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SB 23/2020



National Survey for Wales 2019-20: Adult lifestyle

The National Survey for Wales (NSW) replaced the Welsh Health Survey (WHS) as the source of data on health-related lifestyle among adults from 2016-17. Results from the two surveys are not comparable due to the change in survey methodology. All results in this bulletin relate to adults aged 16+.



18%

currently smoked
(7% used e-cigarettes)



19%

drank over weekly
guidelines



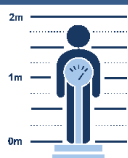
25%

ate 5 or more portions of
fruit or vegetables the
previous day



53%

were active for 150 minutes
or more the previous week



61%

were overweight or obese
(including 25% obese)



10%

followed fewer than 2
healthy behaviours

About this bulletin

This bulletin provides information about the health-related lifestyles and behaviours of adults living in Wales from the National Survey for Wales 2019-20. This includes one of the 46 [National Indicators](#).

The full questionnaire and information about the survey are available on the [National Survey web pages](#).

Additional tables can be accessed via [StatsWales](#).

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Smoking and e-cigarette use

18% of adults reported that they currently smoked. Smoking was less common among older adults. Those in more deprived areas were more likely to smoke. 7% of adults used e-cigarettes.

There was no significant change in smoking rates between 2016-17 and 2019-20. For context and a longer time trend, the former Welsh Health Survey showed a decrease in smoking rates between 2003/04 and 2015. Rates from the two surveys should not be directly compared.

Figure 1: Percentage of adults who smoked / used e-cigarettes, by gender, age and area deprivation

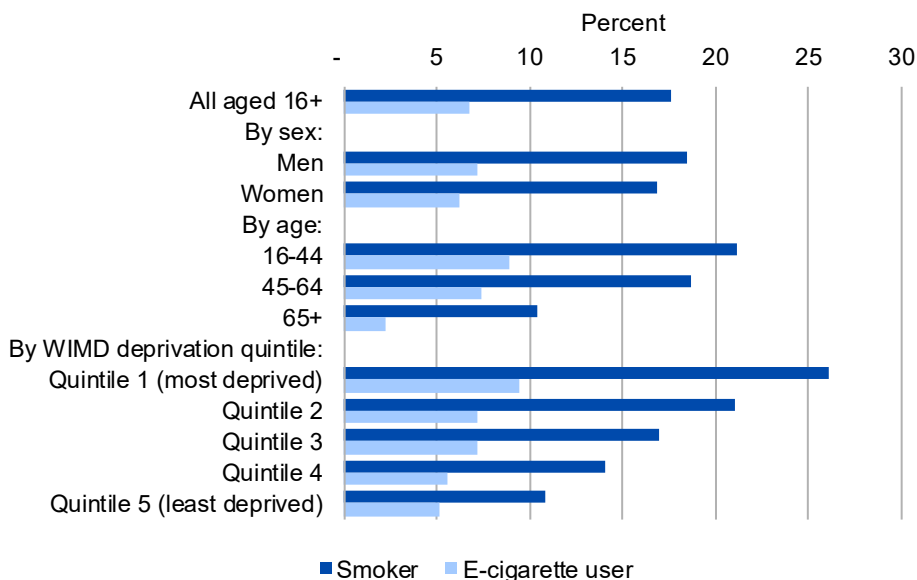
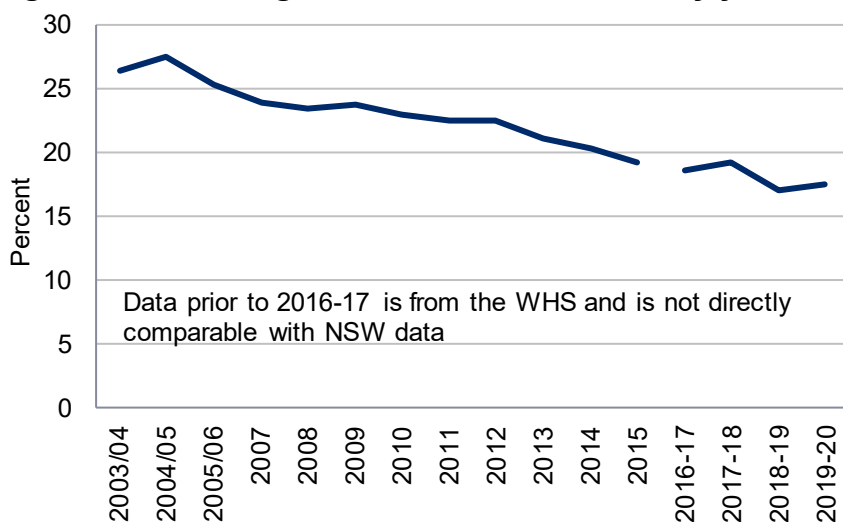


