



National Survey for Wales, 2017-18

Housing: Satisfaction, energy and fire safety

12 December 2018
SB 78/2018

This bulletin covers National Survey results from 2017-18 on accommodation topics: satisfaction with accommodation, noise levels at home, energy efficiency, and fire safety. It complements findings from the [Welsh Housing Conditions Survey 2017-18](#), first results from that survey, on topics such as age and type of dwelling, were published on 6 December 2018.

Key findings

Satisfaction with accommodation

- Overall satisfaction remains the same as in 2014-15, but has fallen for private rented accommodation.



Noise

- 24% of people were bothered by noise from outside their home in the last 12 months.
- Young people were more likely to be bothered by noise than those aged 75 and over.



- Being bothered by noise is also related to anxiety levels and satisfaction with accommodation.

Energy

- 21% of people switched energy supplier, up from 14% in 2014-15.
- The most common energy efficiency measures undertaken by owner-occupiers were:
 - replacement windows and doors
 - new boiler.

Fire Safety

- 5% of households do not have a smoke alarm.



About this bulletin

This bulletin provides more detailed analysis of the 2017-18 results for questions on use of **energy efficiency and fire safety measures**, as well as **nuisance noise** experienced at home.

The full questionnaire is available on the [National Survey web pages](#).

More tables and charts of results are available in the interactive [Results viewer](#).

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Introduction

Housing has an important effect on health, education, work, and the communities in which we live. A stated aim of the Welsh Government is to help ensure that as many people as possible live in accommodation that is of a high standard. The main aims of the Housing (Wales) Act 2014 are to help provide:

- more homes
- better-quality homes
- better housing-related services.

The Act introduced new initiatives relating to all types of housing and includes:

- a compulsory registration scheme for private rented sector landlords
- reform of homelessness law, including placing a stronger duty on local authorities to prevent homelessness
- new standards for local authorities on rents, service charges and quality of accommodation
- measures to assist the provision of housing by co-operative housing associations.

Under section 21 of the Fire and Rescue Services Act 2004 Welsh Ministers must prepare a Fire and Rescue National Framework and are required to report every two years on whether Fire and Rescue Authorities (FRAs) have acted in accordance with the Framework. The Fire and Rescue National Framework 2016 focuses on three main aspects of the changing context in which FRAs deliver their services:

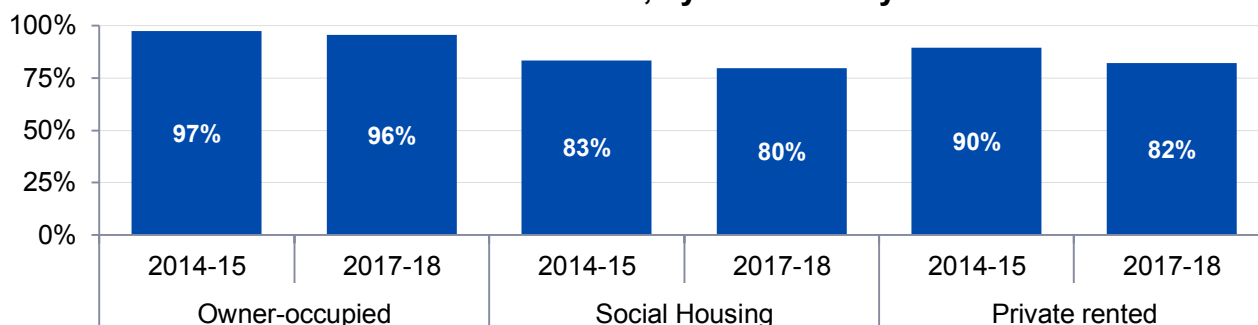
- severe medium to long-term pressure on public finances
- an aging population and a shift to community based care and the implications of these changes for the risk of fire
- potential to expand FRAs' prevention and response roles into wider community safety, as a result of the significant reduction in the number of fires in the last 10-15 years.

