

6 November 2019

SB 50/2019



National Survey for Wales 2018-19: Adult smoking and e-cigarette use

This bulletin provides more information about smoking and e-cigarette use from the National Survey for Wales 2018-19. All results relate to adults aged 16+.

Key facts

In 2018-19:

- 17% of adults reported that they currently smoked; there has been a general downward trend in recent years.
- Adults in the 3 most deprived quintiles were more likely to smoke than those in the 2 least deprived quintiles, however the gap between them was smaller than in 2016-17.
- 45% of smokers had tried to give up in the past year, the most common method used to try and stop smoking was e-cigarettes (49%).
- 6% of adults reported currently using e-cigarettes, the most common reason for using e-cigarettes was to help stop smoking tobacco (76% of current users).
- 29% of non-smoking adults reported being exposed to tobacco smoke indoors or outdoors.

About this bulletin

This bulletin provides more information about smoking and e-cigarette use of adults living in Wales from the National Survey for Wales 2018-19, following publication of initial results in June 2019. It includes information for additional questions asked in 2018-19. It includes data for four indicators from the Tobacco Control Delivery Plan.

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Background

Tobacco is the leading single cause of premature death in Wales and a major contributor to health inequalities¹.

The [Tobacco Control Action Plan for Wales](#), published in 2012, set out a vision of a smoke-free society for Wales and an aim of reducing adult smoking prevalence levels in Wales to 16% by 2020. This is supported by the [Tobacco Control Delivery Plan for Wales, 2017-2020](#).

Progress against four of the indicators from the delivery plan can be tracked using data from the National Survey:

- Adult smoking prevalence in Wales to be reduced to a maximum of 16% by 2020.
- Smoking prevalence amongst the three highest quintiles of deprivation (Welsh Index of Multiple Deprivation or WIMD) to be reduced at a faster rate than quintiles one and two.
- % smokers reporting having made a quit attempt in the last year.
- % of non-smoking adults (16+) regularly exposed to passive smoke by deprivation quintile.

Questions on whether adults smoke and use e-cigarettes have been included every year in the National Survey for Wales (NSW) since its start in 2016-17 (and prior to that in the former Welsh Health Survey (WHS), which ran until 2015). In 2018-19, the National Survey also included some additional questions about stopping smoking, reasons for using e-cigarettes, and exposure to tobacco smoke. For further details of questions, see definitions and the survey webpages.

Initial analyses of the annual smoking questions are available in the Statistical Bulletin "[National Survey for Wales 2018-19: Adult lifestyle](#)". This new bulletin includes information from the additional questions asked in 2018-19. Data relating to all questions are available on [StatsWales](#).

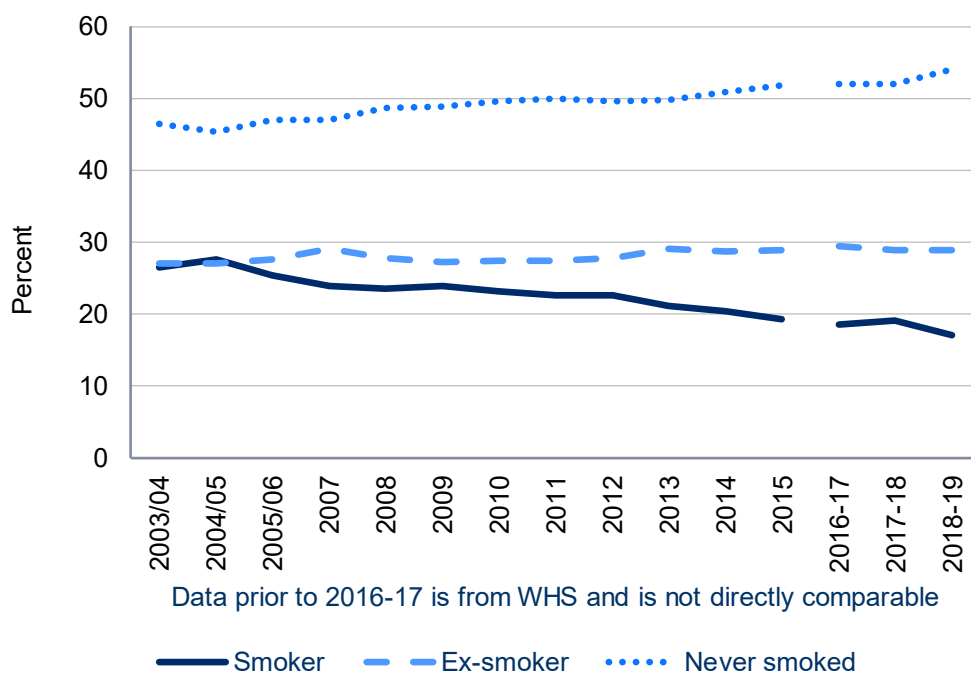
¹ [Public Health Wales Smoking data](#)

