessions were held when 4 or more pupils were missing from class. Interviewers were required to schedule the mop-up session on the day of the initial visit. In cases where the school had opted to lead the survey sessions, instructions were provided to guide them through the setting up mop-up sessions at a convenient time. The absent pupils were either interviewed in a separate session, or with another class taking part at a later date. Mop-up sessions were conducted with 164 pupils. Information on mop sessions was provided by teachers via completed contact sheets.

#### A4.5 Withdrawing pupils from the survey

Schools are required to send out letters to parents/carers of pupils in selected classes to inform them when the survey will be taking place and to provide information about the survey content. The letter provides parents with an opportunity to withdraw their child from the survey.

In accordance with MRS guidelines, pupils were provided with an opportunity to decline to take part (even though a responsible adult has given permission for their participation)

In total, 61 pupils decided to opt-out or were withdrawn out by their parents/carers. Information on opt-outs was provided by teachers via completed contact sheets.

### A5 - Probabilities of selection

To try and ensure an equal number of schools from each region in the final sample, selection probabilities differed between regions. The different probabilities of selection were adjusted as part of the calibration weighting (see section A8). Table 3 shows the distribution of schools sampled by region.

Region	Pupil population <sup>a</sup>	% of population	% of schools sampled
North East	132,231	4.3	6.5
North West	406,978	13.2	9.7
Yorkshire & the Humber	303,266	9.9	9.8

#### Table 3: Distribution of pupil population by region and percentage of schools sampled

10/1	0/2022, 09:52	Smoking, Drinking	g and Drug Use among	y Young People in Engl	and, 2021 - NHS Digital
	East Midlands	257,845	257,845 8.4		
	West Midlands	334,068	10.9	15.7	
	East of England	356,022	11.6	17.6	
	London	479,701	15.6	9.8	
	South East	517,312	16.8	9.1	
	South West	290,119	9.4	12.9	
	Total	3,077,542	100.0	100.0	

<sup>a</sup> Pupils in Years 7 to 11, based on DfE population estimates for 2021.

The overall probability of selection (or sampling fraction) was the product of the sampling fractions at the first and second stages, i.e.

 $F = f_1 x f_2$ 

where

f<sub>1</sub> = probability of selecting the school.

 $f_2$  = probability of selecting the class.

Schools were sampled with probability proportional to the number of pupils in Years 7 to 11, so that roughly equal numbers of pupils could be sampled from each selected school. Thus:

f<sub>1</sub>=n<sub>1</sub> x N<sub>i</sub>/N<sub>r</sub>

where

 $n_1$  = total number of schools to be selected in the region.

 $N_i$  = number of pupils in an individual school in Years 7 to 11.

 $N_r$  = total number of pupils in the region in Years 7 to 11.

Within each school pupils in years 9, 10 and 11 had a higher probability of being selected to take part in the survey. In each school, one class was selected from Years 7 and 8 and two classes were selected from Years 9,10 and 11. Within each class all pupils were selected. Thus:

 $f_2 = n_c/N_c$ 

where:

n<sub>c</sub> is the number of classes (i.e. 1 or 2) selected in the Year Grouping (i.e. Years 7 and 8 or Years 9,10 and 11) in each school.

N<sub>c</sub> is the total number of classes in the Year Grouping in the school.

Overall, therefore, the sampling fraction for each pupil was:

 $F = (n_1 x (N_i/N_r)) x (n_c/N_c)$ 

# A6 - Achieved response rate and sample size

In total, 119 schools agreed to take part in the survey out of the 1023 eligible schools, a response rate of 12%. Of the 119 schools taking part, 34 took part before schools closed for Christmas 2021 and the remaining 85 from January 2022 onwards. Analysis took place in 2016 which concluded conducting surveys after Christmas did not significantly impact the results (see Appendix B for more details).

The response from selected pupils in participating schools was 92% (the pupil response rate was calculated based on information provided by teachers via completed contact sheets), yielding a total of 9289 completed, usable questionnaires. The product of the school and pupil rates gave an overall response of 11% (See Table 4 and Figure 1).

Of the 119 schools participating in the survey, 102 responded to the teacher questionnaire, a response rate of 86%.

#### Table 4: School and pupil response, 1982 - 2021

All eligible schools and pupils

1982 – 2021

Response (%)

School year	Schools	Pupils	Overall
1982	90	94	87
1984	88	93	82
1986	84	93	77
1988	96	91	87
1990	91	90	83
1992	97	92	89
1993	89	90	80
1994	85	92	77
1996	87	89	78
1998	74	90	70
1999	85	90	76
2000	72	87	63
2001	69	89	61
2002	72	88	63
2003	74	87	65
2004	70	89	62
2005	68	89	60
2006	65	85	55
2007	61	87	53

10/10/2022, 09:52

Smoking D	rinking and Dr	ug Use amon	a Youna Pea	ople in England	2021 - NHS Digital
J,		J -			, . J

2008	58	88	51
2009	54	87	47
2010	48	87	41
2011	48	88	42
2012	49	88	43
2013	44	88	38
2014	40	87	35
2016	28	93	26
2018	24	92	22
2021	12	92	11

#### Figure 1: SDD Overall response rate 1982-2021



Since the survey began in 1982 school response rates have continued to decrease. This was also worsened in 2021 as a result of the Covid pandemic, which led to continued teacher and pupil absence, and thus the pressure on school time to catch-up with missed learning. Despite the drop in school response rates, pupil response rates have remained high across the surveys' lifetime and even increased in recent years.

Table 5 shows the response rate by region, which varied considerably. In particular, the response rate in London and Yorkshire & the Humber was poor.

#### Table 5: School response by region

10/10/2022, 09:52

Smoking, Drinking and Drug Use among Young People in England, 2021 - NHS Digital

Region	Number of schools sampled	Number of schools taking part	School response rate
East Midlands	- 91	11	12.1%
East of England	180	21	11.7%
London	100	9	9.0%
North East	67	9	13.4%
North West	99	14	14.1%
South East	93	17	18.3%
South West	132	17	12.9%
West Midlands	161	22	13.7%
Yorkshire & the Humber	100	9	9.0%

In the 2021-22 academic year, the coronavirus (COVID-19) pandemic continued to have a huge impact on schools, with the omicron wave leading to teacher shortages and pupil absences, resulting in a strain on school's time and resources. This contributed to the high number of schools refusing to take part (376). Additional reasons for non-participation included a lack of time, not being interested in the subject and involvement in too many surveys. These reasons were similar to those given in 2018.