To help meet the needs of Welsh Government and other public sector organisations for information on housing issues, a number of questions on housing-related topics were included in the survey in 2017-18. These included questions relating to housing costs and income, to facilitate the [2017-18 Welsh Housing Conditions Survey](#). In 2017-18 the National Survey also included questions relating to noise levels. People who had lived for at least 12 months at their current address were asked whether they had regularly been bothered by noise from outside their home and the most common source of that noise. Questions from previous years were also included again in 2017-18 covering energy efficiency, fire safety and satisfaction with accommodation, allowing us to look at change over time.

Satisfaction with accommodation

In 2017-18, overall satisfaction with accommodation (91% of people were either 'fairly satisfied' or 'very satisfied') was similar to that reported in 2014-15. However, satisfaction with private rented accommodation has decreased from 90% in 2014-15 to 82% in 2017-18, as shown in Chart 1. Satisfaction levels remain lowest for people in social housing.

Chart 1: Satisfaction with accommodation, by tenure and year

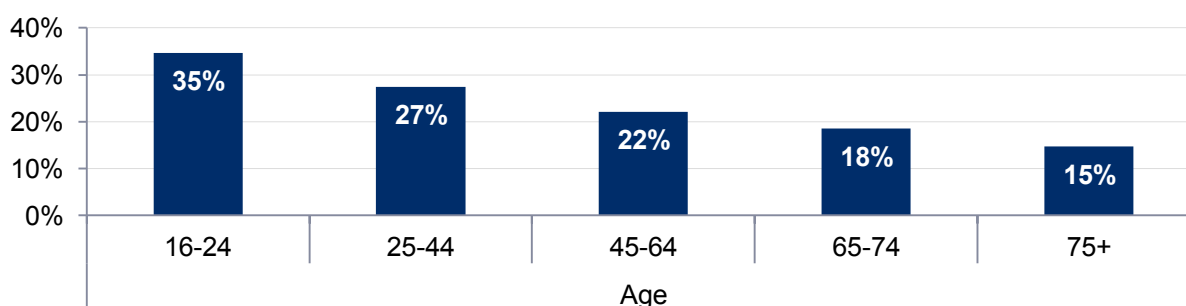


Noise

People who had lived at their home for 12 months or more were asked whether they had regularly been bothered by noise from outside their home. 24% of people had been bothered by noise in the last 12 months; of those people, 36% were bothered by neighbours inside their homes, 47% by neighbours outside, and 45% from traffic, businesses or factories.

The likelihood of being regularly bothered by noise tends to decrease with age with younger people (aged 16-24) were more likely to be bothered by noise (35%) than those aged 75 and over (15%). In a similar way, people aged 16-44 were more likely to be bothered by noise from neighbours outside their homes (55% of this age group) than those aged 65 and over (33%).

Chart 2: Regularly bothered by noise in the last 12 months, by age



People with high anxiety levels were more likely to be bothered by noise (30%) than those with lower levels of anxiety (21%). Individuals who were very satisfied with their accommodation were less likely to be bothered by noise (19%) than those who were fairly or very dissatisfied with their accommodation (44%).

People living in household material deprivation were more likely to be bothered by noise (38%) than households not in material deprivation (21%). 50% of people in material deprivation were bothered by noise from neighbours inside their homes, compared with 32% of people not in