Results

Smoking status

In 2018-19, 17% of adults reported that they currently smoked (this equates to approximately 440,000 adults²). 29% were ex-smokers, and 54% had never smoked. Although the data suggest a reduction in smoking since 2016-17 (down from 19%) and increase in those who have never smoked (up from 52%), the differences were not statistically significant at the 95% level. More data is needed to confirm if this represents a continuation of the trends seen in the former Welsh Health Survey, which showed a decrease in smoking rates between 2003/04 and 2015 and an increase in those who had never smoked. (Rates from the two surveys should not be directly compared due to the change in survey methodology³.)

Figure 1: smoking status, 2003/04 to 2018-19



The Tobacco Control Delivery Plan set a target of 16% smoking by 2020, this will be assessed when survey data for 2020-21 is available (likely June 2021).

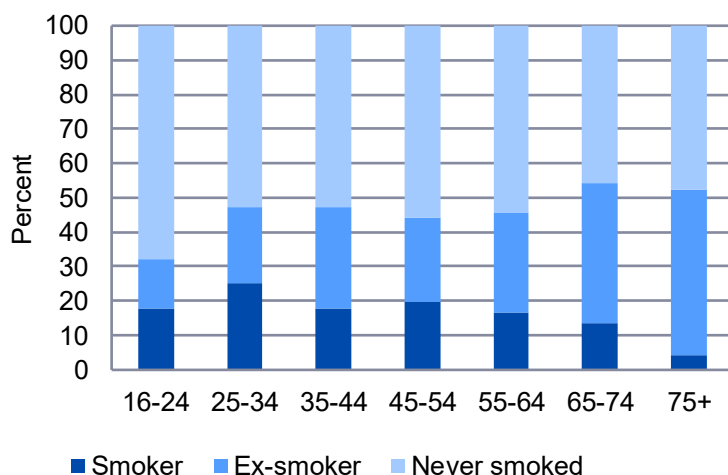
Smoking status by age

Adults aged 75 & over were least likely to smoke and among the most likely to be ex-smokers. Those aged 16-24 were most likely to have never smoked.

² Calculated as % smokers multiplied by 2018 mid-year population estimates aged 16 & over

³ [Discontinuities in results for health-related lifestyle and general health between the Welsh Health Survey and National Survey for Wales](#)

Figure 2: smoking status by age group, 2018-19

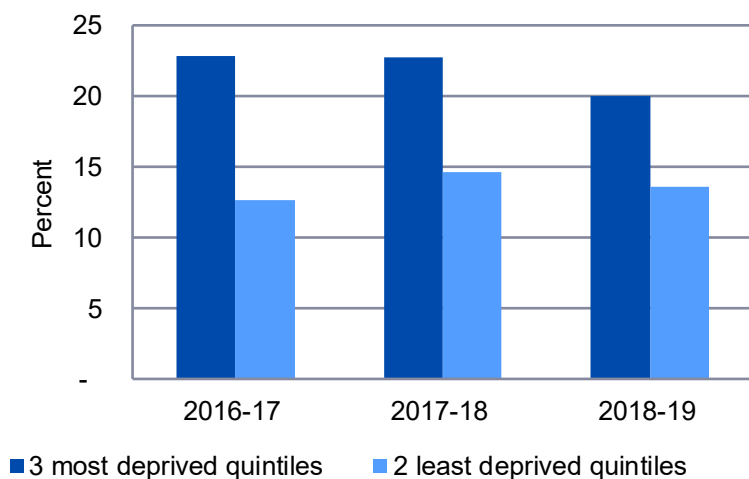


The sample size is not large enough for robust analysis of trends by age group, however it may be possible to look at this in future by averaging a greater period of data when they become available. Meanwhile, the ONS Annual Population Survey⁴ suggests a drop in smoking rates in all age groups between 2011 and 2018, both for Wales and UK as a whole.