#### Table 6: Reasons given by schools for not taking part in the survey

Too busy at this time	48%
Always too busy	10%
Not interested in the subject	7%
Too many surveys	5%
Never do surveys	4%
Too busy now but would be interested at a later date	3%
No staff to manage admin	2%
Ofsted inspections going on	1%
Survey takes too long	1%
Survey topic too sensitive	<1%
Other*/no reason given	19%

\*Other reasons included headteacher being absent, time lost due to COVID and staff shortages

# A7 - Data cleaning

Questionnaires were either returned by the school interviewers or by courier to Ipsos's data capture department to be scanned and processed. Checks were conducted to ensure that the scanned data were captured correctly. As part of this, all handwritten text and characters were reviewed and verified. Random batches of questionnaires were then selected and checked to ensure that the data had been verified correctly.

As with previous years, the following checks were made to the data:

- Checking that filters were correctly followed.
- Checking ranges on consumption and age of first use variables.
- Checking whether answers given as 'other' answers could be back-coded into existing codes.
- Resolving inconsistencies between answers.

A dataset was then created for analysis purposes.

# A8 - Weighting

The sample is weighted to match the school population counts so that the survey's estimates are representative of the full school population. The school population counts were derived from the most recently completed DfE School Census.

The weighting was carried out in two stages. For this survey wave, schools were allowed to include more than one class in a school year, but the sampling was based on only including one school year. Thus, the first stage of weighting was to produce a set of weights that adjusted the number of pupils in any school year for such school back to a nominal class size of 25.

The second stage then used cell weighting to adjust the weights from the first stage directly to the population counts for the school year by gender separately for each region (Table 7).

	North East	North West	Yorks. & The Humber	East Midlands	West Midlands	East of England	London	South East	South West
Boys:									
Year 7	14,039	43,790	32,655	28,185	35,615	38,625	51,328	55,510	30,429
Year 8	13,566	42,212	31,472	27,092	34,479	37,019	50,056	53,813	29,879
Year 9	13,343	41,139	30,657	26,150	33,154	35,923	47,590	52,321	29,304
Year 10	12,913	40,166	29,714	24,990	33,173	35,148	46,684	50,975	28,734
Year 11	12,351	38,362	28,884	24,445	32,280	34,388	44,865	49,989	28,132

#### Table 7: Population counts used for weighting

G	i	r	ls:
-	٠	•	

•									
Year 7	14,127	42,384	31,810	27,211	34,815	37,244	51,201	54,292	30,124
Year 8	13,385	41,117	30,512	26,246	33,858	36,022	49,186	52,469	28,982
Year 9	13,346	40,236	30,106	25,459	32,982	34,547	47,284	50,550	28,605
Year 10	12,850	39,286	29,346	24,365	32,213	33,838	46,407	49,180	28,367
Year 11	12,311	38,286	28,110	23,702	31,499	33,268	45,100	48,213	27,563

These weights were then rescaled to sum to the achieved sample size. Both unweighted and weighted bases are shown in the tables. The unweighted bases represent the number of pupils who responded; the weighted bases have no particular meaning *per se*, but are used when calculating estimates.

Last edited: 5 September 2022 2:53 pm

**Previous Chapter** Part 13: Wellbeing

Next Chapter Appendix B: Technical Notes

# **Appendix B: Technical Notes**

# **B1** - Limitations of the statistics

This publication is based on survey data. It is therefore subject to potential limitations inherent in all surveys, including:

- Sampling error: This occurs when the sample of schools and pupils selected to take part in the survey is not representative of all schools and pupils. This is mitigated against by randomly selecting schools and pupils within schools. Sampling error will also vary to a greater or lesser extent depending on the level of disaggregation at which results are presented.
- Non-response error: This occurs when those pupils who take part in the survey are not representative of all pupils. It results in systematic bias due to non-response by schools and pupils selected to take part. In an attempt to correct for differential non-response, estimates are weighted using population totals (more details on weighting are available in appendix A8).
- Survey coverage: SDD covers pupils in all mainstream state maintained and independent schools in England.
   Some small groups of schools are not included such as pupil referral units (PRUs) and it may be that pupils in PRUs are more likely to partake in risky behaviours than other pupils. In addition, pupils who were playing truant, or were excluded or were absent for other reasons are not generally included in the survey (although there were "mop-up" visits to a small number of schools to capture pupils who were not there on the day).
- Sample size: Although SDD has a relatively large sample size detailed analysis of some subgroups of pupils may require several years of data to be combined for some analysis.

 Under reporting of risky behaviours: Pupils may not feel they wish to admit to some of behaviours asked about in the survey for fear of how this will be perceived by the interviewer or their teachers despite the questionnaire containing no personal identifiable information such as their name. They may also feel bad about undertaking such behaviours so may not want to admit to them. However, previous analysis has shown SDD to provide the most accurate measures of undertaking in risky behaviours (See section A8 of <u>Health and Wellbeing of 15-year-olds</u> in England - Main findings from the What About YOUth? Survey 2014)

Since the results compared in this report are from surveys in the SDD series conducted in a similar way and using the same methods of collecting information, other types of error should be similar on each survey and so will not affect comparisons. However, it is also possible that social desirability of these behaviours may affect whether pupils overreport or under-report, and as social desirability may change over time this may affect comparability.

# **B2** - Confidence intervals, significance testing and sampling error

Estimates in this report are subject to uncertainty due to sampling error as they were obtained from a relatively small sample of all pupils in secondary school (i.e. the "eligible population"). Any sample is only one of an almost infinite number that might have been selected which would all produce slightly different estimates. Sampling error stems from the probability that any selected sample is not completely representative of the population from which it is drawn.

It is possible to calculate the level of uncertainty around a survey estimate by exploring how that estimate would change if many survey samples were taken for the same time period instead of just one. A range of uncertainty can be placed around the survey estimate which is called the Confidence Interval. Confidence intervals are typically set up so that users of the data can be 95% sure that the true value lies within the range – in which case this range is referred to as a "95% confidence interval". Confidence intervals can be used as a guide to the size of sampling error and a wider confidence interval indicates a greater uncertainty around the estimate. Generally, a smaller sample size will lead to estimates that have a wider confidence interval than estimates from larger sample sizes. This is because a smaller sample is less likely than a larger sample to reflect the characteristics of the total population and therefore there will be more uncertainty around the estimates derived from the sample.