Figure 2: Percentage of adults who smoked, by year



Alcohol

19% of adults reported that they drank more than the weekly guideline amount (that is, average weekly alcohol consumption above 14 units). Drinking above weekly guidelines was more common among men and those in the middle age groups. Adults in the most deprived areas were less likely to drink above guidelines.

There was no significant change in drinking above the weekly guidelines between 2016-17 and 2019-20. Weekly consumption was not asked in the former Welsh Health Survey, however that survey did show a decrease in adults drinking over the old daily alcohol guidelines between 2008 and 2015.

Figure 3: Percentage of adults who reported drinking above weekly guidelines, by gender, age and area deprivation

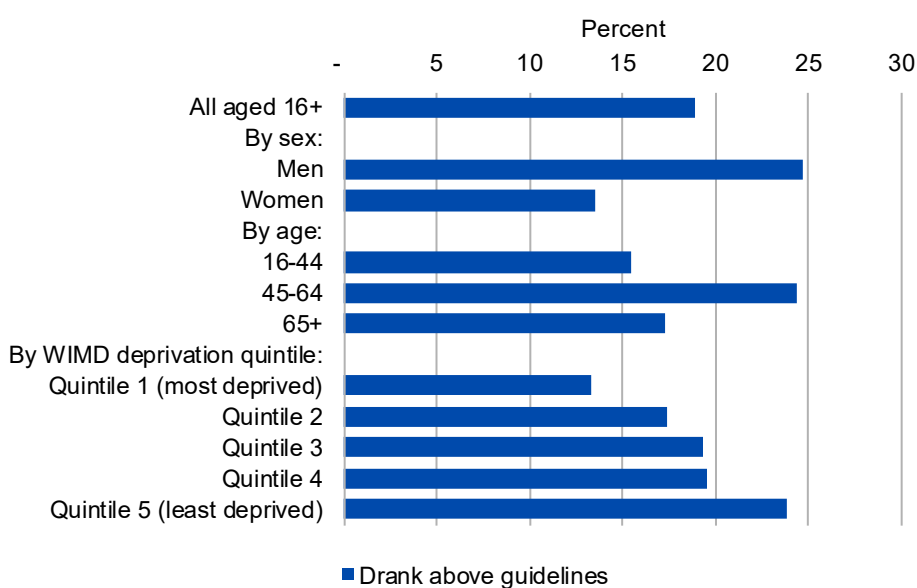
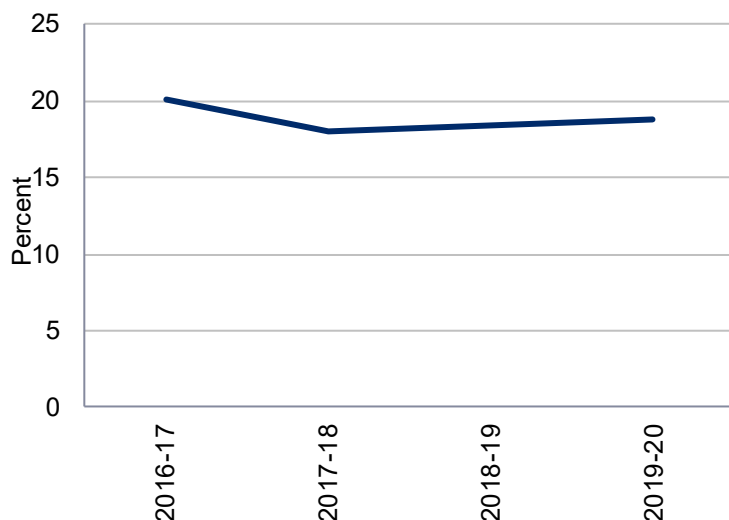


Figure 4: Percentage of adults who reported drinking above weekly guidelines, by year



Fruit and vegetables

25% of adults reported that they ate at least five portions of fruit or vegetables the previous day. Men were less likely to have done so, as were adults in the most deprived areas.