Smoking status by deprivation quintile

Adults in the 3 most deprived quintiles (based on WIMD) were more likely to smoke than those in the 2 least deprived quintiles (20% compared with 14%), however the gap between them was smaller than in 2016-17. More data is needed to see if this is sustained or just a fluctuation.

Figure 3: smokers by grouped deprivation quintile, 2016-17 to 2018-19



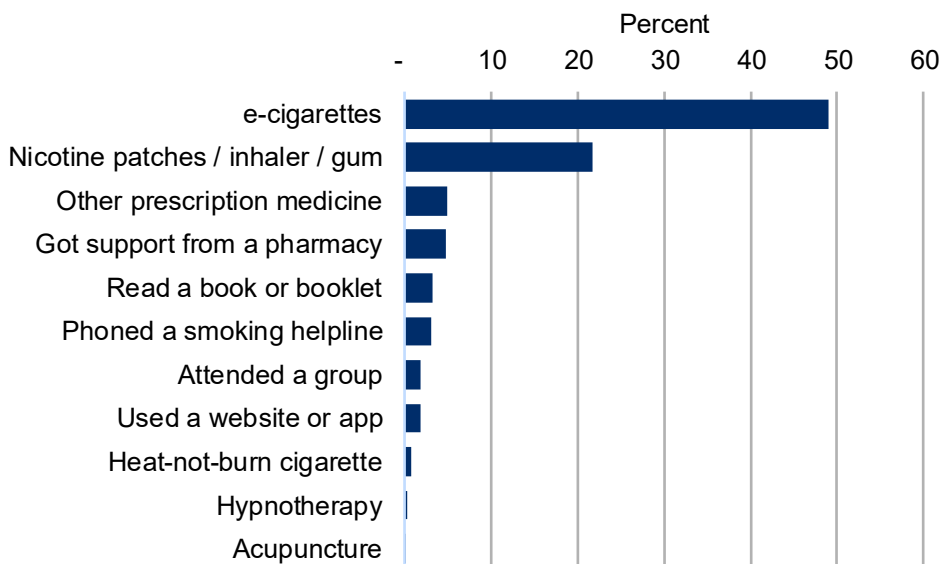
⁴ The Annual Population Survey (APS) run by the Office for National Statistics also provides some information on adult smoking status in Wales since 2011. This is based on a larger sample than the NSW, but is for adults aged 18 & over (rather than 16 & over), and does not include information on other lifestyle behaviours. See [notes](#).

Stopping smoking

45% of smokers had tried to give up in the last 12 months.

Among those who gave up or tried to give up smoking in the last 12 months, the most common method⁵ tried was e-cigarettes (49%), followed by nicotine patches / inhaler / gum (22%).

Figure 4: methods used to try and stop smoking in last 12 months⁵, 2018-19



35% did not use any of these methods. 48% used 1 method, 13% used 2, and 5% used 3 or more.

The Tobacco Control Delivery Plan highlighted the role of NHS-funded smoking cessation services involving evidence-based behavioural support. Grouping together three of the methods covered by the survey as a proxy for this (getting support from a pharmacy, phoning a smoking helpline, attending a group), 8% of those who gave up or tried to give up in the last 12 months reported using at least one of these methods.

E-cigarette use

In 2018-19, 6% of adults reported currently using e-cigarettes (this equates to approximately 150,000 adults⁶). 17% had ever tried them. There was little change since 2016-17.