Statistical significance is a concept that says whether an estimated value is likely to have arisen only from variations in the survey's sampling. It is most often used when talking about a change over time (e.g. comparison to the previous survey) or a difference between groups (e.g. between boys and girls). A statistically significant change or difference is one that is not likely to be due only to sampling, and therefore likely to be a real change or difference. Plotting estimates and their confidence intervals (a measure of the uncertainty of an estimate) gives an indication of whether or not a difference is significant. In general, if the confidence intervals of two estimates do not overlap, the estimates are significantly different. If they do overlap however then they may still be statistically significantly different and so a significance test is required. The following formula produces a statistic which can be compared with the normal distribution to see if it is statistically different to zero. If it falls outside the 2.5 or 97.5 percentile then it suggests the difference is statistically significant:

#### \({p1 - p2} \over \sqrt{(s1^2+s2^2)}\)

p = prevalence estimate from the first category

- s = standard error from the first category
- p = prevalence estimate from the second category
- s = standard error from the second category

In general, attention is drawn to differences between estimates in this report only when they are significant at the 95% confidence level. This indicates that there is less than 5% probability that the observed difference is due to sampling variation rather than a real difference occurring in the population. The excel confidence interval <u>data tables</u> give true standard errors and 95% confidence intervals for the sample design for a range of key outputs broken down by age, gender, region and ethnicity. Standard errors and design effects (defts) were calculated in R studio, using a Taylor Series expansion method.

The deft is a measure of the efficiency of the sample design, with a value greater than 1 indicating statistical inefficiency in the sample. The deft can be interpreted as the relationship between the achieved sample size and the number of pupils that would be needed from a simple random sample to achieve the same level of precision.

### **B3** - Logistic regression analysis and odds ratios

#### **B3.1** Running the model

Logistic regression modelling has been used in this report to examine the factors that might be associated with selected outcome variables after adjusting for other factors. Models were constructed for outcomes of interest: current smoking, drinking alcohol in the last week and taking drugs in the last month.

The models included a variety of variables (factors) relating to pupil characteristics (e.g. age, sex, region, smoking, drinking, drug use, family deprivation). Although each model used comparable variables as far as possible, they also included variables specific to particular outcomes. For example, the current smoking model included families' attitudes to pupils' smoking and recall of lessons on smoking but not recall of lessons on drinking or drugs misuse.

For each model, the variables are grouped into a number of discrete categories which includes missing values. Sample code to create a model is shown below.

The placeholders 'var1', 'var2' and 'var3' (in green) represent where the variables would be entered (e.g. age, region and sex), and 'indicator' represents the dependent variable being modelled (e.g. a binary variable to reflect whether the pupil is a current cigarette smoker).

The full modelling process was developed using a mixture of R and Python code and the complete codebase can be found in GitHub.

def create\_model (df):

Creates the logistic regression model for the indicator of interest.

```
Parameters:
df: pd.DataFrame
Returns:
Dict[str, pd.DataFrame]
Dataframes of model information stored in a dictionary
df_filt = df.loc[
df["age1315"].isin([13, 14, 15])
& df["indicator"].isin([0, 1])]
model response = "indicator"
model_effects = ["var1", "var2", "var3"]
indicatorModel = logit_model(
df filt,
model_response=model_response,
model effects=model effects,
bubble factor=8
)
```

return indicatorModel

The final models were developed using an iterative process, by comparing a number of different variables and testing for significant associations. Variables, in each model, were rejected if the association was not significant (p < 0.05).

The results of the regression analysis, which includes the significant variables, are presented in data tables 1.10, 5.26

and 8.10. The results include odds ratios for the final models, together with the probability that each association is statistically significant.

Details of the variables included in the different models can also be found in the GitHub codebase.

#### **B3.2 Interpreting the odds ratios**

The models show the relative odds of the outcome of interest (e.g. current smoking) for each category of the explanatory variable (e.g. being a boy or a girl).

For categorical variables, odds are expressed relative to a reference category with a given value of 1. Odds ratios greater than 1 indicate higher odds (increased likelihood), and odds ratios less than 1 indicate lower odds (reduced likelihood). 95% confidence intervals for the odds ratios are shown. Where the interval does not include 1, this category differs significantly from the reference category.

For continuous variables, there is a single p-value. Continuous variables do not have a reference category; the odds ratio represents the change in odds associated with each additional point in the range (for example each extra year of age, or unit of alcohol drunk). Again, the 95% confidence interval is shown, and the odds ratio is significant if the interval does not include 1.

#### **B3.3 Interpreting the C-statistic**

The c-statistic can be used to assess the goodness of fit, with values ranging from 0.5 to 1.0. A value of 0.5 indicates that the model is no better than chance at predicting membership in a group. A value of 1.0 indicates that the model perfectly identifies those within a group and those not.

Models are typically considered reasonable when the c-statistic is higher than 0.7 and strong when the c-statistic exceeds 0.8 (Hosmer and Lemeshow, 2000).

#### B3.4 Estimates for contribution of each variable to the model

The complexity of the interactions between variables in a model makes it difficult to untangle their relative contributions. Nonetheless, an estimate of a variable's contribution can be made using the model comparison technique.

For example, consider a simple model containing three variables: age band, ethnicity and sex and a dataset that has 1,000,000 possible pairs where one record has the outcome (1) and the other does not (0). When run, the model assigns a higher probability to (1) than for (0) for 700,000 pairs (correct guesses), giving a concordance (or c-statistic) of 0.700.

Real models are also likely to have ties, which are counted as half a correct guess. To perform a model comparison, the logistic regression is re-run with one (and only one) of the predictor variables removed each time. The resultant c-statistics indicate how much the removed variable contributed to the final model.

In this example, when the age band is removed, the number of incorrect guesses increases from 300,000 to 450,000, a difference of 150,000. Therefore, the inclusion of the age band reduces the proportion of incorrect guesses by 33.3 per cent (150,000 / 450,000): this is the estimated contribution. Using the same methodology, ethnicity and sex have estimated contributions of 6.3 and 0.3 per cent, respectively. It can therefore be deduced that age band makes the largest contribution to the model's predictive power.

This is illustrated in the table below. Please note that estimated contributions cannot be added together.

#### Table 1: Example of estimating contribution to the logistic regression model

Model	c-statistic	Pairs	Guesses	Reduction in
_				incorrect
			Correct Incorrec	t

	guesse when inclu		esses included			
		000s	000s	000s	000s	%
All variables	0.700	1,000	700	300		
Variable excluded						
Age band	0.550	1,000	550	450	150	33.3%
Ethnicity	0.680	1,000	680	320	20	6.3%
Sex	0.699	1,000	699	301	1	0.3%

## B4 - Extending the fieldwork into the spring term

The fieldwork in surveys prior to 2016 has been conducted during the autumn school term. It has always felt important to complete the fieldwork by the end of the autumn term as anecdotally it has been believed that some pupils will have their first experience of the partaking in risky behaviours (particularly drinking alcohol) during the Christmas period either with their peers or at family gatherings.