There was no significant change in fruit and vegetable consumption between 2016-17 and 2019-20. For context and a longer time trend, the former Welsh Health Survey showed a slight decrease in fruit and vegetable consumption between 2008 and 2015. Results from the two surveys should not be directly compared.

Figure 5: Percentage of adults who reported eating 5 or more portions of fruit and vegetables the previous day, by gender, age and area deprivation

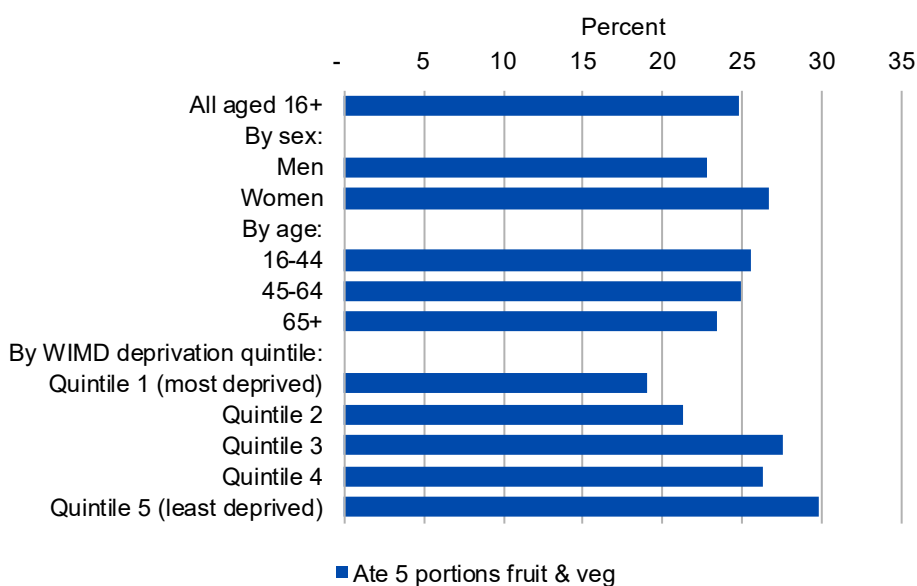
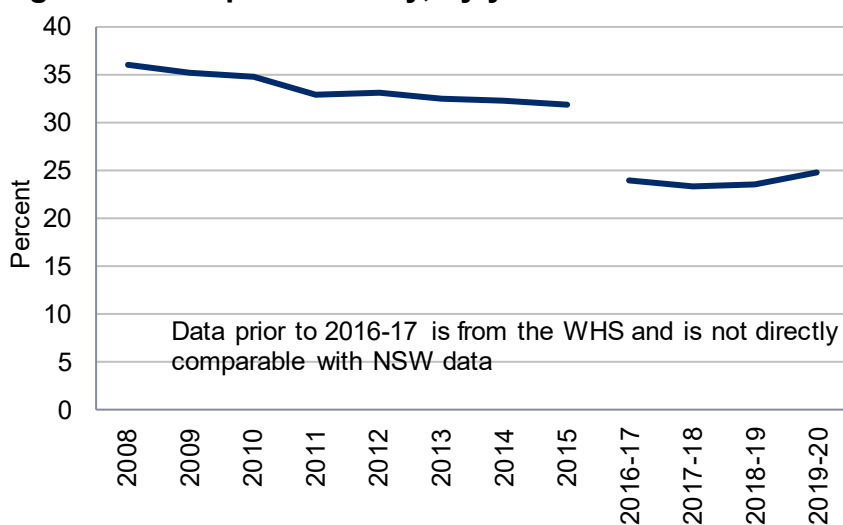


Figure 6: Percentage of adults who reported eating 5 or more portions of fruit and vegetables the previous day, by year



Physical activity

53% of adults reported that they had been active for at least 150 minutes in the previous week. Physical activity rates were lower among women, older adults, and more deprived areas. 33% of adults were inactive (active less than 30 minutes the previous week).

There was no significant change in physical activity between 2016-17 and 2019-20. Weekly minutes of activity was not asked in the former Welsh Health Survey, however that survey showed little change in physical activity (active days) between 2003/04 and 2015.

