

## Adult lifestyle (National Survey for Wales) - comparability of results for 2020-21 with previous years <sup>1</sup>

### Summary

The National Survey for Wales (NSW) 2020-21 was adapted due to the coronavirus pandemic. This report looks at how the changes may have affected results for the health-related lifestyles and behaviours of adults. It recommends that results should not be compared with previous editions of the National Survey for Wales. The largest impact appears to be on results for smoking and fruit and vegetable consumption, but we advise all topics should not be compared.

### Background

The National Survey for Wales 2020-21 was adapted due to the coronavirus pandemic. Telephone interviews replaced face-to-face interviews. The survey was run as a monthly survey from May to September 2020, and as a quarterly survey from October 2020 to March 2021 (there was no fieldwork in April 2020). There were some monthly / quarterly changes to content during this period, and some questions were modified to make them more suitable for answering by phone.

This report looks at how the changes may have affected results for the health-related lifestyles and behaviours of adults.

### Questions included in 2020-21

Questions about smoking status were included from the start of the survey in May 2020. Questions about other lifestyle behaviours were introduced later, and the final quarter of 2020-21 (quarter 4, January-March 2021) was the first time when questions were asked for all five healthy lifestyle behaviours. The main published results for [adult lifestyle behaviours](#) from the 2020-21 survey focus on the final quarter as this is the only period having information for all topics. A summary of which questions were asked when is below.

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<sup>1</sup> Notes on the use of statistical articles can be found at the end of this document.

## Adult lifestyle questions asked by quarter, 2020-21

	Quarter 1 (May-June 2020)	Quarter 2 (Jul-Sep 2020)	Quarter 3 (Oct-Dec 2020)	Quarter 4 (Jan-Mar 2021)
Smoking status	x	x	x	x
Alcohol units			x	x
Fruit and vegetable portions				x
Physical activity minutes		x		x
Body mass index				x

Questions about alcohol units and fruit and vegetable portions were adapted from the previous versions to make them more suitable for asking by phone, with some categories being combined. Copies of [questionnaires](#) are available on our Statistics and Research website.

For 2021-22, the survey continues to be conducted by telephone, with questions on healthy lifestyle behaviours included for the full year.

## Results

Results for the following five healthy lifestyle behaviours are considered here, comparing results for 2020-21 (the adapted survey) with those for 2019-20 (the most recent year of the original survey):

- smoking
- drinking over weekly guidelines (average weekly consumption over 14 units)
- eating 5 or more portions of fruit and vegetables the previous day
- being physically active at least 150 minutes the previous week
- healthy weight (body mass index BMI from 18.5 to under 25)

Results are shown in the table below, both for quarter 4 (January-March) (all topics), and for the full year (only available for smoking in 2020-21 - excluding April 2020 when no fieldwork was conducted).