However in all surveys since 2016, it was decided to continue the fieldwork until the end of January to boost the number of schools and therefore pupils who took part in the survey.

It was a concern that extending the fieldwork in this way could lead to the estimates of drinking prevalence being inflated and there could also be some impact on smoking and drugs misuse. It was felt therefore that whilst it may be possible to include the post-Christmas sample in some of the report tables such as attitudinal responses or source of alcohol, it could be that the impact was so great on the drinking prevalence estimates that pupils surveyed after Christmas should be excluded from some of the prevalence tables. The advantage of including them in the analysis was that they would greatly increase the sample size and therefore reduce the confidence intervals around the survey estimates.

Following the 2016 survey, there were two pieces of work carried out to test the impact of including the post-Christmas sample in the analysis, details of which can be found in Appendix B4 from the 2016 report.

This concluded that extending the fieldwork by just one month was not found to be sufficiently significant to exclude those pupils surveyed after Christmas from the main prevalence estimates.

### **B5** - Measuring alcohol consumption

#### **B5.1** Conversion to units

Pupils who had drunk in the last seven days were asked how much they had drunk in that period. Their answers were used to calculate their consumption in units (one unit of alcohol is equivalent to 10ml by volume of pure alcohol). These questions about alcohol consumption have been asked in a consistent way since 1990, with minor changes in 2002. The questionnaire specified six types of drink; for each type, pupils were asked whether they had drunk any in the last seven days and, if so, how much. The types of drink covered in the questionnaire (with the quantities asked about for each) were:

- Beer, lager and cider: pints, half pints, large cans, small cans, bottles
- Shandy: pints, half pints, large cans, small cans
- Wine, martini, sherry: glasses\*
- Spirits and liqueurs (e.g. whisky, vodka, gin, tequila, Baileys, Tia Maria): glasses
- ➡ Alcopops (e.g. Bacardi Breezer, Reef, Smirnoff Ice, Vodka Kick, WKD): small cans, bottles.

• Other alcoholic drinks.

\*Before 2014, wine was asked about separately from martini and sherry. The two categories were combined in recognition that there is increasing convergence in the alcoholic content of the drinks within these categories.

Pupils who had drunk beer, lager or cider were asked if they usually drank normal strength or strong beer (alcohol volume of 6% or more). For the 2016 survey an additional category was added where the pupil could say they didn't know the strength and the implication of this change is discussed later in this section.

Attempting to accurately measure alcohol consumption among 11 to 15 year olds presents similar but not identical challenges to surveys of adults. For both adults and children, recall of their drinking can be erroneous; a generally acknowledged problem for all surveys measuring alcohol consumption. Also, the majority of pupils' drinking is in informal settings, and the quantities they drink are not necessarily standard measures. In addition, the survey method limits the amount of detail that can be recorded about the alcoholic strength and quantities drunk, so that, to convert actual drinks into units of alcohol consumed, it is necessary to make consistent assumptions about the strength and size of each type of drink.

Since the established unit measurement was introduced in 1990 there have been significant changes in the alcohol content of drinks and the variability in glass size. As a result, the 2006 General Household Survey and the Health Survey for England changed the method by which adult alcohol consumption is converted into units of alcohol. The 2007 report in this survey series revised the method of calculating units in line with these surveys of adults and reported 'original' and 'revised' units of alcohol. This resulted in a higher, more accurate estimate of alcohol consumption among pupils, and reflected a likely gradual change in drinking behaviour since the 1990s. From 2008, consumption has been shown only in 'revised' units and so direct comparisons between consumption of alcohol from 2008 onwards and trend data based on the original units from 2006 and before are not possible.

The conversion factors used in this report are shown in the table below.

Type of drink	Measure	Units of alcohol
Beer, lager or	Pint	2
cider	Half pint	1
	Large can	2
	Small can or bottle	1.5
	Less than half a pint	0.5
Shandy	Pint	1
	Half pint	0.5
	Large can	0
	Small can or bottle	0
	Less than half a pint	0.25
Wine, martini, sherry	Glass	2

#### Table 2: Conversion factors used to estimate consumption in units of alcohol

	Less than a glass	0.5
Spirits and	Glass	1
nqueurs	Less than a glass	0.5
Alcopops	Can or bottle	1.5
	Less than a bottle	0.75

Where pupils have indicated that they normally drink strong rather than normal strength beer, lager or cider, the number of units has been multiplied by 1.5. Where they indicated they did not know the strength then the number of units has been multiplied by 1.25.

#### **B5.2** Question on alcohol strength

As mentioned previously, the methodology for the number of alcohol units consumed allows for an adjustment to be made if the pupil normally drinks strong beer, cider or lager. The adjustment is to multiply the units of alcohol consumed via beer, cider and lager by 1.5 if the pupil indicates they normally drink stronger variants. Prior to 2016, the only options were "normal" and "strong" but during cognitive testing of the survey questions some pupils reported they were often unsure about the strength of the alcohol they were drinking so they were either not answering the question or guessing. Therefore an additional option of "don't know" was added from 2016 onwards, although this then presented a challenge of the level of multiplier which should be used for pupils who chose the "don't know" option. The following scenarios were considered:

- Use a multiplier of 1 i.e. treat "don't knows" as if they answered "normal" which is the same as those who didn't answer the equivalent question in previous years were treated.
- Use a multiplier of 1.5 i.e. treat the "don't knows" as if they answered "strong"
- Use a multiplier of 1.25 i.e. an average of "strong" and "normal".

For the 2016 survey, the impact of the different scenarios on the mean number of alcohol units drunk by age and sex of the pupil was examined. It showed that the differences were very small and therefore it was decided to use a multiplier of 1.25 as it is an average between strong and normal strength.

### **B6 - Measuring wellbeing**

From 2018 the survey moved to measuring wellbeing using questions recommended by ONS. These questions represent a harmonised standard for measuring personal wellbeing and are used in many surveys across the UK.

Pupils were asked to rank their feelings from 0 to 10 in relation to the following questions:

- Overall, how satisfied are you with life nowadays?
- Overall, to what extent do you feel that the things you do in life are worthwhile?
- Overall, how happy did you feel yesterday?
- Overall, how anxious did you feel yesterday?

The responses were then allocated to one of 4 categories per wellbeing question as shown in the table below.