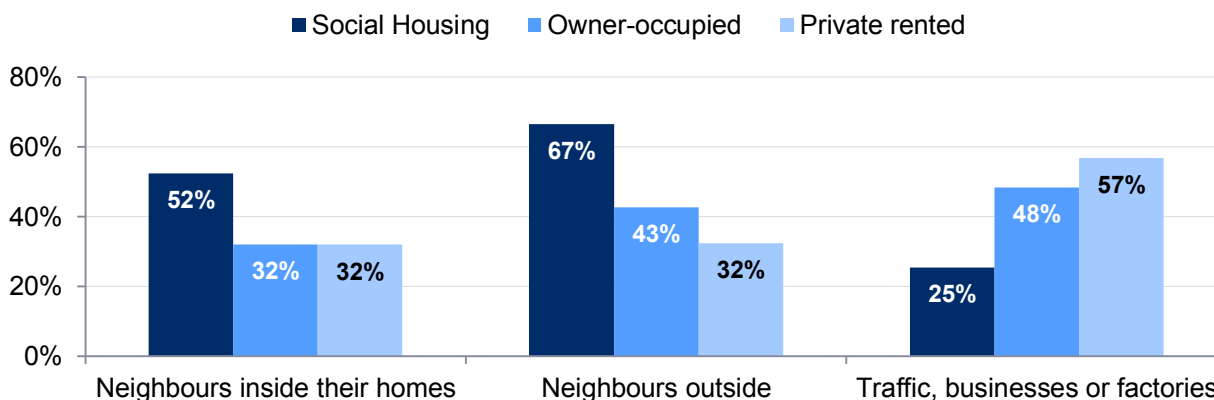
material deprivation. Also, those living in the 20% most deprived areas in Wales were more likely to be bothered by noise (34%) than those in the 20% least deprived areas in Wales (15%).

As might be expected, people living in urban areas were more likely to be bothered by noise (27%) than those living in rural areas (18%).

35% of people living in purpose-built flats were bothered by noise, 34% of people living in end-terrace houses or end-terrace bungalows were bothered by noise, 30% in a mid-terrace and 24% in a semi-detached house or bungalow. People living in detached houses were least likely to be bothered by noise from outside their home (16%). Also, those who said that their home is kept in a good state of repair were less likely to be bothered by noise (22%) than those who said their home is not in a good state of repair (40%).

People living in owner-occupied accommodation were less likely to be regularly bothered by noise (21%) than those living in social housing (32%) or private rented accommodation (32%). For those bothered by noise and living in social housing they were most likely to be bothered by neighbours outside (67%), whereas those in owner-occupied accommodation and private rented accommodation were most likely to be bothered by traffic, business or factories (48% and 57%, respectively). The full results are shown in Chart 3. However when other factors are taken into consideration tenure is not related to being bothered by noise - see under '[Further analysis – Noise](#)' below.

Chart 3: People bothered by noise, by type of noise and tenure



Similarly, the well-being of the individual may be expected to be linked with how bothered they are by noise from outside their home; but based on our analysis it appears that other factors - such as living in an urban area - may be more strongly linked to being regularly bothered by noise. 22% of those who were satisfied with their lives¹ were less likely to be bothered by noise than those who had low life satisfaction (30%). Similarly, 31% of people who had low levels of happiness² (based on measures of subjective wellbeing³) are regularly bothered by noise, compared with 23% who are very happy. 35% of people who were lonely⁴ were bothered by noise from outside their home,

¹ Satisfaction with life – see [Terms and Definitions](#)

² That is, on a scale of 0 to 10 in response to the question ‘Overall, how happy were you yesterday’ had a score between 0 and 4.

³ Subjective Well-being - see [Terms and definitions](#)

⁴ Loneliness – see [Terms and Definitions](#)

compared with 18% of people who were not lonely and bothered by noise. As with the well-being measures though it appears that other factors may be more strongly related to being bothered by noise.

Further analysis - Noise

The analysis above shows that age and area characteristics are associated with being bothered by noise from outside the home. However, these factors are often also linked to each other. To get a clearer understanding of the effect of each individual factor we used statistical methods to separate out the individual effect of each factor on people being bothered by noise. These methods allow us to look at the effect of one factor while keeping other factors constant – sometimes called “controlling for other factors”⁵. Various factors can be considered, such as age, gender, and deprivation.

Controlling for a range of other factors⁶, the following were linked to being bothered by noise from outside the home:

- being aged 16-24
- being dissatisfied with accommodation
- being in a materially deprived household
- living in an urban area
- living in terraced housing or in flats, whether purpose built or converted.