Figure 7: Percentage of adults who reported being active for at least 150 minutes or being inactive (less than 30 minutes) the previous week, by gender, age and area deprivation

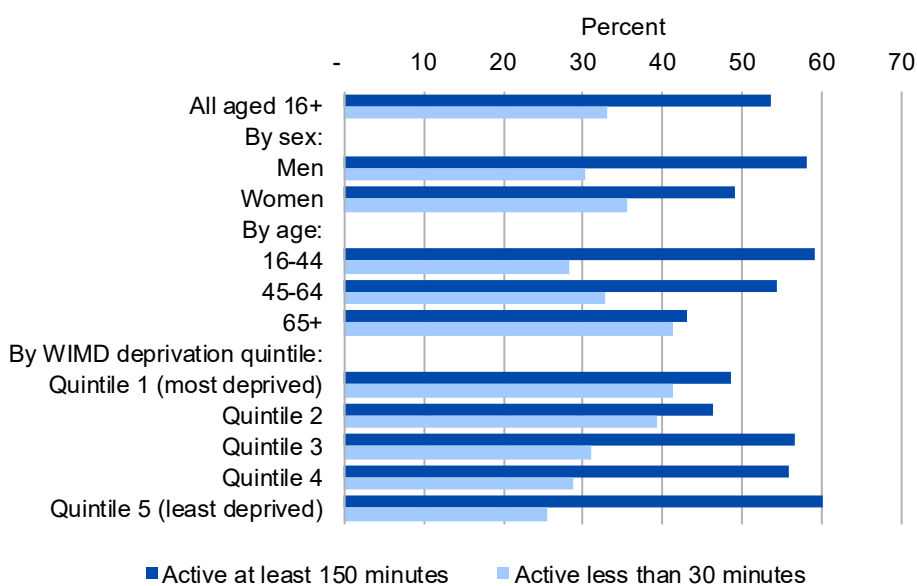
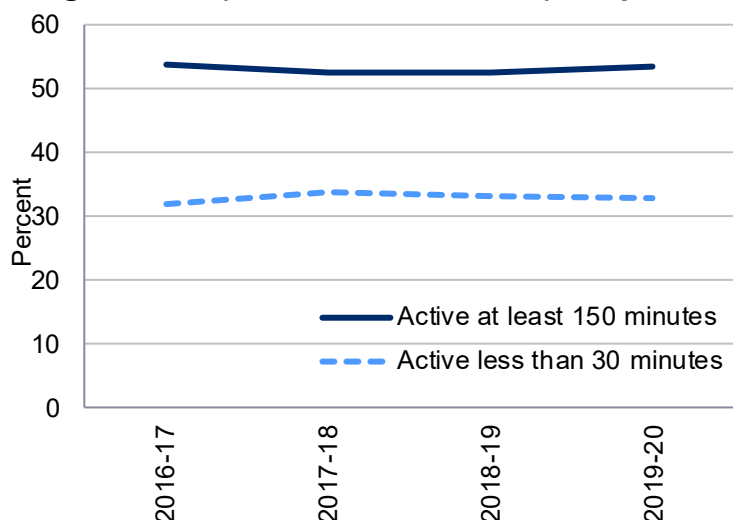


Figure 8: Percentage of adults who reported being active for at least 150 minutes or being inactive (less than 30 minutes) the previous week, by year



Body Mass Index

61% of adults were classified as overweight or obese including 25% who were obese. Men were more likely to be overweight, but not obese, than women. Middle aged adults were more likely to be overweight or obese, as were adults in the most deprived areas.

There was no significant change in overweight and obesity between 2016-17 and 2019-20 (although obesity rates appeared slightly higher, the difference was not statistically significant). For context and a longer time trend, the former WHS showed an increase in overweight / obesity between 2003/04 and 2015). Rates from the two surveys should not be directly compared.

