

Understanding prevalence and trends in vaping among adults and children: an analysis of data from twelve national and regional surveys in the UK



HEALTH AND SOCIAL CARE

Contents

Introduction	1
Key Messages	1
Adults.....	1
Children	2
Data on Vaping among Adults	4
Current use.....	4
Ever tried	5
Dual use.....	5
Vaping by deprivation.....	6
Data on Vaping among Children	7
Regular or current use	7
Ever tried	8
Increase in ever tried as children get older	8
Dual use.....	9
Vaping by deprivation.....	9
Appendix	10
Smoking Toolkit Study	11
Scottish Health Survey.....	12
Opinions and Lifestyle Survey	13
ASH SmokeFree GB survey	14
Understanding Society.....	15
Health Survey for England.....	16
Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) ..	17
Health and Wellbeing Census	18
ASH SmokeFree GB Youth Survey.....	19
Growing Up in Scotland	20
Health Behaviour in School-aged Children (HBSC) Study (Scotland).....	21
Student Health and Wellbeing Survey.....	22

Introduction

This document reports our understanding of current prevalence and trends in vaping based on the analysis of data from twelve surveys conducted at UK or regional level.

It is important to note at the outset that there are some challenges to interpreting the data mostly due to:

- the way in which questions on vaping are formulated (in some cases asking participants whether they have ever used e-cigarettes or used them in the past 30 days, with no exploration of frequency to establish more precise prevalence);
- variations in sample size and research methodology during the Covid-19 pandemic;
- variations in cohorts, sample size and time periods between surveys which complicate data comparison.

Information on the surveys, including the characteristics of each and key data available, are presented in the Appendix.

Key Messages

Key messages from the twelve surveys analysed are grouped by whether referring to the adult population (16+ or 18+) or children (aged 10-17).

Adults

- The percentage of adults in Scotland reporting current use (generally includes those who vape once a week or more and those who vape only occasionally) is likely to be somewhere between 5% according to the Scottish Health Survey ([SHeS 2021](#)) and 13.2% as shown by the Smoking Toolkit Study ([STS 2022](#))¹.
- The most recent data suggest that the percentage reporting current vaping has increased over time. For example, the [Smoking Toolkit Study](#) shows that prevalence in Scotland was 7.3% in October 2020 compared to 13.2% in October 2022; the [ASH SmokeFree GB Survey](#) that prevalence increased from 4.2% in 2014 to 8.3% in 2022; and previously the [Opinions and Lifestyle Survey](#) (OPN) that prevalence was 3.7% in 2014 compared to 7.7% in 2021 across the UK.

¹ [SHeS](#) (Scotland 2021) – 5% current use ; [STS](#) (Scotland Oct 2022) – 13.2% current use; [ASH SmokeFree GB survey](#) (GB 2022) – 8.3% current use; [Health Survey for England](#) (2021) – 5% current use; [Opinion and Lifestyle Survey](#) (UK 2020/21) – 7.7% current use; [Understanding Society](#) (UK 2020/21) – 5.12% current use.

- The percentage reporting having ever tried vaping is estimated to be around 15% (16% according to [SHeS 2021](#), 15% according to [Understanding Society 2020/21](#) and 15% according to the [Health Survey for England 2021](#)).
- The vaping trend for those reporting having ever tried is uncertain. The [Health Survey for England \(HSE\) 2021](#) suggests it has decreased, the [Understanding Society 2020/21 survey](#) that it has increased and the [Scottish Health Survey 2021](#) that there has been no change.
- Current vaping is less common in older age groups, according to [STS 2022](#), [SHeS 2021](#), [OPN 2021](#), [Understanding Society 2020/21](#) and [HSE 2021](#).
- In Scotland, a large percentage (around 40%) of those who currently vape are also smoking tobacco (dual use) according to [SHeS 2021](#), [STS 2022](#) and [Understanding Society 2020/21](#). Other surveys for England ([HSE 2021](#) and [STS 2022](#)), Wales ([STS 2022](#)), UK ([OPN 2021](#) and [Understanding Society 2020/21](#)) and Great Britain ([ASH 2022](#)) estimate around a quarter to a half of those who currently vape are dual users.
- Vaping is more common in more disadvantaged groups with consistent findings whether assessing by social grade or class ([STS 2022](#) and [ASH 2022](#)), income or deprivation quintile ([SHeS 2021](#) and [Understanding Society 2020/21](#)).