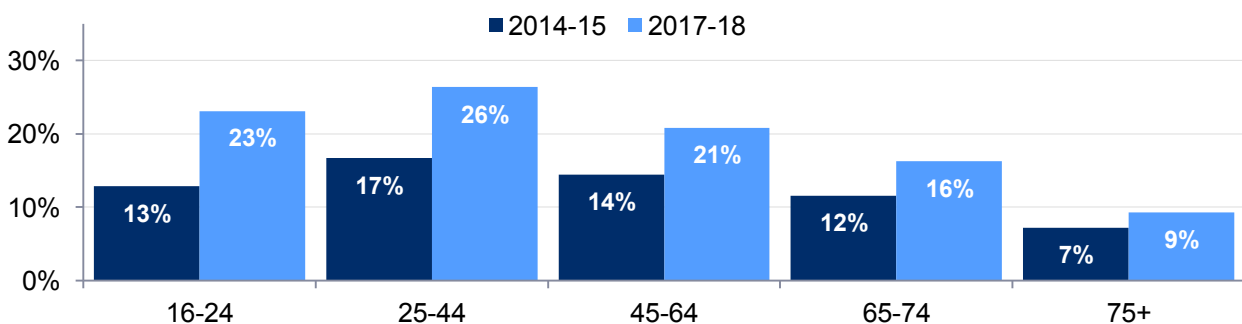
Loneliness, happiness and anxiety were not found to be strong predictors of whether people were bothered by noise. Of the factors that were found to be related to being bothered by noise, these methods of analysis do not allow us to attribute cause and effect, but do indicate that they are associated.

Energy

Switching energy supplier

The proportion of people switching energy supplier in the last 12 months has increased since 2014-15.

Chart 4: Energy supplier switching in last 12 months, by age group and year



⁵ This method is known as logistic regression. Information about the method can be found in [Regression analysis](#)

⁶ Other factors considered at the start of the analysis included gender, tenure, having a long-term limiting illness, loneliness, anxiety and happiness yesterday.

This is reflected across all ages (see Chart 4) but is more marked for those aged under 45. In 2017-18, 26% of 25 to 44 year olds switched supplier compared with 17% in 2014-15. In 2014-15 the proportion who have never switched supplier was 50%; this fell to 44% in 2017-18.

Further analysis – Switching energy supplier

Chart 4 above shows that people are now more likely to switch energy supplier than in 2014-15, regardless of age; nevertheless, some have never changed supplier (or changed tariff but remained with the same supplier). To get a clearer understanding of the effect of each individual factor, we used the same statistical methods as those used to analyse those bothered by noise to separate out the individual effect of each factor on never switching supplier.⁷ These methods allow us to look at the effect of one factor while keeping other factors constant – sometimes called “controlling for other factors”.⁸ As with the previous analysis, whilst these factors were found to be related to not switching energy supplier, these methods do not allow us to attribute any cause and effect, but do indicate that they are associated.

This analysis showed that each of the following factors is associated with people never switching energy supplier:

- living in private rented or social housing
- being aged 75 or over
- living in a settlement with fewer than 2,000 people
- living in a rural area
- having no qualifications
- having no dependent children
- very low level of anxiety.