Figure 9: Percentage of adults who were overweight or obese, by gender, age and area deprivation

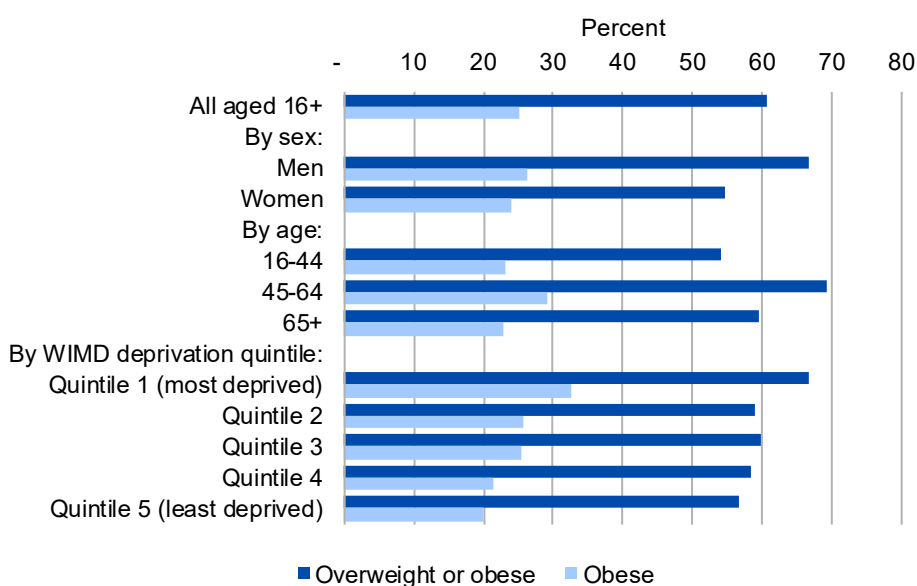
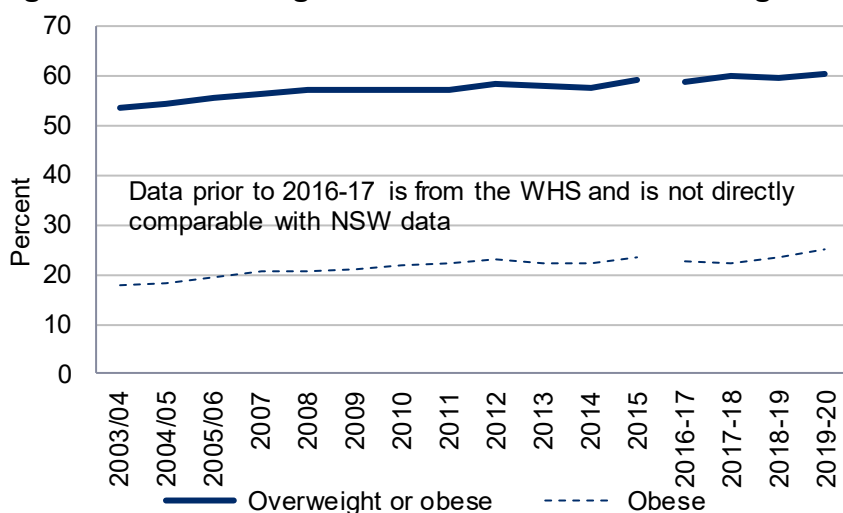


Figure 10: Percentage of adults who were overweight or obese, by year



Multiple healthy lifestyle behaviours

10% of adults reported following fewer than two of the five healthy lifestyle behaviours. Men and middle aged adults were more likely to report fewer than two of the behaviours. Those in the least deprived areas were less likely to do so.

There was no significant change in the proportion of adults who reported fewer than 2 healthy lifestyle behaviours between 2016-17 and 2019-20.

Five healthy lifestyle behaviours:

- Not smoking
- Not drinking above weekly guidelines
- Eating 5 or more portions of fruit & vegetables the previous day
- Being physically active at least 150 minutes the previous week
- Maintaining a healthy weight / body mass index

Figure 11: Percentage of adults who reported fewer than 2 healthy lifestyle behaviours, by gender, age and area deprivation

