



## Fuel poverty estimates for Wales 2018: Headline results

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This release provides headline estimates of the number and percentage of households in Wales in fuel poverty as defined by the Welsh Government's [fuel poverty strategy 2010](#) (see definition below). These are the first estimates of fuel poverty since 2016<sup>1</sup> which were modelled on the [Living In Wales Property Survey 2008 estimates](#). The methodology used to produce these figures is broadly comparable with that used to produce the 2008 estimates. These headline figures are being published ahead of detailed analysis, to meet user need/interest.

**Detailed analysis including trends over the years will be published in the summer. This will be accompanied by a detailed methodology report.**

### Key Results

In 2018:

- 155,000 households in Wales were living in fuel poverty, equivalent to 12% of households.
- 32,000 households were living in severe fuel poverty<sup>2</sup>, equivalent to 2% of households.
- 130,000 vulnerable<sup>3</sup> households in Wales were living in fuel poverty, equivalent to 11% of vulnerable households.
- 19,000 vulnerable households were living in severe fuel poverty<sup>2</sup>, equivalent to 2% of vulnerable households.

**In Wales, a household is defined as being in fuel poverty if they would have to spend more than 10 per cent of their income on maintaining a satisfactory heating regime. Any household having to spend more than 20 per cent is defined as being in severe fuel poverty.**

### About this release

This release uses the results from the [Welsh Housing Conditions survey](#) 2017-18, the [National Survey for Wales](#) 2017-18 and fuel price data to produce national level estimates for the number and percentage of households and vulnerable households in Wales living in fuel poverty and severe fuel poverty.

**These are the headline results, a more detailed report will be published in the summer.**

### In this release

<a href="#">Background Information</a>	2
<a href="#">Comparability with previous estimates</a>	2
<a href="#">Method</a>	3
<a href="#">Fuel Poverty in Wales</a>	4
<a href="#">Key Quality Information</a>	5

<sup>1</sup> [The production of estimated levels of fuel poverty in Wales](#)

<sup>2</sup> The sample sizes for severe fuel poverty are small and these estimates are not considered as robust as those for fuel poverty.

<sup>3</sup> A vulnerable household is defined as those with a person aged 60 years or over, a child or young person under the age of 16 years and/or a person who is disabled or has a long term limiting condition.

## Background information

A household is regarded as being in fuel poverty if they are unable to keep their home warm at a reasonable cost. In Wales, this is measured as any household that would have to spend more than 10 per cent of their income on maintaining a satisfactory heating regime, as defined by the World Health Organisation (WHO). This requires a minimum indoor temperature of 21 degrees centigrade in living areas and 18 degrees centigrade in other areas. Any household having to spend more than 20 per cent is defined as being in severe fuel poverty.

In 2010 the Welsh Government set targets to eradicate fuel poverty as far as reasonably practicable:

- in vulnerable households by 2010
- in social housing by 2012
- in all households by 2018.

Vulnerable households are defined as those with a person aged 60 years or over, a child or young person under the age of 16 years and/or a person who is disabled or has a long term limiting condition.

The Welsh Government has committed to consult on a new plan to tackle fuel poverty in the autumn of 2019, with the intention of publishing a final revised plan early in 2020.

## Comparability with previous estimates

The last comprehensive estimates of fuel poverty levels in Wales were for 2008, produced using the [Living in Wales Property Survey 2008](#) data. Those estimates used the above definitions of fuel poverty, vulnerable households and satisfactory heating regime. The method used to produce the figures in this 2018 release is consistent with that used for the 2008 figures, so broad comparisons can be made. There has, however, been a change in the SAP methodology since the 2008 statistics were produced (see Key Quality Information).

In 2016<sup>4</sup> some additional research was undertaken which used the 2008 base data, together with updated information on fuel costs and incomes and modelling of energy efficiency installations to predict estimated levels of fuel poverty up to 2016. At this time the heating regime was changed to be 23 degrees centigrade in living areas for households with older people or people with disabilities or chronic illnesses, and the definition of vulnerable households was expanded to include households containing young people under 25. The 2018 fuel poverty estimates are therefore not comparable with the levels estimated in the 2016 research.