Life satisfaction, l	ife worthwhile,	Anxiety scores	
and happiness sco	ores		
Response on an 11 point scale	Label	Response on an 11 point scale	Label
to 4	Low	0 to 1	Very low

#### Table 3: Personal well-being thresholds

5 to 6	Medium	2 to 3	Low
7 to 8	High	4 to 5	Medium
9 to 10	Very high	6 to 10	High

Source: Office for National Statistics

## **B7** - Measuring family affluence

Family affluence is measured as per the methodology used by the HBSC (Health Behaviour in School-aged Children), a research collaboration with World Health Organisation offices across Europe and North America: <u>http://www.hbsc.org/</u>

It uses the following questions to produce an overall family affluence ranking of low, medium or high:

- Do you have your own bedroom for yourself?
- Does your family have a dishwasher at home?
- How many times did you and your family travel outside of the UK for a holiday last year?
- How many computers (including laptops and tablets, not including game consoles and smartphones) does your family own?
- How many cars, vans or trucks does your family own?
- How many bathrooms (room with a bath/shower or both) are there in your home?

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**Previous Chapter** Appendix A: Survey Methodology

Next Chapter Appendix C: Definitions

# Appendix C: Definitions C1 - Measuring behaviours

#### C1.1 Smoking and e-cigarette use

All pupils were asked about their cigarette smoking behaviour and e-cigarette use, including whether they had ever smoked cigarettes/used e-cigarettes, and for those that had, the number and how often they smoked/the frequency and length of use of e-cigarettes. Pupils were categorised in three ways based on the responses given:

- Regular smokers/users (defined as usually smoking at least one cigarette per week/using an e-cigarette at least once per week);
- Occasional smokers/users (defined as usually smoking less than one cigarette per week/using an e-cigarette sometimes but less than once per week); or
- Non-smokers/non-users.

#### **C1.2 Alcohol consumption**

Pupils were asked about their alcohol use, with current drinkers being defined as pupils who had drunk alcohol at least once a week, once a fortnight, once a month or a few times a year.
### C1.3 Drug use

Drug use prevalence measures (ever used / used in last year / used in last month) are derived from the answers to questions on *whether they had heard of a drug, had they tried a drug* and if so *when they had last used the drug*, for 16 different drug types (see the table in section C2).

If use of any of the 16 drug types is confirmed by the responses, then they are included as a positive (ever used / used in last year / used in last month), otherwise as a negative (never used).

In the absence of a positive response for any drug type (confirming drug use), if a pupil failed to provide a response for any of the drug types, then that pupil is excluded from the measure. This is because it is not possible to know whether that pupil had or hadn't taken any of the 16 drug types. This does however create a situation where a non-response to just a single drug type can exclude that pupil from the measure.

Note that if a pupil said that they had not heard of, or not tried that drug, then they do not have to answer any more questions about that particular drug and are recorded as having 'not used' that drug.

# **C2** - Drug classification

The following table lists the specific drugs that pupils were asked about in this survey, and indicates the classification under the Misuse of Drugs Act (1971) and its subsequent amendments.

The Act classifies controlled substances into three categories according to their potential for harm, with Class A drugs considered the most harmful.

- The Class A drugs mentioned in the survey (amphetamines if prepared for injection, ecstasy, cocaine, crack, heroin, LSD, magic mushrooms and methadone) are not an exhaustive list of Class A drugs.
- Some drugs are classified according to the method of delivery taken. For example, amphetamines are Class B drugs if taken orally and Class A drugs if injected.
- Methylamphetamine (crystal meth), included in the category 'Speed and other amphetamines', was reclassified to Class A in all its forms on 18th January 2007. The current questionnaire does not allow a distinction between methylamphetamine and other forms of amphetamines. For the sake of comparability with previous years, this survey has continued to define all amphetamines as Class A if injected, and otherwise Class B.
- Within the Drugs Act 2005, raw magic mushrooms were classified as Class A drugs; this came into force on 18th July 2005. Previously, magic mushrooms were Class A drugs only if prepared, for example dried or stewed. The survey questionnaire has never made the distinction and magic mushrooms have always been counted as Class A drugs in the analysis.

Drug	Mode of use	Classification
Amphetamines	Inject	А
Ecstasy	Swallow	А
Cocaine	Inhale, inject	А
Crack	Inject, smoke	А
Heroin	Smoke, inject, inhale	А
<u>    L</u> SD	Swallow	A

### Table 9: Classification of drugs covered by the survey

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Smoking, Drinking and Drug Use among Young People in England, 2021 - NHS Digital

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Magic mushrooms	Swallow	А
Methadone	Swallow	А
Amphetamines	Inhale, swallow	В
Cannabis	Smoke, swallow	В
Ketamine	Swallow, inhale or inject	В
Mephedrone	Inhale, swallow, smoke, inject	В
Tranquillisers	Swallow, inject	B/C (depends on drug)
Poppers	Inhale	It is an offence for anyone other than a licensed outlet, such as a pharmacist, to supply amyl nitrite. <sup>1</sup> Other types of poppers, for example butyl pitrite
		and isobutyl nitrite, are legal to possess and supply. <sup>2</sup>
Glue, gas, aerosols or solvents (Volatile substances)	Inhale	It is an offence to supply these substances if it is likely that the product is intended for abuse.
New psychoactive substances (formerly legal highs)	Smoke, swallow, inhale, inject	It is an offence to supply any substance intended for human consumption that is capable of producing a psychoactive effect. <sup>3</sup>
Nitrous oxide	Inhale	It is an offence to supply this substance if it is likely that the product is intended for abuse.

### Footnotes

1. Amyl nitrite is covered by the Medicines Act 1968; it is legally available on prescription only. See <a href="http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1968/cukpga\_19680067\_en\_1">http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1968/cukpga\_19680067\_en\_1</a>

 There is some question as to whether these alkyl nitrites, legally available in products such as room deodorants, but also sold by sex shops and other outlets, should be covered by the Medicines Act.
See <u>https://www.drugwise.org.uk/nitrites/</u>

3. For more information on the Psychoactive Substances Act 2016, see <u>https://www.gov.uk/government/collections/psychoactive-substances-bill-2015</u>

Previous Chapter

Appendix B: Technical Notes

### **Next Chapter**

Appendix D: How are the statistics used?

## Appendix D: How are the statistics used?

From our engagement with customers we know there are many users of this report. There are also many users of these statistics who we do not know about. We are continually aiming to improve our understanding of who our users are in order to enhance our knowledge on what the uses of these data are via recent consultations and feedback forms available online.

Below is listed our current understanding of the known users and uses of these statistics. Also included are the methods we use to attempt to engage with the current unknown users.