Children

- The proportion reporting regular vaping (once a week or more) varies between 0.2% for UK 10-15 year olds ([Understanding Society 2020/21](#)) and 6.7% for Scottish 13 and 15 year olds ([Health and Wellbeing Census 2021/22](#)).
- Although presenting differences in sample by age, surveys from across the UK show that the percentage of current users (both regular and occasional) could be somewhere between 1.1% of 10-15 year olds ([Understanding Society 2020/21](#)) and 7% of 11-17 year olds ([ASH GB Youth Survey 2022](#)).
- Current use may be increasing. According to the most recent data from the [ASH GB Youth survey](#), the rate among 11-17 year olds was 7% in 2022, up from 3.3% in 2021 and 4.1% in 2020. When compared to data from the [Scottish Schools Adolescent Lifestyle and Substance Use Survey \(SALSUS\) 2018](#), the [Health and Wellbeing Census 2021/22](#) (Scotland) also shows an increase in current use from 2% to 4.3% among S2 pupils and from 3% to 10.1% among S4 pupils².
- The most recent data on prevalence among children who have ever tried vaping comes from the [ASH GB Youth Survey 2022](#), which reports 15.8% for 11-17 year olds. Prevalence estimates have varied widely between different surveys (from 6.3% for 10-15 year olds in [Understanding Society 2020/21](#) to 22% for 11-16 year olds in the [Welsh Student Health and Wellbeing Survey 2019/20](#)), but different age ranges and years contribute to the variation.

² Some caution is required in directly comparing the Health and Wellbeing Census with SALSUS – see Appendix.

- The vaping trend for young people reporting having ever tried is uncertain. Some surveys show an increase ([SALSUS 2018](#) and [ASH GB Youth Survey 2022](#)), while [Understanding Society 2020/21](#) records no change and the [Student Health and Wellbeing Survey 2019/20](#) a decrease.
- Average figures for children and young people may mask wide differences by age. Ever having tried vaping becomes more common as children age. For example, [SALSUS 2018](#) showed that 28% of 15 year olds in Scotland had ever tried vaping compared to 15% of 13 year olds. The [Growing Up in Scotland survey \(GUS\) 2019](#) and [2022](#) showed 7% when participants were 12 year olds compared to 21.5% when they were 14 year olds.
- Smokers or those who have ever tried a tobacco cigarette are more likely to have tried vaping than non-smokers or those who have never tried a tobacco cigarette. Dual use is also common. For example, the [ASH GB Youth Survey 2022](#) estimated that 55.4% of current vapers aged 11-17 were dual users.
- Surveys in Scotland ([GUS 2019](#), [GUS 2022](#) and [Health and Wellbeing Census 2021/22](#)) and Wales ([Student Health and Wellbeing Survey 2019/20](#)) suggest ever having tried or currently vaping appear more common in more disadvantaged or less affluent groups.

Data on Vaping among Adults

This section summarises data on vaping among the adult population (either 16+ or 18+ depending on the survey) both in Scotland and the rest of the UK. Summary data is presented covering:

- Current use (including both daily and occasional use)
- Ever tried (including both current use and any use in the past)
- Dual use (namely the percentage of those who currently vape and also smoke tobacco)
- Differences by socio-economic status (measured by social grade or class, or income or deprivation quintile)

Current use

Increase in current use (Scotland) – Data on adults aged 16+ in Scotland from the [Smoking Toolkit Study](#) (STS) show an increase in the proportion reporting use of e-cigarettes and heated tobacco products from 7.3% in October 2020 to 13.2% in October 2022. This is in line with trends recorded both in [England](#) and [Wales](#). In Scotland, current use is higher in the younger age groups. Current use was reported by 16.8% of the 16-24 cohort between November 2021-November 2022, compared to 8.5% of those aged 55-64 years and 2.8% of those 65+ ³.

No change in current use (Scotland) – The [Scottish Health Survey \(SHeS\) 2021](#) shows that the proportion of adults aged 16+ who reported being current users was 5% compared to 7% in 2019. This is not statistically significant and methodological changes in data collection may have impacted results⁴. Current use was higher in the younger age groups (6% of the 16-24 cohort and 8% of the 25-34 cohort compared to 5% of those aged 55-64 years and 2% or less of those 65+).

Increase in current use (UK) – In 2021, the [Opinions and Lifestyle Survey \(OPN\)](#) reported a significantly higher proportion of vapers – 7.7% of all respondents aged 16 and over (of which 4.9% said that they were currently daily users of e-cigarettes and 2.8% that they vaped occasionally) compared to 3.7% in 2014, when data collection began⁵. By age, those aged 25 to 34 years reported the highest proportion of daily users (8.3%), while those aged 16-24 had the highest proportion of occasional users (7.5%).

³ Please note that this is a small sample – 95% CI: (12.8, 20.9) for 16-24 cohort and (6.6, 10.4) for 55-64 cohort. Data by age group for Scotland are unpublished and have been kindly provided by the STS team.