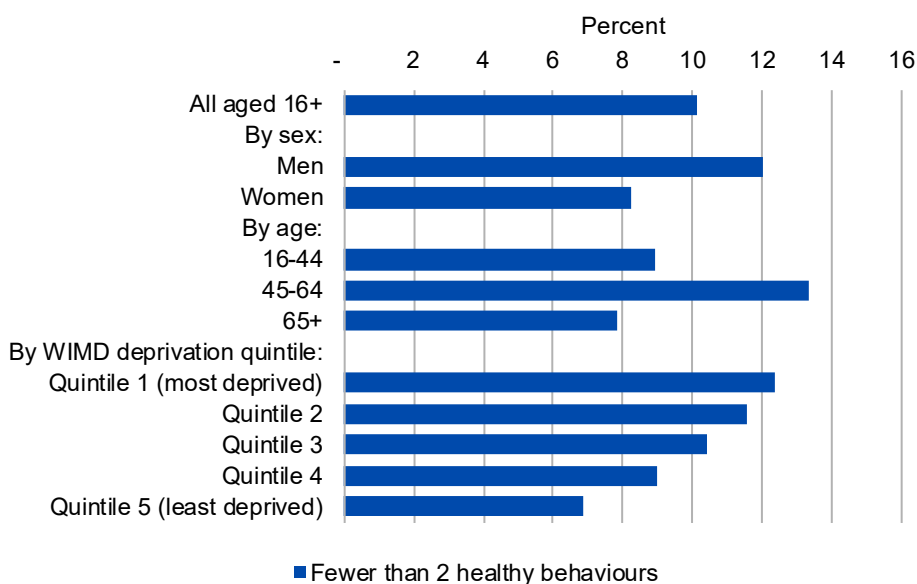
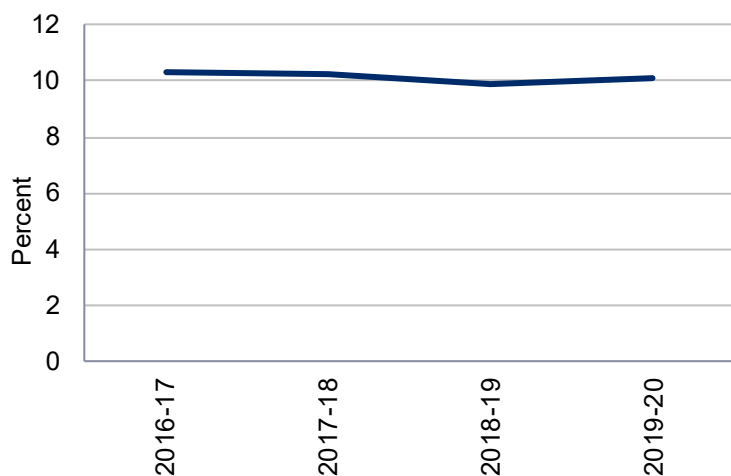


Figure 12: Percentage of adults who reported fewer than 2 healthy lifestyle behaviours, by year



Summary Table: Health-related lifestyle behaviours - summary of key variables, adults aged 16 & over (a) (per cent)

	Smoker	E-cigarette user	Weekly alcohol consumption above 14 units	Ate 5 portions fruit & veg	Active 150 minutes in week	Active less than 30 minutes in week	Overweight or obese	Obese	Fewer than 2 healthy behaviours
All aged 16+	18	7	19	25	53	33	61	25	10
By sex:									
Men	18	7	25	23	58	30	67	26	12
Women	17	6	14	27	49	36	55	24	8
By age:									
16-44	21	9	15	26	59	28	54	23	9
45-64	19	7	24	25	54	33	69	29	13
65+	10	2	17	23	43	41	60	23	8
By WIMD deprivation quintile (age-standardised):									
Quintile 1 (most deprived)	26	9	13	19	49	41	67	33	12
Quintile 2	21	7	17	21	46	39	59	26	12
Quintile 3	17	7	19	28	57	31	60	26	10
Quintile 4	14	6	20	26	56	29	58	21	9
Quintile 5 (least deprived)	11	5	24	30	60	26	57	20	7
By Local Health Board (age-standardised) (b):									
Betsi Cadwaladr	18	6	18	26	55	31	55	20	9
Powys	15	4	20	27	61	26	56	19	8
Hywel Dda	18	6	20	23	55	30	61	25	12
Swansea Bay	17	7	20	21	50	33	61	25	10
Cwm Taf Morgannwg	19	7	16	22	42	47	64	27	12
Aneurin Bevan	18	7	17	20	55	31	65	29	10
Cardiff & Vale	14	7	22	32	57	29	56	20	8
By year:									
2016-17	19	7	20	24	54	32	59	23	10
2017-18	19	7	18	23	53	34	60	22	10
2018-19	17	6	18	24	53	33	59	23	10
2019-20	18	7	19	25	53	33	61	25	10

National Survey for Wales, 2019-20

a) See definitions in bulletin for explanations of age-standardisation and socio-demographic factors

b) Figures for LHBs are based on two years of data combined (2018-19 and 2019-20)

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 and 'non-smokers' were those who responded to have never smoked and ex-smokers.