### Department of Health and Social Care (DHSC)

Frequently use these statistics to inform policy and planning.

For example Towards a smoke-free generation: tobacco control plan for England mentions SDD as the source of information on children smoking and one of the objectives stated in the plan is to "reduce the number of 15 year olds who regularly smoke from 8% to 3% or less". Progress against this objective will be measured by this survey.

### Office for Health Improvement and Disparities (OHID)

Frequently use these data for secondary analysis and publications. For example, data from the survey are used to monitor indicator 2.09 (smoking prevalence at age 15) at national level in the Public Health Outcomes Framework (PHOF)

Data from the survey are also used by OHID in their annual commissioning prompts and data packs that are published to support LAs with planning.

### Media

Results from the survey are used to underpin articles in newspapers, journals, etc

### Public

All information is accessible for general public use for any particular purpose.

### Local Government

Use the reports and tables for analyses, benchmarking and to inform decision making.

### **Public Health Campaign Groups**

Data are used to inform policy and decision making and to examine trends and behaviours. For example Action on Smoking and Health (ASH) use results from this survey in some of their factsheets

### **Ad-hoc requests**

The statistics are used to answer Parliamentary Questions (PQs), Freedom of Information (FOI) requests and ad-hoc queries. Ad-hoc requests are received from health professionals; research companies; public sector organisations, and members of the public, showing the statistics are widely used and not solely within the profession.

### **Unknown users**

This publication is free to access via the <u>NHS Digital website</u>, and consequently the majority of users will access the report without being known to us. Therefore, it is important to put mechanisms in place to try to understand how these additional users are using the statistics and also to gain feedback on how we can make these data more useful to them.

On the webpage for this report there is a link to a survey which allows users to provide feedback which will be sent to the team responsible for the report to consider. We also capture information on the number of times the reports are downloaded, although we are unable to capture who the users are from this.

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Appendix C: Definitions

Next Chapter Data quality statement

## Data quality statement

This document constitutes a background quality report for Smoking, Drinking and Drug Use Amongst Young People in England (SDD). The statistics included in this release are the latest available figures at the time of publication.

## Background

## Context

This is the latest in the series of surveys of secondary school children in England which provides the national estimates of the proportions of young people aged 11 to 15 who smoke, drink alcohol or take illicit drugs. As well as providing prevalence rates it also provides information on sources of cigarettes, alcohol and illicit drugs as well as attitudes towards their use.

The report is published on the NHS Digital website.

## **Purpose of document**

This paper aims to provide users with an evidence based assessment of the quality of the statistical outputs included in this report.

It reports against the nine European Statistical System (ESS) quality dimensions and principles<sup>1</sup> appropriate to this output. In doing so, this meets NHS Digital's obligation to comply with the UK Statistics Authority (UKSA) Code of Practice for Statistics, and the following principles in particular:

- Trustworthiness pillar, principle 6 (Data governance) which states "Organisations should look after people's information securely and manage data in ways that are consistent with relevant legislation and serve the public good."
- Quality pillar, principle 3 (Assured Quality) which states "Producers of statistics and data should explain clearly how they assure themselves that statistics and data are accurate, reliable, coherent and timely."
- <u>Value pillar, principle 1 (Relevance to Users)</u> which states "Users of statistics and data should be at the centre of statistical production; their needs should be understood, their views sought and acted on, and their use of statistics supported."
- <u>Value pillar, principle 2 (Accessibility)</u> which states "Statistics and data should be equally available to all, not given to some people before others. They should be published at a sufficient level of detail and remain publicly available."

<sup>&</sup>lt;sup>1</sup>The original quality dimensions are: relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, and coherence and comparability; these are set out in Eurostat Statistical Law. However more recent quality guidance from Eurostat includes some additional quality principles on: output quality trade-offs, user needs and perceptions, performance cost and respondent burden, and confidentiality, transparency and security.

## Relevance

### This dimension covers the degree to which the statistical product meets user needs in both coverage and content.

Towards a smoke-free generation: tobacco control plan for England mentions SDD as the source of information on children smoking and one of the objectives stated in the plan is to "reduce the number of 15 year olds who regularly smoke from 8% to 3% or less". Progress against this objective will be measured by this survey.

It is also used to monitor indicators C13a and C13b at national level in the Public Health Outcomes Framework (PHOF). The report covers England only.

From our engagement with customers, we know that there are many other users of these statistics, details of which can be found in Appendix D.

## Accuracy and reliability

*This dimension covers, with respect to the statistics, their proximity between an estimate and the unknown true value.* 

### Sampling error and confidence intervals

As the data are based on a sample (rather than a census) of pupils, the estimates are subject to sampling error. A range of uncertainty can be placed around the survey estimate which is called the Confidence Interval. Appendix B2 has details on the sampling errors and confidence intervals for this survey, and the confidence interval excel tables include true standard errors, confidence intervals and design effects calculated for key survey estimates.

In general, attention is drawn to differences between estimates only when they are significant at the 95% confidence level, thus indicating that there is less than 5% probability that the observed difference could be due to random sampling variation when no difference occurred in the population from which the sample is drawn.

The limitations of the survey estimates are discussed in Appendix B1.

### Presentation of unreliable estimates in data tables

Estimates calculated from a small sample base of pupils (the denominator) are less reliable and will be subject to wider confidence intervals. In the data tables, where a base is between 30 and less than 50, the estimate is shown in square brackets to indicate a low level of reliability e.g. [34]. Where a base is below 30 then the estimate is replaced with a 'u' to indicate that the estimate is considered unreliable.

## **Timeliness and punctuality**

# *Timeliness refers to the time gap between publication and the reference period. Punctuality refers to the gap between planned and actual publication dates.*

The survey relates to the academic autumn term of 2021. However, as happened in 2018, fieldwork was extended into January 2022 in order to increase response rates. This is discussed more fully in Appendix B.

The section on coherence and comparability explains how the survey mode by which these questions are asked can influence how a pupil may answer them.

The survey asks about awareness and usage of a fictional drug called Semeron. Responses to these questions provide a guide as to how much pupils are over-estimating so it is reassuring to see that in the 2021 survey only 11 pupils (0.1% of all pupils) admitted to taking Semeron which is in line with previous surveys and suggests that only a very small minority of pupils may be falsely admitting to drugs use. However, 1,074 pupils (12%) said they had heard of Semeron which suggests awareness of drugs could be overestimated. Hence, the majority of the tables in this report to to drug usage rather than drug awareness.

## Accessibility and clarity

Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.