⁴ Results from SHeS 2021 need to be interpreted with caution due to changes in data collection methods and in the samples deriving from the Covid pandemic. The adoption of an opt-in approach resulted in a lower proportion of respondents among those living in the most deprived areas and in the youngest age group than in previous survey years.

⁵ 2021 data is presented in a Table at [E-cigarette use in Great Britain - Office for National Statistics \(ons.gov.uk\)](#). Trend 2014 to 2020 is available in the report at [Smoking prevalence in the UK and the impact of data collection changes - Office for National Statistics \(ons.gov.uk\)](#).

Increase in current use (UK) – Data from the [ASH SmokeFree GB survey](#) show that the overall proportion of the adult population using e-cigarettes increased to 8.3% in 2022, the highest percentage ever recorded, amounting to 4.3 million people. This compares to 7.1% in 2021 and 4.2% in 2014.

No change in current use (UK) – Data from wave 12 of the [Understanding Society survey 2020/21](#) show that current use was 5.12%. This percentage has remained relatively stable compared to previous years (current use was 5.46% in 2019/2020, 5.47% in 2018/2019 and 5.41% in 2017/2018). In 2020/21, vaping was less common among those aged 55+.⁶

No change in current use (England) – The [Health Survey for England \(HSE\) 2021](#) indicates that 5% of all adults are current e-cigarette users (stable since 2016). Use of e-cigarettes varied with age, peaking in the 25-34 cohort at 7% and decreasing to 2% in those aged 75 and over.

Ever tried

No change in ever tried (Scotland) – The [Scottish Health Survey \(SHeS\) 2021](#) shows no change in the proportion of adults aged 16+ who reported having ever used e-cigarettes (16% vs 20% in 2019). Although this looks like a reduction, this is not statistically significant and methodological changes in data collection may have impacted results⁷.

Increase in ever tried (UK) – Data from wave 12 of the [Understanding Society survey 2020/21](#) show that 15% of respondents ever tried vaping. The percentage has gradually increased since wave 9 (14.1% in 2017/2018) though by only a small amount.

Decrease in ever tried (England) – The [Health Survey for England \(HSE\) 2021](#) indicates that 15% of the total sample have ever tried e-cigarettes, a decline from 21% in 2019. This decline is reflected in different age groups, but particularly in the 16-24 cohort (from 37% in 2019 to 21% in 2021).

Dual use

The [Smoking Toolkit Study](#) (Scotland) data for October 2022 report that 42.9% of all adult e-cigarette users also smoked tobacco, down from 51.5% in July 2022. Similarly, dual use is common both in [England](#) (48.2%) and [Wales](#) (55.5%).

The [Scottish Health Survey 2021](#) shows that 2% of the total sample of adults aged 16+ who vape are also smoking tobacco (with current vapers being 5% of all participants).

⁶ These data are unpublished and have been kindly provided by the Understanding Society team.

⁷ Results from SHeS 2021 need to be interpreted with caution due to changes in data collection methods and in the samples deriving from the Covid pandemic. The adoption of an opt-in approach resulted in a lower proportion of respondents among those living in the most deprived areas and in the youngest age group than in previous survey years.

For Scotland, the [Understanding Society survey 2020/21](#) shows that 39.3% of current e-cigarette users also smoke (33% for the whole UK)⁸.

The [ASH SmokeFree GB survey 2022](#) shows a gradual decrease in the proportion of all adult vapers who also smoke (dual users) from 65% in 2014 to 31% in 2021, with a slight increase in 2022 (35%).

Data from the [Opinions and Lifestyle survey 2020/21](#) (GB) highlight that one fourth of those who are aged 16+ and vape are also smoking tobacco cigarettes (11.3% of daily users and 14% of occasional users).

The [Health Survey for England 2021](#) reports that 25.3% of current tobacco smokers are also current e-cigarette users.

Vaping by deprivation

Figures for Scotland from the [Smoking Toolkit Study](#) report variation in current use by social grade, with those in group E twice as likely as those in group AB of using e-cigarettes (12% vs 6.2% between November 2021 and November 2022). Despite small sample sizes, this difference is statistically significant⁹.

The [Scottish Health Survey 2021](#) highlighted how current use was more frequent in those in the bottom equivalised income quintile (11% vs 2% in the top quintile) and in the most deprived SIMD quintile (12% vs 3% in the least deprived). Among current smokers who tried to quit and recent ex-smokers, e-cigarettes and vapes for smoking cessation were also more commonly used in the bottom equivalised income quintile (25% vs 13% in the top quintile) and in the most deprived SIMD quintile (26% vs 8% in the least deprived). Similarly, dual use was more common in the bottom equivalised income quintile (5% vs 1% in the top quintile) and in the most deprived SIMD quintile (6% vs 1% in the least deprived).