Energy saving measures

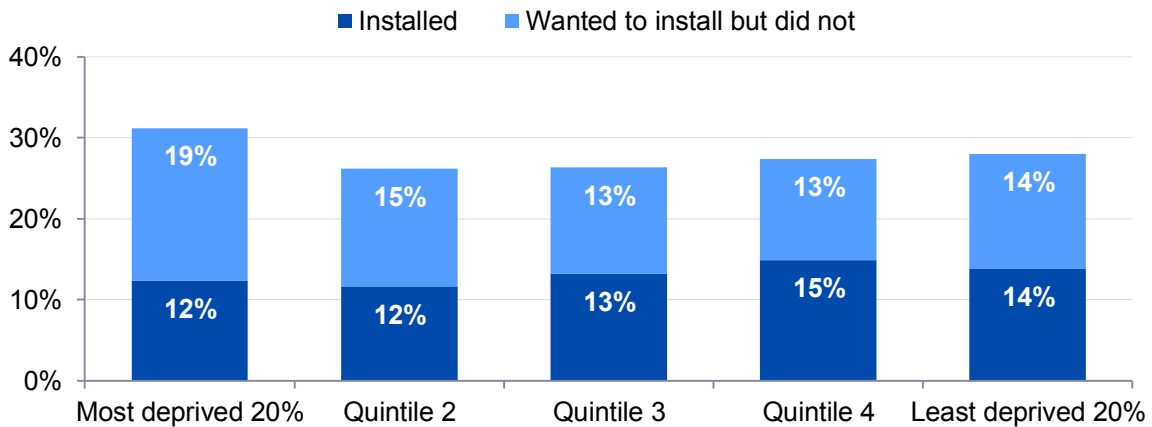
Owner-occupiers were asked whether they had undertaken any energy-saving measures in the past year – 31% said they had. Selecting from a list of possible energy-saving measures people were most likely to have installed replacement windows or external doors (13%) or a new boiler (10%). Other measures were less popular, such as improved heating controls (9%), and loft or floor insulation (6% and 5% respectively). They were also less likely to have installed renewable energy measures such as solar panels (2%). 69% of households had not done any of these things in the last 12 months. There was unmet demand for energy-saving measures. Whilst installing replacement windows and external doors was the most commonly undertaken measure (13%) a similar proportion of people wanted to install them but did not (14%). Chart 5 shows that installation levels for owner-occupiers are similar regardless of area deprivation and that in all areas as many

⁷ The factors that were included at the start of the regression analysis were: gender, age, economic status, local health board, urban/rural categories, material deprivation, WIMD areas of deprivation, tenure of housing type, anxious yesterday, limiting long term illness, and limited a lot by illness (see [Terms & definitions](#)).

⁸ This method is known as logistic regression. Information about the method can be found in [Regression analysis](#)

people (or more) wanted to install new windows and doors but had not done so. The same pattern but with lower proportions was shown for those who wanted to install a new boiler but did not.

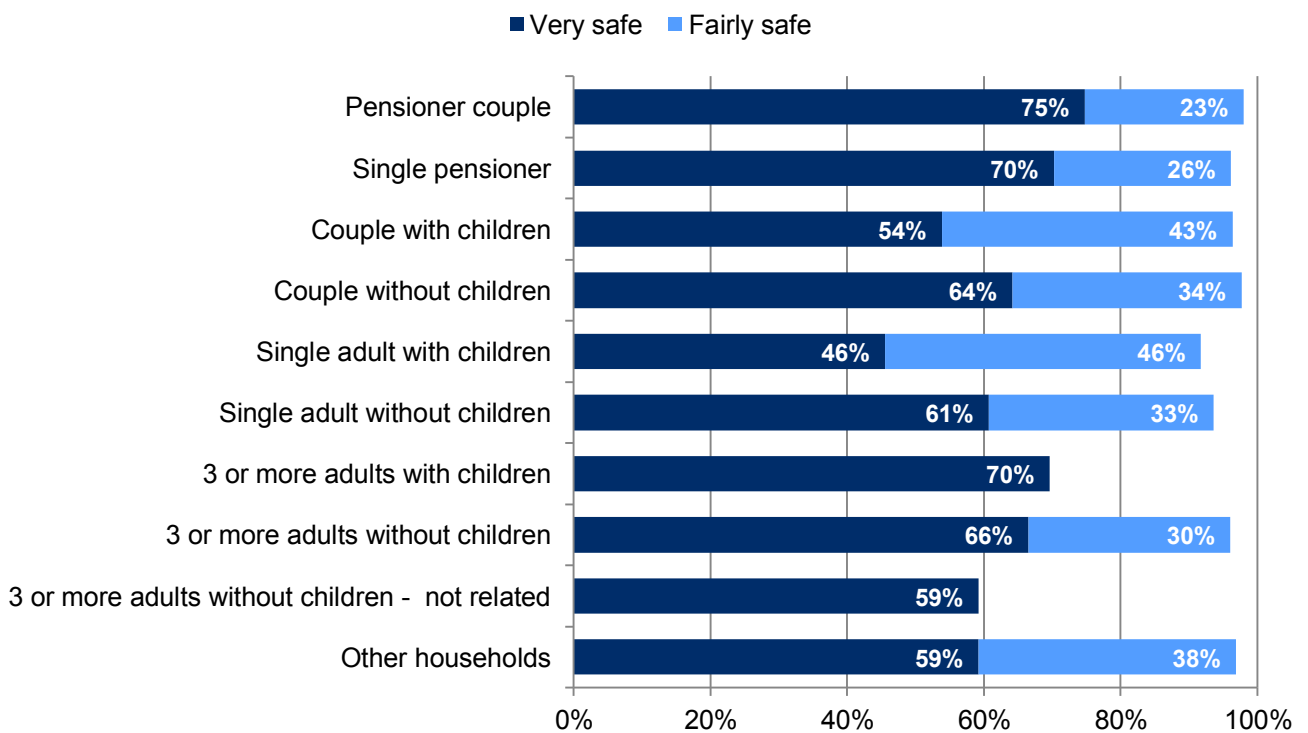
Chart 5: Installed or wanted to install new windows or external doors, by area deprivation