This report can be printed as a PDF using the functionality on the front page. All tables in the report are provided in Excel format.

The publication may be requested in large print or other formats through the NHS Digital's contact centre: enquiries@nhsdigital.nhs.uk (please include 'SDD' in the subject line).

NHS Digital has produced SDD reports since 2004. Prior to this the Department of Health produced these reports. The DH reports are available here.

## **Coherence and comparability**

*Coherence is the degree to which data which have been derived from different sources or methods but refer to the same topic are similar. Comparability is the degree to which data can be compared over time and domain.* 

### Survey topic content

The first survey in the series, carried out in 1982, measured the prevalence of smoking among pupils and described their smoking behaviour. Trends in smoking were monitored by similar surveys carried out every two years. Questions on alcohol consumption were added to the survey in 1988. The 1998 survey was the first to include questions on the prevalence of drug use.

### Break in time series: change to alcohol questions 2016

The question wording which is used both for the "ever drunk alcohol" prevalence indicator and as a filter question for further questions about alcohol use changed from 2016. Previously the question wording was "Have you ever had a proper alcoholic drink – a whole drink, not just a sip? Please don't count drinks labelled low alcohol?"

However, during cognitive testing of the survey pupils expressed confusion around the terms "proper alcoholic drink" and "low alcohol". Some pupils reported excluding alcopops and cocktails containing alcohol as they generally tasted of fruit rather than alcohol. As a result, it was decided to remove those terms and therefore the question became "Have you ever had an alcoholic drink - a whole drink, not just a sip?".

Therefore, whilst this change of wording will deliver a better estimate of the number of children who do drink alcohol it does mean that the results from 2016 onwards are not comparable with previous years. The chapters which include estimates based on the alcohol questions and the tables they are based on have been annotated to mention this. To a lesser extent, this may also affect estimates produced from other alcohol related questions. This is because a slightly wider group of children will now answer these questions, who may have been filtered out of the further alcohol questions based on the previous wording.

### Break in time series: mean number of units drunk on each drinking day (part 5)

The ranges for the mean number of units on each drinking day have been updated from 2016 onwards to provide a more precise measure, and so data is not comparable with previous years.

Ranges and inclusions up to 2014:

- Less than 1 unit included 0 through 0.49
- 1 or 2 units included 0.5 through 2.49
- 3 or 4 units included 2.5 through 4.49
- More than 4 units included 4.5 and above

Ranges and inclusions from 2016:

• Less than 1 unit – as described

- 1 unit, to less than 3 units as described
- 3 units, to less than 5 units as described
- 5 units or more as described

### Increase in drug prevalence (2016)

The following should be taken into account when looking at changes over time for the drug prevalence measures in part 8; ever taken drugs, taken drugs in the last year and taken drugs in the last month (tables 8.1 to 8.8):

1. Questions on psychoactive substances, which include new psychoactive substances (NPS), previously known as legal highs, and Nitrous Oxide (laughing gas), were included in the calculation of the overall prevalence of drug use measures (ever used, used in last year, used in last month) from 2016. Both are covered by the Psychoactive Substances Act 2016 which restricts the production, sale and supply of such substances. When psychoactive substances are removed from the 2016 measure, the overall drug prevalence figure falls by 3 percentage points (24.3% to 21.3%). This adjusted version is included as an extra measure in the time series data shown in tables 8.6 to 8.8.

2. In 2016, even when accounting for the addition of psychoactive substances to the measures, there was a large and unexpected rise in the overall drug use prevalence reported; 14.6% in 2014, to 24.3% in 2016.

Further investigations identified that some of this change had been driven by an increased likelihood since 2016 of pupils who said yes to having heard of individual drug types, then not going on to answer questions on whether they had tried them. The overall drug prevalence measure is derived using the responses from these individual drug types (see Appendix C), and so this results in a greater proportion of pupils being excluded from the denominator, as their drug use was considered to be unknown. A pupil not providing a response for just one of the 17 drug types asked about can result in them being excluded from the overall prevalence calculation; the proportion with an unknown overall drug use status increased from 8% in 2014, to 21% in 2016 (non-response proportions in subsequent survey years have been around the same magnitude; 20% in 2018, and 22% in 2021).

Cross checking with a further summary question, pupils' are asked whether they had ever tried any drug, indicates that most of these pupils had not tried any drugs. Thus, the overall impact of having removed these pupils from the indicator would likely be to increase the prevalence rates.

Neither the reason for this, nor how much of the change in prevalence between 2014 and 2016 this accounts for, is clear. However, some level of genuine increase was still apparent. If the overall drug use prevalence figure were to be adjusted based on the response to the summary drug use question, then the estimated prevalence for 2016 would be 21.5%. However, due to the amount of uncertainty in deriving this figure, it has not been presented in the publication.

This also affects prevalence measures for individual drug types, though to a lesser extent. This is because a pupil not answering a question for one drug type (and so being excluded from the overall prevalence calculation), will not impact their inclusion for other drug types about which they did provide a response.

The changes in the proportions of pupils not answering questions for each individual drug type in 2014, 2016 and 2018 are shown below (proportions of non-responses in 2021 were of a similar magnitude to 2016 and 2018):

### Table 1 – Proportion of pupils with non-responses to questions about drug use, by drug type

2014 to	2018

	Percent (%)		
Variable (drug type)	2014	2016	2018
If used amphetamines	3.3	3.8	3.7
If used cannabis	2.7	3.3	3.7
If used cocaine	2.7	5.1	4.5
If used crack	2.5	4.5	4.0

https://digital.nhs.uk/data-and-information/publications/statistical/smoking-drinking-and-drug-use-among-young-people-in-england/2021#

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If used ecstasy	2.6	3.9	4.2
If used alue gas aerosols or solvents			
(volatile substances)	29	52	48
	2.5	512	
If used heroin	2.3	4.6	4.4
If used ketamine	2.2	3.8	3.5
If used new psychoactive substances			
(previously known as legal highs)	-	4.2	4.3
If used LSD	2.2	3.6	3.4
If used menhodrope	2.2	<i>A</i> 1	2 7
n used mephedrone	2.5	4.1	5.7
If used magic mushrooms	2.6	4.0	3.6
If used methadone	2.6	4.1	3.9
If used nitrous oxide	-	5.1	4.7
If used other drugs	2.8	5.3	4.9
If used meaning	2.5	2.4	2.2
It used poppers	2.5	3.4	3.3
If used tranquilisers	2.1	3.6	3.8
	2.1	5.0	5.0
If used any drugs (derived from all above)	7.8	21.2	19.7
If used any Class A drugs (derived from			
class A drug variables above)	6.5	15.8	14.5
5 ,			-

Other drug time series data in the report is not affected as it is derived from different questions e.g. usual frequency of drug use. The affected tables have been footnoted.