Data for Scotland by Index of Multiple Deprivation (IMD) from the [Understanding Society survey 2020/21](#) show a marked difference in current use between those in the most deprived (9.4%) and those in the least deprived quintile (2.2%)¹⁰.

The [Ash SmokeFree GB survey](#) identified differences in vaping behaviour by social class. In 2022, 9.5% of those classified as C2DE were current vapers compared to 7.3% of those classified as ABC1.

⁸ These data are unpublished and have been kindly provided by the Understanding Society team.

⁹ Please note that this is a small sample - 95% CI: (4.7, 7.7) for AB and (9.0,14.9) for E. Data by social grade for Scotland are unpublished and have been kindly provided by the STS team.

¹⁰ These data are unpublished and have been kindly provided by the Understanding Society team.

Data on Vaping among Children

This section summarises data on vaping among children and young people both in Scotland and the rest of the UK. Surveys included cover a different range of ages from 10 year to 17 year olds. Summary data is presented covering:

- Regular (once a week or more) or current use (including both regular and occasional use)
- Ever tried (including both current use and any use in the past)
- Dual use (namely the percentage of those who currently vape and also smoke tobacco)
- Differences by socioeconomic status (measured by deprivation quintile or FAS score)

Regular or current use

Increase in regular use (Scotland) – Data from the [Health and Wellbeing Census 2021/22](#) show a marked increase in the number of pupils vaping regularly (once a week or more) compared to the [Scottish Schools Adolescent Lifestyle and Substance Use Survey \(SALSUS\) 2018](#), both among the S2 cohort (13 year olds) – from 2% to 4.3% in the Census – and the S4 cohort (15 year olds) – from 3% to 10.1% in the Census. Caution needs to be used when interpreting this comparison as findings from the Census are experimental statistics¹¹. Previously, between 2015 and 2018, [SALSUS](#) found that regular use remained unchanged at very low percentages (2% of 13 year olds and 3% of 15 year olds).

Increase in current use (GB) – The [ASH Smokefree GB Youth survey 2022](#) showed that 7% in the 11-17 cohort were current users (occasional + once a week or more), compared to 3.3% in 2021 and 4.1% in 2020.

No change in regular or current use (UK) – The [Understanding Society survey](#) found that in 2020/2021 just 0.2% of the 10-15 year old participants were regular users and 1.1% were current users. With such small numbers, no clear pattern is discernible (percentages for regular use were 0.4% in 2019/2020, 0.8% in 2018/2019, 0.6% in 2017/2018 and 0.5% in 2016/2017; percentages for current use were 1.3% in 2019/2020, 1.6% in 2018/2019, 1% in 2017/2018 and 1.2% in 2016/2017).

Decrease in regular use¹² (Wales) – The [Student Health and Wellbeing Survey 2019/20](#) (Wales) shows that current use of e-cigarettes was rare in 11-16 year olds with only 2.5% of young people reporting at least weekly use. This percentage is a decrease from 3.3% in 2017.

¹¹ Data from the Census are not weighted to be nationally representative and include data from 16 of Scotland's 32 Local Authorities. Response rate decreased with stages, particularly for S4-S6.

¹² Referred to as current use in this survey but the measure is 'once per week or more', which is referred to as regular use in other surveys.

Ever tried

Increase in ever tried among non-smokers (Scotland) – In 2018, the [Scottish Schools Adolescent Lifestyle and Substance Use Survey \(SALSUS\)](#) found that the number of non-smokers trying e-cigarettes had increased since 2015 from 24% to 28% among 15 year olds and from 13% to 15% among 13 year olds.

Increase in ever tried (GB) – The [ASH Smokefree GB Youth survey 2022](#) found that 15.8% of 11-17 year olds had tried vaping, compared to 11.2% in 2021 and 13.9% in 2020. Rates have remained relatively stable since 2017 (11.2% to 13.9%) and it is not yet clear if 15.8% represents an increase. However, this is a clear increase from 3.8% in 2013 and 6.9% in 2014.

No change in ever tried (UK) – The [Understanding Society survey](#) found that in 2020/2021 6.3% of the youth aged 10-15 had ever tried vaping, similar to previous waves.

Decrease in ever tried (Wales) – The [Student Health and Wellbeing Survey 2019/20](#) shows that more than 1 in 5 (22%) young people aged 11-16 reported having ever tried an e-cigarette, a decrease from 25% in 2017.