Fire safety

Over 90% of people say they feel 'fairly safe' or 'very safe' from the risk of fire in their own homes, with the majority feeling very safe. However the proportion of people in household material deprivation who felt 'very safe' (52%) was lower than those not in material deprivation (67%). Similarly the proportion who felt 'very safe' varied by household type, as shown in Chart 6: 75% of pensioner couples felt very safe compared with 46% of single adult households with children.

Chart 6: Feeling safe from fire by household type



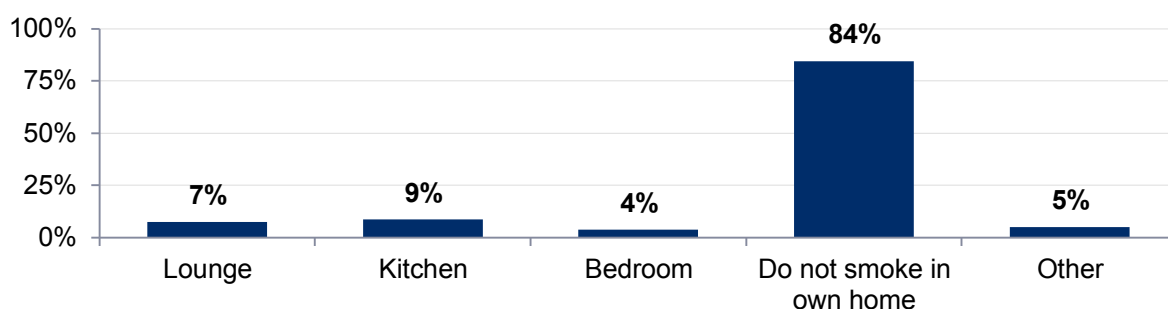
Further analysis – Fire safety

Using the same approach and the same set of factors as the previous analysis, we looked at which groups felt ‘very safe’ from the risk of fire in their own home. When controlling for other factors, feeling ‘very safe’ was found to be related to not being in material deprivation. This is to be expected given the high proportion of those not in material deprivation who felt ‘very safe’, as highlighted above. Feeling ‘very safe’ was also found to be more associated with pensioner households and very low levels of anxiety. Feeling ‘very safe’ from fire was less associated with single adult households with children and found to be unrelated to age, gender, and community safety quintile⁹, as defined by the Welsh Index of Multiple Deprivation.