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

Alcohol consumption

The survey asked adults a set of questions about their alcohol consumption.

As announced in the UK Chief Medical Officers' Low Risk Drinking Guidelines during 2016, a weekly alcohol guideline was recommended to replace the former daily guidelines. This new guideline for both men and women suggests drinking no more than 14 units a week on a regular basis, therefore this release measures responses to alcohol intake against this weekly guideline. The former guidelines suggested that men should not regularly drink more than 3 – 4 units of alcohol per day, and women not more than 2 – 3 units. Details of daily consumption are included in the additional tables.

Respondents were asked how often they drank alcohol in the past 12 months and, if never, whether they had always been a non-drinker.

Respondents were asked to indicate how often they had consumed each type of alcohol during the past 12 months, and how much they had usually consumed; they were also asked how many measures of each type of alcohol they had consumed on their heaviest drinking day the previous week. The following table was used to calculate the average weekly units drunk, and the units drunk on the heaviest drinking day in the previous week.

Some respondents who did drink stated that their usual weekly consumption was none – this may lead to an underestimate in weekly drinking estimates.

Type of drink	Measure	Alcohol units
Normal strength beer, lager, stout, cider or shandy	Pints	2
	Large cans	2
	Small cans	1.5
	Bottles	1.5
Strong beer, lager, stout or cider	Pints	4
	Large cans	3
	Small cans	2
	Bottles	2
Wine	Large glass (250ml)	3
	Standard glass (175ml)	2
	Small glass (125ml)	1.5
	Bottles (750ml)	9
Spirits or liqueurs	Measures or shots (single measure)	1
Sherry or martini	Glass	1
Alcopops	Small can	1.5
	Standard bottle (275ml)	1.5
	Large bottle (700ml)	3.5

Weekly consumption of each type of drink was calculated by multiplying the units usually consumed on a day when that type of alcohol was drunk by a factor representing the frequency with which it was drunk. The results for each type of drink were added together to give an overall weekly figure. The frequency multipliers used were:

Drinking frequency	Multiplying factor
Almost every day	7.0
5 or 6 times a week	5.5
3 or 4 times a week	3.5
Once or twice a week	1.5
Once or twice a month	0.375
Once every couple of months	0.115
Once or twice a year	0.029

Health-related behaviours can be a complex area to measure and there may be some differences between what people report and what they do (for instance, they may tend to underestimate their

alcohol consumption). However, survey data still provides a reliable means of comparing patterns for these behaviours between different groups and over time.

Fruit and vegetable consumption

The survey asked adults questions about a range of food items to determine the overall amounts of fruit, vegetables and pulses consumed the previous day.

For each food item, respondents were asked whether they had eaten it and, if so, how much they had consumed. Everyday measures were given for each food item: for example, tablespoons of vegetables, small bowls of salad, or medium sized fruit (such as apples). Each question provided a definition of which foods were to be included. Guidelines recommend eating at least five portions of a variety of fruit and vegetables each day. To conform with these guidelines, the questions and analysis were based on the concept of portions of 80g each and the information collected was converted into standard portions at the analysis stage.

The table that follows shows portion sizes for the different food items included in the questions.

Food item	Portion size
Vegetables (fresh, frozen or tinned)	3 tablespoons
Pulses	3 tablespoons
Salad	1 small bowl
Dishes made mainly from vegetables or pulses	3 tablespoons
Very large fruit, such as melon	1 average slice
Large fruit, such as grapefruit	Half a fruit
Medium fruit, such as apples, bananas, oranges	1 fruit
Small fruit, such as plums, satsumas	2 fruits
Very small fruit, such as grapes, berries	2 average handfuls
Dried fruit, such as raisins, apricots	1 average handful
Frozen/tinned fruit	3 tablespoons
Dishes made mainly from fruit such as fruit salad or fruit pies	3 tablespoons
Fruit juice	1 small glass

At the analysis stage, rules for certain foods were applied: respondents could obtain no more than one portion of their daily intake from fruit juice, one portion from pulses, and one portion from dried fruit. These restrictions are in line with guidelines, which emphasise that a variety of fruit and vegetables should be consumed.