Increase in ever tried as children get older

Results from the [Growing Up in Scotland survey \(GUS\) 2019](#) reveal that 7% of the cohort aged 12 had ever tried an e-cigarette or vaping device. This increased to 21.5% two years later when children in the sample were aged 14 ([GUS 2022](#)).

The [ASH Smokefree GB Youth survey 2022](#) highlighted that there is a gradient in use by age. Ever use is highest among older children (29.1% among 16 and 17 year olds compared to 10.4% among 11 to 15 year olds).

Despite the small sample size, the [Understanding Society survey 2020/2021](#) identified a statistically significant increase in ever used by age in the 10-15 cohort¹³.

The [Student Health and Wellbeing Survey 2019/20](#) shows that ever use of e-cigarettes increased considerably with age: 6% of students in year 7 (aged 11-12) reported having tried e-cigarettes, rising to 43% by year 11 (pupils aged 15-16).

[Health Behaviour in School-Aged Children 2018 \(HBSC\)](#) (Scotland) reports that 3% of 13 year olds and 7% of 15 year olds said they had used an e-cigarette in the past 30 days.

¹³ These data are unpublished and have been kindly provided by the Understanding Society team.

Dual use

The [Scottish Schools Adolescent Lifestyle and Substance Use Survey \(SALSUS\)](#) found that in 2018 smokers in both 13 and 15 age groups were more likely than non-smokers to have ever used or regularly used an e-cigarette.

Although not recording dual use, the [Growing Up in Scotland survey 2019](#) highlighted a clear relationship between trying a cigarette and trying an e-cigarette, with 72% of 12 year olds who had tried a cigarette also having tried an e-cigarette (compared to 5% of children who had not tried a cigarette). Thirty-nine percent of the children who had tried vaping had also tried a cigarette.

The [ASH Smokefree GB Youth survey 2022](#) reports that 55.4% of current vapers aged 11-17 are also cigarette smokers.

The [Student Health and Wellbeing Survey 2019/20](#) (Wales) shows that current e-cigarette use was concentrated among current smokers (38% of 11 to 16 year olds vaping at least weekly were daily/weekly tobacco smokers too).

Vaping by deprivation

The [Growing Up in Scotland \(GUS\) survey 2019](#) revealed that 12 year olds living in the most deprived areas were more likely than those living in the least deprived ones to have tried e-cigarettes (13% compared to 3%). [GUS 2022](#) reported that 14 year olds in SIMD quintile 3 were more likely to say they had tried an e-cigarette or vape than those in higher quintiles (27.2% compared to 18.7% of quintile 4 and 18.3% of quintile 5).

Data from the [Health and Wellbeing Census 2021/22](#) (Scotland) suggest that the percentage of pupils who are regularly vaping is higher in more deprived areas for S2 and S4 pupils combined (7.8% in SIMD quintile 1 compared to 4.6% in SIMD quintile 5).

The [Student Health and Wellbeing Survey 2019/20](#) (Wales) highlighted socioeconomic inequalities, with young people from less affluent families a bit more likely than those from more affluent families to report being current (regular) users (3% for low and medium Family Affluence Scale (FAS) compared to 2% for high FAS) or having ever tried (25% for low FAS compared to 21% for high FAS).

Appendix

This appendix contains information on and links to the studies included in this document. The sources included are:

- The Smoking Toolkit Study
- The Scottish Health Survey
- Opinions and Lifestyle Survey
- ASH SmokeFree GB Survey
- Understanding Society
- Health Survey for England
- Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)
- Health and Wellbeing Census
- ASH Smokefree GB Youth Survey
- Growing Up in Scotland (GUS)
- Health Behaviour in School Aged Children (HBSC) (Scotland)
- The Student Health and Wellbeing Survey

Smoking Toolkit Study

The Smoking Toolkit Study (STS) is run by the Institute of Epidemiology & Health Care of UCL. It is funded by Cancer Research UK, the National Institute for Health and Care Research (NIHR) and the Society for the Study of Addiction (SSA).

STS consists of monthly cross-sectional household interviews of representative samples of UK adults aged 16+. Initially limited to England, the study expanded to include Scotland and Wales in October 2020. Approximately 1700 adults in England, 450 adults in Scotland and 300 adults in Wales complete the survey each month.

STS includes detailed questions on smoking and smoking cessation. Questions on vaping pertain to prevalence and dual use, but also characteristics and sources of e-cigarettes.

Current use is derived from answers to the following questions¹⁴:

- Current smokers are asked:
 1. Which, if any, of the following are you currently using to help you cut down the amount you smoke?
 2. Do you regularly use any of these in situations when you are not allowed to smoke?
 3. Can I check, are you using any of the following either to help you stop smoking, to help you cut down or for any other reason at all?
- Everyone else is asked:
 1. Can I check, are you using any of the following at all for any reason?