### Key healthy lifestyle behaviours among adults, 2019-20 and 2020-21 (%)

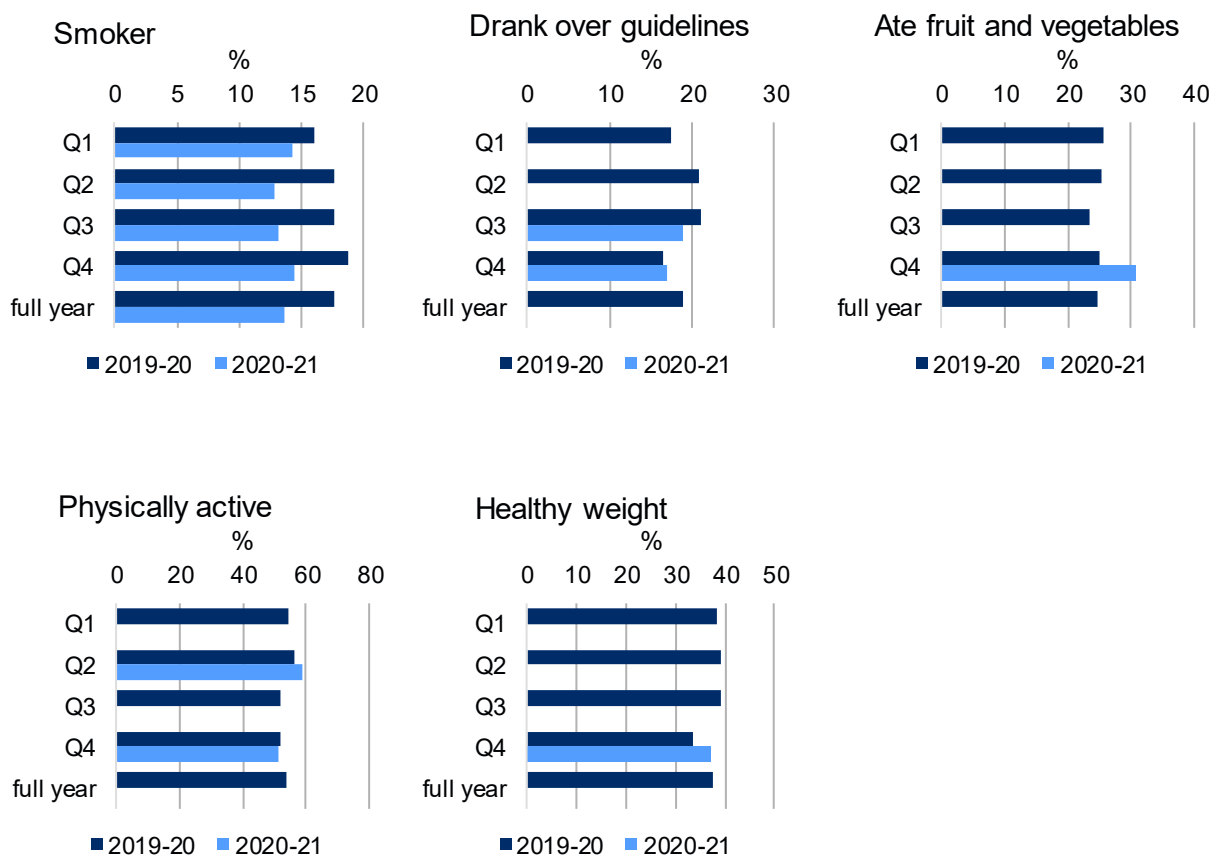
	2019-20 Q4	2019-20 full year	2020-21 Q4	2020-21 full year*
Smoker	18.8	17.6	14.4	13.7
Drank over weekly guidelines	16.5	18.8	16.9	..
Fruit and vegetables - ate 5 portions	24.9	24.8	30.5	..
Physically active 150 minutes	51.7	53.5	51.4	..
Healthy weight	33.6	37.3	37.1	..

\* May 2020-March 2021

.. Not available

The charts below show results for each topic, by quarter, for 2019-20 and 2020-21. Note that results by quarter are based on a relatively small sample and can be volatile (with wider confidence intervals and fluctuation between years), so care is needed in their interpretation.

## Chart: Key lifestyle behaviours, 2019-20 and 2020-21



For Wales as a whole, this suggests some differences between the two years, in particular a large decrease for smoking, and a large increase for eating fruit and vegetables. The pattern for alcohol consumption, physical activity, and healthy weight was unclear.

A number of factors may contribute to the differences, including:

- change in survey mode (from face-to-face to telephone interviews)
- adapted questions (alcohol, fruit and vegetables)
- asking questions for reduced period rather than full year (all topics except smoking)
- genuine change

Some of the differences seen are larger than would be expected from year-to-year. It's not possible to disentangle to what extent these are genuine changes and to what extent they reflect the changes made to the survey, but it's likely that the change in survey mode had some impact, along with (for alcohol and fruit and vegetables) the change in questions. [Previous experience](#), when the National Survey for Wales replaced the Welsh Health Survey, showed that these topics can be sensitive to such changes. Some topics may also be affected by the inclusion of questions for a reduced period rather than the full year (people's behaviours can change with the time of year, although previous data suggests that the pattern can be volatile and is not always consistent between years) - the impact of this may become clearer once we have data for 2021-22 when all topics will again be asked for the full year.