More information on comparability and change over time will be provided in the detailed report in the summer.

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<sup>4</sup> [The production of estimated levels of fuel poverty in Wales](#)

## Method

The estimates of households in fuel poverty in Wales have been calculated for Welsh Government by the Building Research Establishment (BRE). BRE produce fuel poverty estimates for England and Northern Ireland, and assist in producing Scotland's estimates.

There are three main components used in the calculations of fuel poverty. These are:

- Annual household incomes
- Household fuel prices
- Annual required household energy use.

Annual household incomes are based on the [National Survey for Wales](#). In 2017-18, if the respondent was the Household Reference Person (HRP)<sup>5</sup>, or their spouse/partner, a detailed set of income and housing cost questions<sup>6</sup> were asked. Data from the [Welsh Housing Conditions Survey](#) (WHCS) inspections are used to establish the energy efficiency of the home and, therefore, how much energy is required to heat it to the WHO heating regime. To estimate household fuel costs, BRE take the required energy consumption of the household and combine this with the known fuel price for the method of payment<sup>7</sup> used by the household and the location of that household in Wales.

A household that needs to spend more than 10 per cent of their income on maintaining a satisfactory heating regime is defined as being in fuel poverty. Any household having to spend more than 20 per cent is defined as being in severe fuel poverty.

Further high level information on the methodology used to produce these estimates can be found in Annex 1. A full methodology report will be published alongside the detailed analysis of the Fuel Poverty estimates in the summer.

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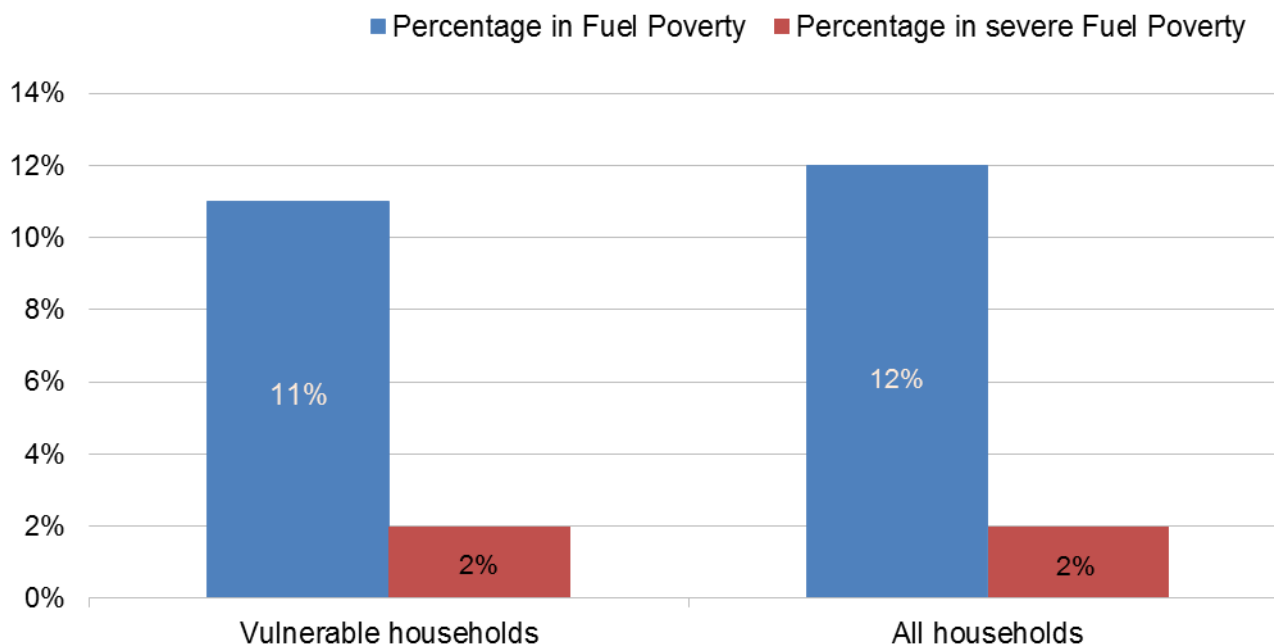
<sup>5</sup> HRP is the respondent in whose name the property is owned or rented. If jointly owned/rented, the HRP is the highest earner. If more than one person jointly owns/rents and they earn the same, the HRP is the eldest of these people.