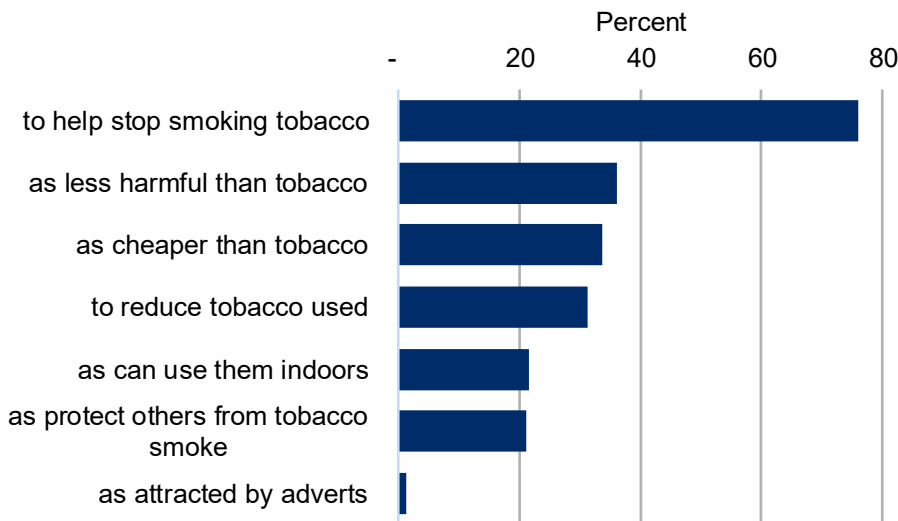
The most common reason⁷ for using e-cigarettes among current users was to help stop smoking tobacco (76%); other common reasons were because they were perceived to be less harmful than tobacco (36%), because they were perceived to be cheaper than tobacco (34%), and to reduce tobacco used (31%).

⁵ People could report more than one method

⁶ Calculated as % e-cigarette users multiplied by 2018 mid-year population estimates aged 16 & over

⁷ People could report more than one reason

Figure 5: reasons for using e-cigarettes⁷ (current users), 2018-19



Smoking and e-cigarette status

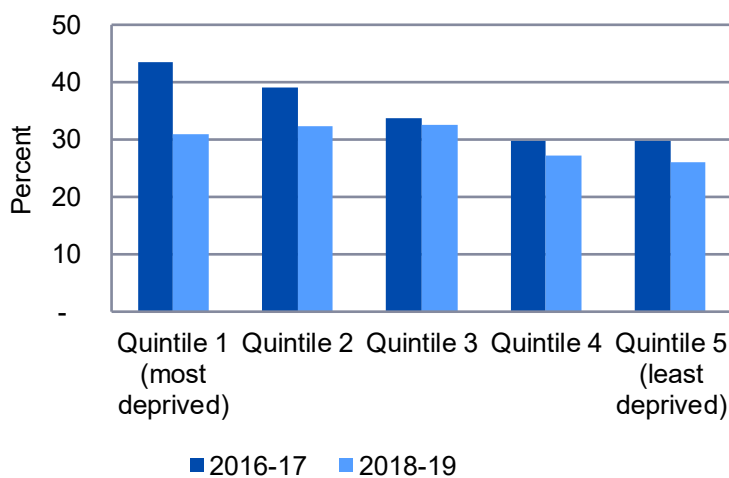
50% of e-cigarettes users were smokers, and 49% were ex-smokers. 1% had never smoked.

18% of smokers and 10% of ex-smokers currently used e-cigarettes. Less than 1% of those who had never smoked currently used e-cigarettes.

Non-smokers’ exposure to tobacco smoke

29% of non-smoking adults reported being exposed to tobacco smoke indoors or outdoors. This was down from 34% in 2016-17, with the reduction seen primarily in the most deprived WIMD quintiles. As a result, the difference between quintiles was no longer statistically significant. More data is needed to see if this is sustained or just a fluctuation.

Figure 6: non-smokers exposed to tobacco smoke by deprivation quintile, 2016-17 and 2018-19



Looking at those reporting being exposed to smoke indoors, rates in the most deprived quintile were lower in 2018-19 than in 2016-17, however they remained above rates in the least deprived quintiles. For those exposed outdoors, following a drop in the rate for the most deprived quintile for 2018-19 there was little difference between the quintiles. As above, more data is needed to see if this is sustained or just a fluctuation.