Health-related behaviours can be a complex area to measure and there may be some differences between what people report and what they do. However, survey data still provides a reliable means of comparing patterns for these behaviours between different groups and over time.

Physical activity

Physical activity guidelines recommend that adults should aim to do at least 150 minutes of moderate activity during the week. Alternatively, comparable benefits can be achieved by 75 minutes of vigorous activity, or an equivalent combination of the two.

The questions asked respondents on what days in the previous week they walked, completed some moderate physical activity and completed some vigorous physical activity for at least 10 minutes at a time and then they were asked how much time, on average, they spent doing these activities each time. The respondents were also asked about their walking pace and the effort involved. Walking was included as a moderate activity for those walking at a 'fairly brisk' or 'fast' usual pace. For those aged 65 and over, walking at any pace was included if the effort was enough to make them breathe faster, feel warm or sweat. The information was combined to provide an estimate of the equivalent number of moderate minutes of activity undertaken the previous week. Those with the equivalent of 150 minutes or more moderate activity were classed as meeting the guidelines. Results for those who were inactive are also shown, which for the purposes of this report was defined as those with the equivalent of less than 30 minutes moderate activity the previous week.

Health-related behaviours can be a complex area to measure and there may be some differences between what people report and what they do (for instance, they may tend to overestimate their levels of physical activity). However, survey data still provides a reliable means of comparing patterns for these behaviours between different groups and over time.

Body Mass Index

The survey asked adults to report their height and their weight. In order to define overweight or obesity, a measurement is required which allows for differences in weight due to height. The Body Mass Index (BMI) is calculated as weight (kg) divided by squared height (m²). However, BMI does not distinguish between mass due to body fat and mass due to muscular physique, nor does it take account of the distribution of fat. BMI was calculated for all respondents, excluding pregnant women, with valid height and weight measurements and classified into the following BMI groups:

BMI (kg/m²)	Description
Less than 18.5	Underweight
18.5 to under 25	Healthy weight
25 to under 30	Overweight
30 and over	Obese
40 and over	Morbidly obese

Height and weight of respondents are self-reported, and there is evidence to show that some people tend to under-report weight and/or over-report height, resulting in an under-estimation of the prevalence of overweight and obesity ^{1 2}.

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.

¹ [World Health Organization, Geneva, 2000](#)

² Roberts, RJ. (1995) Can self-reported data accurately describe the prevalence of overweight? Public Health; 109 (4): 275-284 [Used Welsh data]

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 2019-20 (between 1 April 2019 and 16 March 2020, at which point fieldwork was halted due to the coronavirus situation).

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 6,300 (about half of the sample) were asked the adult lifestyle questions. 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.³ Confidence intervals can be used as a guide to the size of the sampling error. 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.

Local authority / health board estimates

Sample sizes for questions on health-related lifestyle for local authorities and health boards are relatively small, therefore two years of data (2018-19 and 2019-20) have been combined to increase the sample size and improve precision. Even so, it should be noted that the sample size for some areas is still relatively small. Sample sizes are shown in the StatsWales tables, along with 95 per cent confidence intervals to give an indication of the precision of results. The survey weights for each year are scaled to match the adult population in private households in Wales. This means that when the data are combined, each survey year contributes roughly the same number of weighted survey responses.

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.

³ Sampling error is discussed in more detail in the [Quality Report](#) for the National Survey.

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.

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 and this bulletin includes one of the national indicators namely the “Percentage of adults who have fewer than two healthy lifestyle behaviours (not smoking, healthy weight, eat five fruit or vegetables a day, not drinking above guidelines and meet physical activity guidelines)”.

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](#).

This release includes 5 contextual indicators, namely the five individual behaviours contained within the composite measure “Percentage of adults who have fewer than two healthy lifestyle behaviours (not smoking, healthy weight, eat five fruit or vegetables a day, not drinking above guidelines and meet physical activity guidelines)”, which were referenced in the technical document in the previous link.

As a national indicator under the Act they must be referred to in the analyses of local well-being produced by public services boards when they are analysing the state of economic, social, environmental and cultural well-being in their areas.

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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