If participants answer to one or several of these that they used e-cigarettes, they are considered current e-cigarette users.

This document makes reference to the tables 'Prevalence of e-cigarette and heated tobacco product use' and 'Proportion of daily-e-cigarette and NRT users who are smokers' which can be accessed on the [Smoking Toolkit dashboard for Scotland](#), and those for [England](#) and [Wales](#). Some of the data included in this report is unpublished and kindly provided by the STS team.

¹⁴ Question wording kindly provided by the STS research team.

Scottish Health Survey

The Scottish Health Survey (SHeS) is a survey series commissioned by the Scottish Government Health Directorates. It has been carried out annually since 2008 and prior to this was carried out in 1995, 1998, and 2003.

SHeS has been designed to yield a representative sample of the general population living in private households in Scotland. Due to disruption to the survey at the onset of the pandemic, the survey data collected in 2020 was published as experimental statistics and is not comparable with the time series.

SHeS aims to provide regular information on aspects of the public's health, such as the occurrence of certain health conditions, the prevalence of certain risk factors, and differences between regions and subgroups of the population.

Questions on vaping included in the SHeS ask participants whether they have used e-cigarettes or vaping devices (now, ever or never) and, if so, how often. The survey also includes a question on dual use.

Reports and supplementary tables are accessible via the [Scottish Government website](#).

This document makes reference to [Chapter 7](#) of the SHeS 2021 (figure 7F – Current e-cigarette use by age and sex – and to the related [supplementary tables](#) – J69, 577, J70, J71, J89, 597, J90, J91, J26, J27).

The [SHeS dashboard](#) provides additional data, such as confidence limits. These can be obtained by clicking on the 'Trends' tab, selecting 'Smoking' as a topic, 'E-cigarette use' as an indicator, 'Currently using' as a category, 'Age'/'SIMD quintile'/'Equivalised income' as breakdown, and finally ticking the box for 'Show/hide 95% confidence limits'.

[Opinions and Lifestyle Survey](#)

The Opinions and Lifestyle Survey (OPN) is a currently fortnightly cross-sectional sample survey run by the Office for National Statistics. It provides data for the whole UK. The sample size is about 2000/2500 participants (aged 16 years and older) per period.

OPN covers a range of topics relating to health, including Covid-19, cost of living and shortage of goods.

The survey asks questions on vaping. Before March 2020, respondents were asked whether they currently used an e-cigarette or vape. This included both “daily” and “occasional” use. In March 2020 the survey question changed to ask respondents about frequency. To compare current users with previous years, figures have been summed for daily and occasional users.

This document makes reference to the [December 2021 report](#) (Figure 6 on the Proportion of current vapers between 2014 and 2020), the [December 2022 report](#) and the [datasets on e-cigarette use in Great Britain](#) (tables 1a: 2020 to 2021, 1c: 2014 to 2017 and 2a: 2020 to 2021).

[ASH SmokeFree GB survey](#)

The ASH Smokefree GB Survey is an annual representative survey of UK adults aged 18 and over. The survey is carried out online by YouGov and is commissioned by Action on Smoking and Health (ASH) and funded by a combination of the British Heart Foundation, Cancer Research UK and the Department of Health and Social Care.

In 2010, the survey started including questions on e-cigarette. Questions on vaping ask participants about awareness of e-cigarettes, use and frequency, attitudes towards vaping, dual use, and main source and type of product used.

Sample size varies by year but is around 12,000 (13,088 in 2022).

This document makes reference to the [2022 report](#) (Table 1: Number of e-cigarette users in Great Britain from 2012 to 2022, Figure 1: Smoking status among current adult e-cigarette users in Great Britain 2013-2022 and Figure 2: E-cigarette use among current adult cigarette smokers in Great Britain 2013-2022).

Understanding Society

Understanding Society is the UK Household Longitudinal Study which offers a long-term perspective on how life in the UK is changing over time. It started in 2009 and interviewed around 40,000 households on: family life; income, wealth and expenditure; education and employment; civic participation; health, wellbeing and health behaviours.

Understanding Society has a large sample of around 10,000 people for each birth cohort per decade from the 1940s onwards, and approximately 17,000 children who have been born into the Study since the year 2000. It includes an Ethnic Minority Boost sample and an Immigrant and Ethnic Minority Boost sample.

Parents or care-givers included in the sample can answer questions about children in the household who are up to age 10. Children aged 10-15 have their own questionnaire with questions formulated for their age group.