Summary table on adult smoking and e-cigarette use (adults aged 16 & over) (per cent)

	2016-17	2017-18	2018-19
Smoking status			
Smoker	19	19	17
Ex-smoker	29	29	29
Never smoked	52	52	54
Smoke daily	16	16	14
Smoker - 3 most deprived quintiles (1)	23	23	20
Smoker - 2 least deprived quintiles (1)	13	15	14
Smoker - male	20	21	18
Smoker - female	17	17	16
Smoker - age 16-24	20	22	18
Smoker - age 25-34	25	27	25
Smoker - age 35-44	22	20	18
Smoker - age 45-54	23	23	20
Smoker - age 55-64	19	16	17
Smoker - age 65-74	12	14	14
Smoker - age 75+	6	7	4
Stopping smoking			
Tried to give up smoking in the last 12 months (as % smokers)	44	.	45
Stopped smoking less than 1 month ago (as % ex-smokers)	1	.	1
Stopped smoking 1 month-1 year ago (as % ex-smokers)	7	.	7
Stopped smoking more than 1 year ago (as % ex-smokers)	91	.	92
Methods tried to stop smoking in last 12 months (2)			
e-cigarettes	.	.	49
Nicotine patches / inhaler / gum	.	.	22
Other prescription medicine (e.g. Zyban, Champix)	.	.	5
Got support from a pharmacy	.	.	5
Read a book or booklet	.	.	3
Phoned a smoking helpline (e.g. Help Me Quit)	.	.	3
Attended a group	.	.	2
Used a website or app	.	.	2
Heat-not-burn cigarette (e.g. IQOS, heatsticks)	.	.	1
Hypnotherapy	.	.	0
Acupuncture	.	.	0
E-cigarette use			
E-cigarette user	7	7	6
Use e-cigarette daily	4	5	4
Ever tried e-cigarette	18	17	17
Reasons for using e-cigarettes (current users) (3)			
to help stop smoking tobacco	69	.	76
as less harmful than tobacco	32	.	36
as cheaper than tobacco	28	.	34
to reduce tobacco used	25	.	31
as can use them indoors	18	.	22
as protect others from tobacco smoke	18	.	21
as attracted by adverts	2	.	1
curiosity (spontaneous)	1	.	-

Smoking and e-cigarette status			
Current e-cigarette user who is smoker	52	47	50
Current e-cigarette user who is ex-smoker	44	50	49
Current e-cigarette user who has never smoked	4	3	1
Current smoker who currently uses e-cigarette	18	17	18
Ex smoker who currently uses e-cigarette	10	12	10
Has never smoked and currently uses e-cigarette	0	0	0
Used e-cigarette before tobacco (of those who have ever used both)	1	.	2
Non-smoking adults exposed to tobacco smoke			
indoors or outdoors	34	.	29
indoors	13	.	10
outdoors	27	.	24
inside own home	4	.	3
inside other people's home	8	.	6
travelling by car / van	3	.	3
in other indoor places	2	.	2
outside at home	5	.	5
outdoor smoking areas pubs etc	15	.	15
outside school / hospital / playgrounds	5	.	4
in other outdoor places	14	.	10
indoors or outdoors - quintile 1 (most deprived) (1)	44	.	31
indoors or outdoors - quintile 2 (1)	39	.	32
indoors or outdoors - quintile 3 (1)	34	.	33
indoors or outdoors - quintile 4 (1)	30	.	27
indoors or outdoors - quintile 5 (least deprived) (1)	30	.	26
indoors - quintile 1 (most deprived) (1)	21	.	15
indoors - quintile 2 (1)	17	.	14
indoors - quintile 3 (1)	13	.	9
indoors - quintile 4 (1)	9	.	7
indoors - quintile 5 (least deprived) (1)	9	.	9
outdoors - quintile 1 (most deprived) (1)	32	.	23
outdoors - quintile 2 (1)	30	.	24
outdoors - quintile 3 (1)	27	.	28
outdoors - quintile 4 (1)	25	.	24
outdoors - quintile 5 (least deprived) (1)	26	.	23

Source: National Survey for Wales

(1) age-standardised %, using WIMD deprivation quintile

(2) as % of those who gave up or tried to give up in last 12 months; people could report more than 1 method

(3) people could report more than 1 reason

Definitions

Smoking

The survey asked adults whether they smoked (daily or occasionally), used to smoke (daily or occasionally), or had never smoked. Throughout the report, 'current smokers' are those who responded saying they smoked either daily or occasionally, 'ex-smokers' are those who responded to the survey saying that they used to smoke daily or occasionally.