Smoking in own home

Smoking is a potential risk to fire safety and is more hazardous depending on where it occurs in the home. To understand people’s perception of domestic fire safety we also asked whether people smoke at home, and where. Most people (84%) (whether smokers or not) do not smoke in their own home as shown in Chart 7. In homes where smoking does occur, it is more likely in the kitchen/lounge than the bedroom. 51% of smokers do not smoke inside their own home.

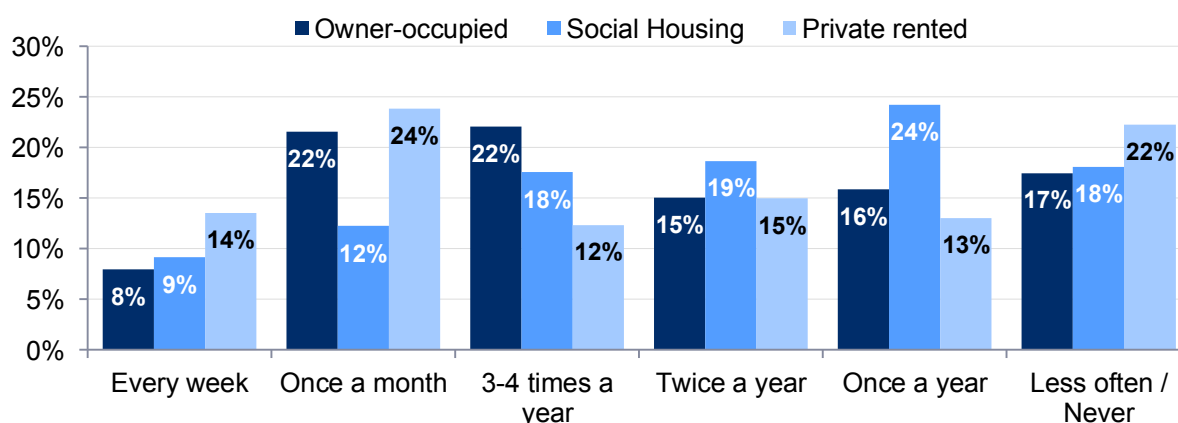
Chart 7: Smoking in own home, all respondents



Smoke alarms

In 2017-18, 5% of households had no smoke alarm – this proportion has not changed since 2012-13. 91% of people said they check smoke alarms less often than once a week. For people in social housing, the most commonly-selected answer was “once a year” whereas for owner-occupied and private rented accommodation monthly checks were most likely (see Chart 8).

Chart 8: Frequency of smoke alarm checking, by tenure



⁹ See [Welsh Index of Multiple Deprivation](#) for more information.

Terms and definitions

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. Deprivation 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. For this bulletin, we have grouped the people living in the 20% of LSOAs that are most deprived based on WIMD score and compared them against the 20% of the LSOAs that are least deprived. – see also Material Deprivation below.

Urban / rural

“Urban” includes settlements with a population of 10,000 or more. “Rural” includes all other areas.

Material deprivation

Material deprivation is a measure which is designed to capture the consequences of long-term poverty on households, rather than short-term financial strain.

Non-pensioner adults were asked whether they had things like ‘a holiday away from home for at least a week a year’, ‘enough money to keep their home in a decent state of decoration’, or could ‘make regular savings of £10 a month or more’. The questions for adults focussed on whether they could afford these items. These items are really for their ‘household’ as opposed to them personally which is why they were previously called ‘household material deprivation’.

Pensioners were asked slightly different questions such as whether their ‘home was kept adequately warm’, whether they had ‘access to a car or taxi, when needed’ or whether they had their hair done or cut regularly’. These also asked whether they could afford them, but also focussed on not being able to have these items for other reasons, such as poor health, or no one to help them etc. these questions were less based on the household and more about the individual.

Those who did not have these items were given a score, such that if they didn’t have any item on the list, they would have a score of 100, and if they had all items, they had a score of 0. Non-pensioners with a score of 25 or more were classed as deprived and pensioners with a score of 20 or more were classed as deprived.

Parents of children were also asked a set of questions about what they could afford for their children.