Understanding Society is one of the most stable longitudinal studies in the world. The study follows sample household members as they move to new households and form new families. In the last wave of data collection over 95% of participants who participated in the previous wave continued to take part in the survey.

The survey asks participants about vaping and frequency.

This document makes reference to the [data tables for adults](#) and [data tables for youth](#) on e-cigarette use. Some inclusions in this document are not published and were kindly provided by the Understanding Society survey team.

Health Survey for England

The Health Survey for England (HSE) is a series of annual surveys that monitor trends in health and care. Each survey in the series includes core questions, with modules of questions on specific issues that vary from year to year.

The HSE started in 1991 and covers the adult population aged 16+ living in private households. Since 1995, children aged 2 to 15 have been included, and from 2001 infants aged under 2. In some years, the core sample has been augmented by a boosted sample from a specific population subgroup, such as minority ethnic groups, older people or children.

The current questions about e-cigarette use were asked between 2016 and 2021. Participants were asked whether they had 'ever used an electronic cigarette or any other vaping device'. Interviewers offered further clarification if necessary. Those who indicated ever use were asked whether they used e-cigarettes or vaping devices at all nowadays.

This document makes reference to the [2021 report](#) (Table 7: Prevalence of current e-cigarette use by age and sex, and Table 8: E-cigarette use by cigarette smoking status) and to the associated [adults' health related behaviours tables](#) (tables 7, 8 and 9).

Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS)

The Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) is part of a long-established series of national surveys on substance use. These were carried out jointly in Scotland and England between 1982 and 2000. Since 2002, Scotland developed its own, more tailored survey, which ran approximately every two years until 2018.

SALSUS involved secondary school pupils in Scotland (S2 around age 13 and S4 around age 15) in Local Authority and independent schools. The sample size varied (21,559 eligible pupils participated in 2018). Local level results (Health Board, Local Authority, and Alcohol and Drug Partnership) are available for every second survey, i.e. every 4 years.

Together with other lifestyle-related matters, SALSUS asked about smoking, drinking and drug use, and included questions on e-cigarettes use and frequency.

This document makes reference to the [2018 report](#) (Figure 2.10: E-cigarette use among 13 year olds by smoking status and year 2015-2018, and Figure 2.11: E-cigarette use among 15 year olds by smoking status and year 2015-18).

Data are derived from the following question¹⁵:

Now read the following statements carefully and cross the box next to the ONE which best describes you:

- I have never used an e-cigarette
- I used to use e-cigarettes but don't use them anymore
- I have tried an e-cigarette once
- I have tried e-cigarettes a few times
- I use e-cigarettes sometimes, but no more than once a month
- I use e-cigarettes once a week or more

¹⁵ This has not changed since 2015. The [Scottish Schools Adolescent Lifestyle and Substance Use Survey \(SALSUS\) 2015: questionnaire - gov.scot \(www.gov.scot\)](#) can be accessed on the Scottish Government website.

Health and Wellbeing Census

The Health and Wellbeing Census has been undertaken for the first time by Local Authorities in Scotland between October 2021 and June 2022. It aims to provide local and national information on children and young people's health and wellbeing, including attitudes to school and aspirations, neighbourhood and life at home, physical and mental health, experience of bullying, substance use and relationships and sexual health.

Findings from the Census are experimental statistics which are undergoing development. The results are not weighted to be nationally representative.

In 2021/22, 16 of the 32 Local Authorities took part in the Census, with an overall response rate of 58.3%. This decreased with stages (especially for S4-S6). Response rate was 61% for S2 pupils (16,688 responses) and 45.3% for S4 pupils (11,738 responses).

S2 and S4 pupils were asked about vaping and frequency in the main survey through the following question:

How often do you use e-cigarettes / vapes at present?

- Every day
- At least once a week, but not every day
- Less than once a week
- I do not use e-cigarettes / vapes
- Prefer not to say

[ASH SmokeFree GB Youth Survey](#)

The ASH Smokefree GB Youth Survey is an annual survey of a representative sample of 11-18 year olds in Great Britain which has been running since 2013. The survey is carried out online by YouGov and is commissioned by Action on Smoking and Health (ASH) and funded by a combination of the British Heart Foundation, Cancer Research UK and the Department of Health and Social Care.

Since 2021, the analysis in the factsheet focuses on 11-17 year olds to present a clearer picture of underage use.

Questions on vaping ask participants about awareness of e-cigarettes, use and frequency, attitudes towards vaping, dual use, and main source and type of product used.