For e-cigarettes, respondents were asked if they currently used or had ever used an e-cigarette and whether this was daily or occasionally.

In 2018-19, a longer set of questions about smoking was asked, including questions about trying to give up smoking, reasons for using e-cigarettes, exposure to tobacco smoke, age started smoking / using e-cigarettes.

Full details of the [questions asked](#) are on the survey webpages.

Welsh Index of Multiple Deprivation

The Welsh Index of Multiple Deprivation (WIMD) is used as the official measure of deprivation in Wales. Deprivation is a wider concept than poverty and refers to wider problems caused by a lack of resources and opportunities. The WIMD is constructed from eight different types of deprivation. These are: income, housing, employment, access to services, education, health, community safety and physical environment. Wales is divided into 1,909 Lower-Layer Super Output Areas (LSOA) each having about 1,600 people. Deprivation ranks have been worked out for each of these areas: the most deprived LSOA is ranked 1, and the least deprived 1,909. Respondents to the survey have been split into five groups based on the LSOA they live in (with 20 per cent of LSOAs allocated to each group). Results are compared for the five groups.

Age-standardisation

Age standardisation has been used in selected analysis in order to enable groups to be compared after adjusting for the effects of any differences in their age distributions. When different sub-groups are compared in respect of a variable on which age has an important influence (such as health), any differences in age distributions between these sub-groups are likely to affect the observed differences in the proportions of interest.

Age standardisation was carried out using the direct standardisation method. The standard population to which the age distribution of sub-groups was adjusted was adapted from the 2013 European Standard Population. Calculations were done using Stata. The age-standardised proportion p' was calculated as follows, where p_i is the age specific proportion in age group i and N_i is the standard population size in age group i :

$$p' = \frac{\sum_i N_i p_i}{\sum_i N_i}$$

Therefore p' can be viewed as a weighted mean of p_i using the weights N_i . Age standardisation was carried out using the age groups: 16-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75 and over.

Key quality information

Comparability with results from the former Welsh Health Survey

The National Survey for Wales has replaced the Welsh Health Survey as the source of data on health-related lifestyles among adults. Results from the two surveys are not comparable due to the change in survey methodology. The size of the discontinuities can vary depending on the topic. Some additional information is given in a [Statistical Article](#) looking at trend discontinuities for a selection of health-related lifestyle behaviours.

Background

The National Survey for Wales was carried out by the Office for National Statistics on behalf of the Welsh Government. The results reported in this bulletin are based on interviews completed in 2018-19 (1 April 2018 – 31st March 2019).

Addresses were chosen randomly from the Royal Mail's Small User Postcode Address File. Interviewers visited each address and randomly selected one adult (aged 16+) in the household. They then carried out a 45-minute face-to-face interview with them, covering a range of views, behaviours, and characteristics. Of these, approximately 5,900 (about half of the sample) were asked the adult lifestyle questions, which include smoking. More [background information about the survey](#) is given on the survey webpages.

Interpreting the results

Percentages quoted in this release are based on those respondents who provided an answer to the relevant question only. Missing answers occur for several reasons, including refusal or an inability to answer a particular question and cases where the question is not applicable to the respondent.

The results of the National Survey are weighted to compensate for unequal selection probabilities and differential non-response (i.e. to ensure that the age and sex distribution of the final dataset matches that of the Welsh population).

Quality report

A summary [quality report](#) is available, containing more detailed information on the quality of the survey as well as a summary of the methods used to compile the results.

Technical report

More detailed information on the survey methodology is set out in the [technical report for the survey](#).