<sup>6</sup> [National Survey for Wales: questionnaires](#)

<sup>7</sup> e.g. direct debit, prepayment meter etc.

## Fuel Poverty in Wales

Chart 1: Percentage of households in fuel poverty in Wales, 2018<sup>8</sup>



In 2018:

- 155,000 households were living in fuel poverty (12% of all households), 84% of these were vulnerable households.
- 32,000 households were living in severe fuel poverty<sup>9</sup> (2% of all households), 59% of these were vulnerable households.

The 2008 and 2018 fuel poverty statistics use the same methodology and the same definitions for satisfactory heating regime and vulnerable households, so broad comparisons can be made. The percentage of households in fuel poverty has decreased from 26% in 2008. Initial indications show that this is a result of increased household incomes and reduced household energy requirements due to energy efficiency improvements outweighing increases in fuel prices.

The 2016 fuel poverty estimates<sup>10</sup> provided an estimate of 23% of households in fuel poverty, however as they used some different definitions for the satisfactory heating regime and vulnerable households, they are not comparable.

Further discussion of the factors affecting fuel poverty levels and updates for previous estimates following changes in the SAP methodology will be provided in the report to be published in the summer.

<sup>8</sup> Figures have been rounded to the nearest whole percentage.

<sup>9</sup> The sample sizes for severe fuel poverty are small and these estimates are not considered as robust as those for fuel poverty.

<sup>10</sup> [The production of estimated levels of fuel poverty in Wales](#)

## **Next steps**

Detailed analysis of Fuel Poverty estimates are due in summer. The intention is to cover:

- comparisons with other UK Nations,
- changes over time, and
- a more detailed discussion on the factors influencing fuel poverty – income, fuel prices and energy efficiency, and how these have changed since the previous estimates were produced.

The Welsh Government has committed to consult on a new plan to tackle fuel poverty in the autumn of 2019, with the intention of publishing a final revised plan early in 2020.

## Key quality information

This section provides a summary of Welsh Housing Conditions Survey (WHCS) and the National Survey for Wales quality information. Please note that a detailed **Quality Report** on WHCS statistics has been published on the [WHCS website](#), which measures quality against five dimensions: Relevance, Accuracy and Reliability, Timeliness and Punctuality, Accessibility and Clarity, and Comparability and Coherence. A Summary [Quality report](#) for the National Survey 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.

## Background to the National Survey for Wales 2017-18

The National Survey for Wales is carried out by the Office for National Statistics on behalf of the Welsh Government. For the National Survey for Wales 2017-18, 23,517 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. A total of 11,381 interviews were achieved with a response rate of 54.5%.

The information on income and housing costs used to calculate fuel poverty in this Release are based on interviews completed between 1 July 2017 and 31 March 2018. If the respondent was the HRP, or their spouse/partner, a detailed set of income and housing cost questions were asked.

More information on the method is available in the [technical report](#).

## Background to the WHCS 2017-18

There was a critical gap in the Welsh Government's knowledge about housing conditions in Wales. The last comprehensive collection of data on housing conditions in Wales prior to the WHCS 2017-18 was the Living in Wales Property Survey in 2008. In June 2016 permission and funding was given for the [Housing Conditions Evidence Programme \(HCEP\)](#). The Programme is managed by Knowledge and Analytical Services (KAS) within the Welsh Government and encompasses two work streams:

- The Welsh Housing Conditions Survey (WHCS) 2017-18, and
- The [Housing Stock Analytical Resource Wales](#) (HSAR): Essentially a repository capturing a range of data on the characteristics, fabric, condition and energy efficiency of the housing stock in Wales. Where possible at individual property level.