This document makes reference to the [2022 report](#) and the following figures:

1. Use of e-cigarettes by GB youth 2013-2022
2. Level of use of e-cigarettes GB youth 2014-2022
3. Use of e-cigarettes by tobacco smoking status GB youth 2022
4. Ever use of e-cigarettes by age GB youth 2013-2022
5. Current use of e-cigarettes by age GB youth 2013-2022
6. Order of use between tobacco cigarettes and e-cigarettes, GB youth who had tried an e-cigarette 2014-2022
7. Ever use of cigarettes and e-cigarettes over time GB youth 2013-2022.

[Growing Up in Scotland](#)

Growing Up in Scotland (GUS) is a longitudinal study following the lives of young people in Scotland from their early years and childhood, into adolescence and beyond. The study is funded by the Scottish Government and carried out by ScotCen Social Research.

GUS uses data collected from Birth Cohort 1 (BC1), a nationally representative sample of 5217 children living in Scotland when they were 10 months old and who were born between June 2004 and May 2005.

Two reports have been published. The first report, [Growing up in Scotland: life at age 12](#), draws on data collected from 3419 families in 2017/18 when the children were aged 12. The second report, [Life at age 14: initial findings from the Growing Up in Scotland study](#), is based on data collected from 2,943 families in 2019/20, when participants were aged 14. Both reports present data on vaping.

This document makes reference to these publications (including the graph on Proportion of children who ever tried alcohol, a cigarette or an e-cigarette by gender in the report [Growing up in Scotland: life at age 12](#), and Figure 34 on Whether young people had tried smoking, drinking alcohol or drugs in the report [Life at age 14: initial findings from the Growing Up in Scotland study](#)).

[Health Behaviour in School-aged Children \(HBSC\) Study \(Scotland\)](#)

The Scottish Health Behaviour in School-aged Children (HBSC) study is part of a larger cross-national study investigating the health and wellbeing of school children and the social contexts in which they are growing up. This is a collaboration with the World Health Organisation (WHO) covering 44 countries in Europe and North America.

The Scottish HBSC is carried out by the Child and Adolescent Health Research Unit at the University of St Andrews and is funded by Public Health Scotland (PHS). Data collection started in 2014.

The survey is conducted every four years. The sample for each country consists of around 1500-2000 participants aged 11, 13 and 15.

The HBSC survey covers a wide range of health and social topics about physical activity, eating and dieting, oral health, smoking, alcohol consumption, self-reported health and symptoms, and more. The latest survey for school year 2017/18 asked about use of vapes in the previous 30 days.

This document makes reference to the [2018 publication](#), including Figure 12.5: Ever used e-cigarette and Figure 12.6: Used e-cigarette in past month.

Student Health and Wellbeing Survey

The Student Health and Wellbeing Survey is run by the School Health Research Network (SHRN). It collects data on 11 to 16 year olds' health behaviours in participating schools in Wales.

The survey is undertaken every two years and evolves at each iteration, with core items retained and others removed or reinstated in line with policy needs and research interests.

In 2019/20 the sample size was just under 120,000 pupils. The survey asked participants whether they had ever tried e-cigarettes and frequency of use.

This document makes reference to the [2021 publication](#) and Figures:

8.14: Percentage who have ever tried e-cigarettes by year group and family affluence

8.15: Percentage who have ever tried e-cigarettes by year group and gender

8.18: Percentage who use e-cigarettes at least weekly by year group and family affluence

8.19: Percentage who use e-cigarettes at least weekly by year group and gender.

How to access background or source data

The data collected for this <statistical bulletin / social research publication>:

- are available in more detail through Scottish Neighbourhood Statistics
- are available via an alternative route <as referenced in the main text>
- may be made available on request, subject to consideration of legal and ethical factors. Please contact <email address> for further information.
- cannot be made available by Scottish Government for further analysis as Scottish Government is not the data controller.



© Crown copyright 2023

You may re-use this information (excluding logos and images) free of charge in any format or medium, under the terms of the Open Government Licence. To view this licence, visit <http://www.nationalarchives.gov.uk/doc/open-government-licence/> or e-mail: psi@nationalarchives.gsi.gov.uk. Where we have identified any third party copyright information you will need to obtain permission from the copyright holders concerned.

The views expressed in this report are those of the researcher and do not necessarily represent those of the Scottish Government or Scottish Ministers.

This document is also available from our website at www.gov.scot.
ISBN: 978-1-80525-670-0

The Scottish Government
St Andrew's House
Edinburgh
EH1 3DG

Produced for
the Scottish Government
by APS Group Scotland
PPDAS1266022 (04/23)
Published by
the Scottish Government,
April 2023



Social Research series
ISSN 2045-6964
ISBN 978-1-80525-670-0

Web Publication
www.gov.scot/socialresearch

PPDAS1266022 (04/23)