Sampling variability

Estimates from the National Survey are subject to a margin of uncertainty. Part of the uncertainty comes from the fact that any randomly-selected sample of the population will give slightly different results from the results that would be obtained if the whole population was surveyed. This is known as sampling error.⁸ Confidence intervals can be used as a guide to the size of the sampling error.

⁸ Sampling error is discussed in more detail in the [Quality Report](#) for the National Survey.

These intervals are calculated around a survey estimate and give a range within which the true value is likely to fall. In 95% of survey samples, the 95% confidence interval will contain the 'true' figure for the whole population (that is, the figure we would get if the survey covered the entire population). In general, the smaller the sample size the wider the confidence interval. Confidence intervals are included in the tables of survey results published on [StatsWales](#).

As with any survey, the National Survey is also subject to a range of other sources of error: for example, due to non-response; because respondents may not interpret the questions as intended or may not answer accurately; and because errors may be introduced as the survey data is processed. These kinds of error are known as non-sampling error, and are discussed further in the [quality report](#) for the survey.

Annual Population Survey

The Annual Population Survey (APS) run by the Office for National Statistics also provides some information on adult smoking status in Wales since 2011. This is based on a larger sample than the NSW, but is for adults aged 18 & over (rather than 16 & over), and does not include information on other lifestyle behaviours. It should not be used for monitoring Welsh Government smoking targets, but is still useful as it provides results on a consistent basis across UK countries and local authorities. In 2018, smoking rates for Wales were slightly higher than England, and broadly similar to Scotland and Northern Ireland. Both APS and NSW / WHS show current smoking rates being lower than in 2011. Results are not directly comparable with NSW due to differences in methodology and questions. More information is available at [Adult smoking habits in the UK](#) and [Annual population survey \(APS\) Quality and Methodology Information](#).

National Statistics status

The [United Kingdom Statistics Authority](#) has designated these statistics as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Statistics](#).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Statistics. They are awarded National Statistics status following an assessment by the UK Statistics Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is Welsh Government's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

The continued designation of these statistics as National Statistics was confirmed in 2017 following a compliance check by the Office for Statistics Regulation [[letter of confirmation](#)]. These statistics last underwent a full assessment [[full report](#) and [full report](#)] against the Code of Practice in 2012 (as former Welsh Health Survey) and 2013 (as former National Survey for Wales).

Since the latest review by the Office for Statistics Regulation, we have continued to comply with the Code of Practice for Statistics, and have made the following improvements:

- provided more detailed data in StatsWales.
- produced additional statistical bulletins such as this.

Well-being of Future Generations Act (WFG)

The Well-being of Future Generations Act 2015 is about improving the social, economic, environmental and cultural well-being of Wales. The Act puts in place seven well-being goals for Wales. These are for a more equal, prosperous, resilient, healthier and globally responsible Wales, with cohesive communities and a vibrant culture and thriving Welsh language. Under section (10)(1) of the Act, the Welsh Ministers must (a) publish indicators (“national indicators”) that must be applied for the purpose of measuring progress towards the achievement of the Well-being goals, and (b) lay a copy of the national indicators before the National Assembly. The 46 national indicators were laid in March 2016 .

Information on the indicators, along with narratives for each of the well-being goals and associated technical information is available in the [Well-being of Wales report](#).

Further information on the [Well-being of Future Generations \(Wales\) Act 2015](#).

The statistics included in this release could also provide supporting narrative to the national indicators and be used by public services boards in relation to their local well-being assessments and local well-being plans.

Release policy

Information about the process for releasing new results is available from the [Welsh Government's statistics web pages](#), including information on our [revisions policy](#).

Availability of datasets

The data behind the charts and tables in this release are published on [StatsWales](#). An anonymised version of the annual datasets (from which some information is removed to ensure confidentiality is preserved), together with supporting documentation, will be deposited with the UK Data Archive. For more information, please contact us (see below).

Further details

The document is available at: <https://gov.wales/national-survey-wales-population-health>

Next update

Not known.

We want your feedback

We welcome any feedback on any aspect of these statistics which can be provided by email to stats.healthinfo@gov.wales

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