### Calculation of standard errors and confidence intervals for means (2021).

In 2021 the tool for statistical processing was changed from SAS to R Studio. As part of this update there was a minor correction made to the method of calculation for standard errors and confidence intervals of means where sub-populations are involved (e.g. mean units of alcohol consumed last week, by age). The method used in SAS creates a separate analysis of the sub-populations, where you treat the sample sizes in each subpopulation as fixed, and you perform analysis within each group independently. The method used in R uses a statistically valid sub-population analysis instead, where the total number of units in the sub-populations is not known with certainty. This resulted in very minor differences in the outputs. For standard errors of the means, in most cases the difference was less than 0.01 and never more than 0.1. For confidence intervals of the means, in most cases the difference was less than 0.02 and never more than 0.2. The mean calculations themselves were not affected.

The affected data is from tables: 1.8 and 1.9 (standard errors for mean cigarette consumption), 5.8 and 5.9 (standard errors for mean number of drinking days), 5.12b, 5.18b and 5.19 (standard errors for mean units of alcohol consumption), and A19 (confidence intervals for mean units of alcohol consumption).

### Survey mode - school versus home based

The mode used to collect survey data on smoking, drinking and use of illicit drugs can affect how pupils may answer the questions. For example they may be more willing to admit to some of these behaviours in surveys conducted away from the pupils home. Previous analysis has shown SDD to provide the most accurate measures of undertaking in risky behaviours as it is conducted away from the home environment. More information is available in section A8 of Health and Wellbeing of 15-year-olds in England - Main findings from the What About YOUth? Survey 2014.

There is information on comparisons with other sources at the end of parts 1, 5 and 8.

### Survey mode - interviewer versus teacher led 2021

The SDD survey is normally conducted in schools by an Ipsos interviewer under exam conditions. However in 2021 due to the Covid pandemic, schools were also offered the option to complete themselves. Guidance was given to schools for how to run the survey and this emulated the interviewer led survey. The <u>data tables</u> named 'Data quality tables - Mode of survey delivery' show comparisons for key estimates when collected via the interviewer led or school led option.

There was a trend for pupils, in particular girls, to declare some more risky behaviours when the school led the survey themselves rather than an external interviewer. In response to smoking and vaping questions girls were more likely to say they had ever smoked or were current smokers, or had ever used or were current e-cigarette users, when the survey was school led rather than interviewer led. This was not apparent for boys. Girls and boys were both more likely to say that they had ever drank alcohol when the school led the survey rather than interviewer led. For the analysis, school led and interviewer led responses have been combined and presented together. As discussed above, we are aware that where the survey is conducted can influence response, and SDD has been shown to provide the more accurate measure as collected away from the home setting. These results also show that how the survey is conducted within the school may also influence pupil response.

## Trade-offs between output quality components

This dimension describes the extent to which different aspects of quality are balanced against each other.

Partaking in smoking, drinking alcohol or taking illicit drugs is self-reported by the pupil and therefore may be susceptible to "satisficing" where they give an answer which is more socially acceptable, i.e. to say they don't do any of these things. Similarly they may be influenced to say they do partake in these behaviours to impress their peers.

Analysis of data from Health Survey for England showed that examining cotinine levels in saliva can lead to higher estimates of smoking prevalence amongst children than self-reported data. See the topic report on children's smoking in the 2017 survey. However, this is a costly way to collect this information and difficult to carry out in schools within the time they are able to allocate to completion of the survey.

## Assessment of user needs and perceptions

### This dimension covers the processes for finding out about users and uses and their views on the statistical products.

User needs have been gathered and considered at all points in the collection and publication of this information. This has been guided by a steering group consisting of representatives from NHS Digital, Department of Health and Social Care, Department for Education, Office for Health Improvement and Disparities, The Home Office, PSHE Association, Liverpool John Moores University, UK Youth, Local Government Association.

The content of the survey and report are often consulted on. An SDD consultation took place in November 2015 and the results of that consultation have fed into the design of the 2016, 2018 and 2021 surveys.

The main change to the 2018 survey was an update to the questions on pupil wellbeing in order to standardise them with those used by the Office for National Statistics. This was approved by the SDD steering group in November 2017.

The most recent SDD consultation took place in May 2021 and the results of that consultation have fed into the design and questionnaire content of the 2023 survey onwards.

The style of the report was also part of a wider consultation on outputs from NHS Digital. The proposal for SDD was in section A8.

NHS Digital is keen to gain a better understanding of the users of this publication and of their needs; feedback is is loome and may be sent to enquiries@digital.nhs.uk (please include 'Smoking, Drinking and Drugs Survey' in the

## Performance, cost and respondent burden

### This dimension describes the effectiveness, efficiency and economy of the statistical output.

Data were collected from pupils using a self-completion paper questionnaire. These were usually completed during a single school period, generally between 30 and 40 minutes in length. The time taken by individual pupils to complete the questionnaire was not recorded and it is not possible to estimate an average. However, the allotted time was sufficient for almost all pupils to answer the questionnaire in full.

The total cost of developing and running the survey and publishing the report is around £450,000.

## Confidentiality, transparency and security

The procedures and policy used to ensure sound confidentiality, security and transparent practices.

No personal/individual level information is received by NHS Digital or contained in the report. The list of schools which take part is maintained by the survey contractor and not known to NHS Digital.

The respondent level file available via the UK Data Service does not contain any personally identifiable data and has undergone disclosure control measures to mitigate against individuals being identified. It is also only disseminated under an End User Licence which contains terms and conditions on who can use the data and how the data may be stored and used. Specifically, the data can only be accessed by people from central or local government, Higher/Further Education and research charities. The terms and conditions also forbid onward sharing of the dataset and attempts to identify individuals.

This report and dissemination of the data via the UK Data Service are subject to a NHS Digital risk assessment prior to issue which is signed off by the Government Statistical Service Head of Profession for statistics.

The data contained in this publication are National Statistics. The code of practice for official statistics is adhered to from collecting the data to publishing.

### Links to further information

Freedom of Information process

Statement of compliance with pre-release order

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Next Chapter

Author, Copyright and Licensing

# Author, Copyright and Licensing

This publication may be requested in large print or other formats

**Responsible Statistician: Stephanie Gebert** 

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Information Policy Team, The National Archives, Kew, Richmond, Surrey, TW9 4DU; email: psi@nationalarchives.gsi.gov.uk

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