The WHCS was carried out by the [Building Research Establishment](#) (BRE) on behalf of the Welsh Government. Fieldwork ran from August 2017 to April 2018. Property inspections were carried out by qualified surveyors, who performed a visual assessment of the interior and exterior of the property. The inspections lasted around 40-50 minutes, with around 20 minutes spent inside on a room by room inspection. The surveyor also inspected the plot of the property and made an assessment of the local neighbourhood. For full details of the topics included in the Survey see the Survey Form, available on the [WHCS website](#).

A sample of addresses was drawn from eligible households taking part in the [National Survey for Wales](#) 2017-18. A total of 2,549 full WHCS surveys were achieved across the 22 local authorities of Wales which enables national level estimates. A consent rate of 58% was achieved by the National Survey for Wales interviewers, and of those, a conversion rate of 78% was achieved by the BRE surveyors. The overall response rate was 45%.

Detailed information on the methodology used in the WHCS can be found in the survey technical report, available on the [WHCS website](#).

### **How are Fuel Poverty estimates used?**

Fuel Poverty estimates are used by Welsh Government and other organisations to help target resources and measures to improve energy efficiency of homes across Wales. The Welsh Government's [Fuel Poverty Strategy 2010](#) sets out the actions taken to reduce fuel poverty in Wales and the latest estimates will inform the new plan to help target fuel poverty.

### **Who are the users of Fuel Poverty estimates?**

Fuel poverty estimates are used for policy making purposes by the Welsh Government mainly in the areas of housing and environment, but also social policy needs. There are a wide range of other users including: Welsh Government Sponsored Bodies; local authorities across Wales; Public Health Wales; Third Sector Organisations; housing associations, charities; other UK government departments and local government organisations; other public sector organisations; academics; private companies; the media; and members of the public.

### **Strengths and Limitations**

Detailed information on the strengths and limitations of Fuel Poverty Estimates will be provided in the methodology report which will be published in the summer.

### **Coherence**

Whilst each UK nation produces estimates of fuel poverty, it should be noted that each UK nation uses its own definition of fuel poverty, and as such fuel poverty statistics are not comparable across the nations. Further analysis of these fuel poverty estimates will be published in the summer which will look at how and where comparisons can be made.

Links to other UK Fuel Poverty Statistics

[English fuel poverty statistics](#)

[Scottish fuel poverty statistics](#)

[Northern Ireland fuel poverty statistics](#)

## **Changes to SAP (Standard Assessment Procedure) methodology for energy efficiency performance**

The Standard Assessment Procedure (SAP) is the methodology used by the Government to assess and compare the energy of dwellings.

SAP works by assessing how much energy a dwelling will consume, when delivering a defined level of comfort and service provision. The assessment is based on standardised assumptions for occupancy and behaviour. This enables a like-for-like comparison of dwelling performance. The ratings are expressed on a scale between 1 and 100, where 100 represents no energy cost. The SAP methodology has been through two major updates since the 2005 version used for the Living in Wales Property Survey 2008 modelling, first to SAP 2009 and then SAP 2012. In addition, the Reduced Data SAP (RdSAP) methodology for SAP 2012 was updated in November 2017.

## **National Statistics status**

The [United Kingdom Statistics Authority](#) has designated statistics from the Welsh Housing Conditions Survey and the National Survey for Wales as National Statistics, in accordance with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Statistics](#). The assessment reports can be viewed on the Office for Statistical Regulation webpages:

[Statistics from the Welsh Housing Conditions Survey](#)

[Statistics from the National Survey for Wales](#)

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: <https://gov.wales/fuel-poverty-estimates-wales-2018>

## **Next update**

Detailed fuel poverty analysis will be published in summer 2019.

## **We want your feedback**

We welcome any feedback on any aspect of these statistics which can be provided by email to [stats.housingconditions@gov.wales](mailto:stats.housingconditions@gov.wales).

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