In this bulletin the non-pensioner and pensioner measures of deprivation are combined to provide an ‘adult’ deprivation variable. The terms ‘adult’ and ‘household’ deprivation may be used interchangeably depending on context.

Subjective well-being

Respondents were asked to reply to a series of questions concerning their feelings on aspects of their lives, scoring their responses on scales of 0 to 10, where 0 indicates 'not at all' and 10 represents 'completely'. The following four questions were asked:

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

For life satisfaction, worthwhileness of life and happiness scales, scores 0-4 were classed as low, 5-6 as medium, 7-8 as high, and scores 9-10 as very high. For anxiety the scale was grouped so that scores 0-1 were classed as very low, scores 2-3 as low, 4-5 as medium and scores 6-10 as high levels of anxiety.

Key quality information

Background

The National Survey for Wales is 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 2017-18 (1 April 2017 – 31 March 2018).

The sample was drawn from the Royal Mail Small Users Postcode Address File (PAF), whereby all residential addresses and types of dwellings were included in the sample selection process as long as they were listed as individual addresses. If included as individual addresses on the PAF, residential park homes and other dwellings were included in the sampling frame but community establishments such as care homes and army barracks are not on the PAF and therefore were not included.

The National Survey sample in 2017-18 comprised 23,517 addresses chosen randomly from the PAF. Interviewers visited each address, randomly selected one adult (aged 16+) in the household, and carried out a 44-minute face-to-face interview with them, which asked for their opinions on a wide range of issues affecting them and their local area. A total of 11,381 interviews were achieved.

Interpreting the results

Percentages quoted in this bulletin are based on only those respondents who provided an answer to the relevant question. Some topics in the survey were only asked of a sub-sample of respondents and other questions were not asked where the question is not applicable to the respondent. Missing answers can also occur for several reasons, including refusal or an inability to answer a particular question.

Where a relationship has been found between two factors, this does not mean it is a causal relationship. More detailed analysis is required to find whether a factor causes change in another.

The results are weighted to ensure that the results reflect the age and sex distribution 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.

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. 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 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.

Significant differences

Where the text of this release notes a difference between two National Survey results (in the same year), we have checked to ensure that the confidence intervals for the two results do not overlap. This suggests that the difference is statistically significant (but as noted above, is not as rigorous as carrying out a formal statistical test), i.e. that there is less than a 5% (1 in 20) chance of obtaining these results if there is no difference between the same two groups in the wider population.

Checking to see whether two confidence intervals overlap is less likely than a formal statistical test to lead to conclusions that there are real differences between groups. That is, it is more likely to lead to "false negatives": incorrect conclusions that there is no real difference when in fact there is. It is also less likely to lead to "false positives": incorrect conclusions that there is a difference when there is in fact none. Carrying out many comparisons increases the chance of finding false positives. Therefore, when many comparisons are made the conservative nature of the test is an advantage because it reduces (but does not eliminate) this chance.

Where National Survey results are compared with results from other sources, we have not checked that confidence intervals do not overlap.

Regression analysis

Where further analysis has been carried out selection of the initial variables used in the regression was based on; the results from cross-analysis, policy direction, and the practicality of using the variable. The results for some factors were only available for a sub-sample of respondents, or

there were a large number of 'missing' results which resulted in a substantial drop in the sample size on which the regression model could be tested. For this reason some variables/factors were omitted from the investigation.

The final models consisted of those factors that remained significant even after holding the other factors constant. These significant factors are those that have been discussed in this bulletin and the use of regression analysis is indicated by the statement that we have 'controlled for other factors'. It is worth noting that had a different range of factors been available to consider from the survey, then some conclusions about which factors were significant may have been different.

More details on the methodology used in the regression analysis in this report are available in the [Technical Report: Approach to regression analysis and models produced](#).

Technical report

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

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.

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.

Further details

The document is available at: <http://gov.wales/statistics-and-research/national-survey/?lang=en>

Next update

Not a regular output

We want your feedback

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

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