It's also possible that different types of people were more or less likely to take part in the adapted survey, although this should be addressed to some extent through weighting the data.

## Smoking

Smoking is considered in more depth here, as more information is available for this, and it has seen an apparent substantial change with no change in question.

The results suggest a drop in smokers between 2019-20 and 2020-21 (irrespective of whether we look at quarter 4 or the full year). If we were seeing a genuine large drop in smokers, we'd expect to see an increase in the proportion of ex-smokers. In fact, this has remained unchanged, while the proportion saying they have never smoked has increased. Additionally, because the sample for the early months of the survey was based on re-contacting people who had previously taken part in the National Survey, it's possible to compare the responses they provided about smoking then and now. For the months May-December 2020, about 11% of those who said they had never smoked had indicated in their previous response that they were either smokers or ex-smokers. This suggests some people may have answered the question in the most recent survey differently. We cannot judge which answer best reflects their actual behaviour. It seems plausible that the change in survey mode has had an impact on responses to the smoking question, and we do not know how much, if any, of the apparent drop is real.

The [Annual Population Survey](#) (APS) is a large survey run by the Office for National Statistics (ONS) which also asks about adult smoking (but not the other healthy lifestyle behaviours). Recent trends have generally been fairly similar to NSW (and the Welsh Health Survey before that), although the proportion who report being smokers is generally slightly lower in the APS. This survey was also modified due to the pandemic (previously it was a mix of face-to-face and telephone interviews, but during the pandemic all interviews moved to telephone). Looking at pre-pandemic APS data, the proportion of smokers was lower when measured on the telephone than face-to-face. As such, when interviews moved to telephone only in April 2020, there was a sudden and implausible drop in the proportion of smokers, and ONS advise that results are no longer comparable with previous years.

## Conclusions

There are some unexpectedly large differences in adult lifestyle behaviours between NSW 2019-20 and 2020-21. It's likely these are affected at least in part by the change in survey mode and some changes to questions. These topics can be sensitive to such changes. Asking some questions for a reduced period of the year may also have had an impact. It's not possible to separate out what may be real changes and what are artificial. We recommend that results from 2020-21 for these topics should not be compared with those from earlier years. The largest impact appears to be on results for smoking and fruit and vegetable consumption, but we advise all topics should not be compared. Data for the next full year (2021-22) may provide more insight when available (likely summer 2022).

## Notes on the use of statistical articles

Statistical articles generally relate to one-off analyses for which there are no updates planned, at least in the short-term, and serve to make such analyses available to a wider audience than might otherwise be the case. They are mainly used to publish analyses that are exploratory in some way, for example:

- introducing a new experimental series of data
- a partial analysis of an issue which provides a useful starting point for further research but that nevertheless is a useful analysis in its own right
- drawing attention to research undertaken by other organisations, either commissioned by the Welsh Government or otherwise, where it is useful to highlight the conclusions, or to build further upon the research
- an analysis where the results may not be of as high quality as those in our routine statistical releases and bulletins, but where meaningful conclusions can still be drawn from the results.

Where quality is an issue, this may arise in one or more of the following ways:

- being unable to accurately specify the timeframe used (as can be the case when using an administrative source)
- the quality of the data source or data used
- other specified reasons.

However, the level of quality will be such that it does not significantly impact upon the conclusions. For example, the exact timeframe may not be central to the conclusions that can be drawn, or it is the order of magnitude of the results, rather than the exact results, that are of interest to the audience.

The analysis presented does not constitute a National Statistic, but may be based on National Statistics outputs and will nevertheless have been subject to careful consideration and detailed checking before publication. An assessment of the strengths and weaknesses in the analysis will be included in the article, for example comparisons with other sources, along with guidance on how the analysis might be used, and a description of the methodology applied.

Articles are subject to the release practices as defined by the release practices protocol, and so, for example, are published on a pre-announced date in the same way as other statistical outputs.

Missing value symbols used in the article follow the standards used in other statistical outputs, as outlined below.

- .. The data item is not available
- . The data item is not applicable
- The data item is not exactly zero, but estimated as zero or less than half the final digit shown
- \* The data item is disclosive or not sufficiently robust for publication



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