



Welsh Housing Conditions Survey 2017-18: headline report (updated)

18 Feb 2020
SFR 10/2020

This report has been updated since publication on 6 December 2018 to include updated figures for England and Scotland. Please see [update note](#).

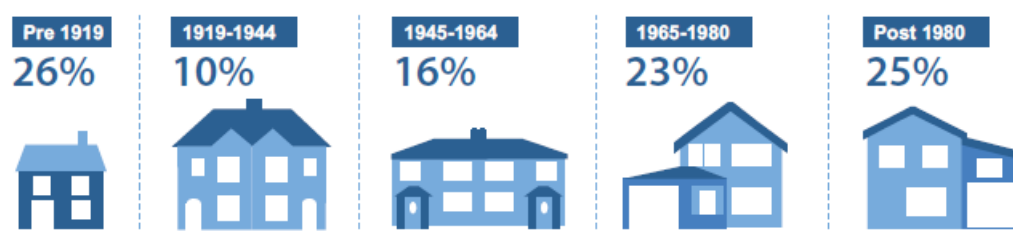
The Welsh Housing Conditions Survey (WHCS) 2017-18 collected information about the condition and energy efficiency/performance of all types of housing in Wales. The Survey included all tenures, but not vacant dwellings. This release contains only a selection of results; more detailed tables of results have been published on the [WHCS webpage](#), and further analysis on specific topics will be published from early 2019.

Welsh Housing Quality Standard figures have not been included in this release. A detailed topic report will be published in due course to ensure that appropriate interpretation and context for users is provided.

Unless otherwise stated differences discussed within this release are statistically significant.

Main points

- Since the last survey in 2008 housing conditions across all tenures in Wales have improved.
- Wales has the oldest housing stock in the UK, with a similar spread of housing types.



- The proportion of dwellings in the private rented sector has increased considerably since 1986. The private rented sector generally has the oldest housing stock and a higher proportion of poor quality housing (e.g. containing damp or other hazards).
- Social housing is generally of better quality than private housing (both owner occupied and private rented); as are newer houses.
- The average energy efficiency band has improved from Band E in 2008 to Band D in 2017-18.

About this release

This release provides national headline results from the Welsh Housing Conditions Survey (WHCS) 2017-18.

More information about methodology, topics and definitions can be found in [Key Quality Information](#).

The survey form, materials, Quality Report, Technical Report and details of future releases are available on the [WHCS webpage](#).

In this release

Background	2
Housing stock profile	2
Housing stock condition	6
Policy context	16
Appendix A: Structural defects	18
Appendix B: Housing Health & Safety Rating System	19
Key Quality Information	21

Background

The sample for the Welsh Housing Conditions Survey (WHCS) 2017-18 came from the [National Survey for Wales](#). Non-invasive inspections were carried out by qualified surveyors in 2,549^(r) properties across Wales between August 2017 and April 2018. The data has been weighted to be representative of the housing stock in Wales.

This is the first release of data from the WHCS 2017-18 and provides an overview of the survey's findings at a national level. More detailed tables of results have been published to accompany this analysis in the WHCS Results Viewer available on the [WHCS webpage](#). This will be expanded as more analysis is published. Detailed, national level, topic reports will be published from early 2019.

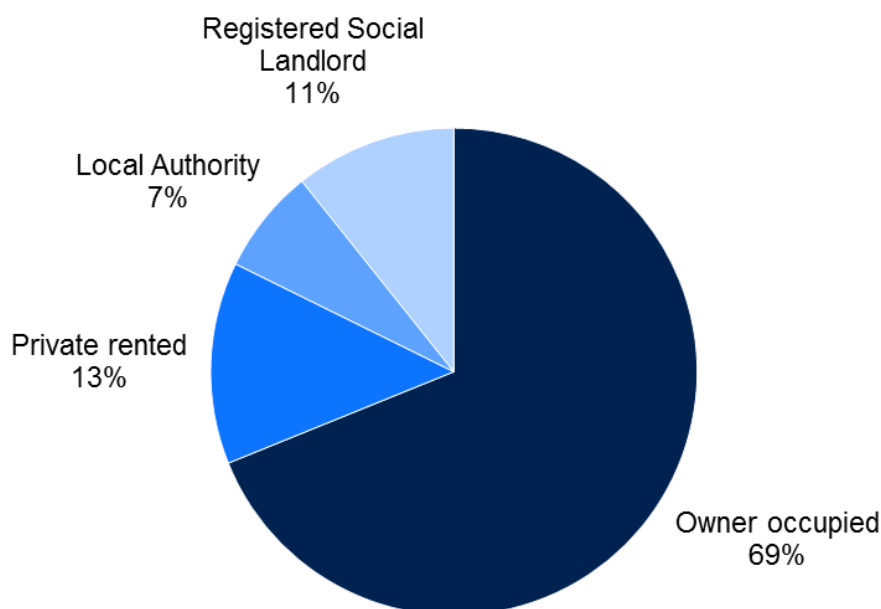
The WHCS is very much a standard housing conditions survey and where appropriate it has been adapted to meet the needs of housing policy in Wales. It is very similar to those previously conducted in Wales and those of other UK nations. Where possible, comparisons to other UK nations have been made, using the most up to date data available at the time of preparing the publication.

For relevant housing policy context see page 17.

Housing stock profile

Tenure

Chart 1: Tenure, Wales, 2017-18

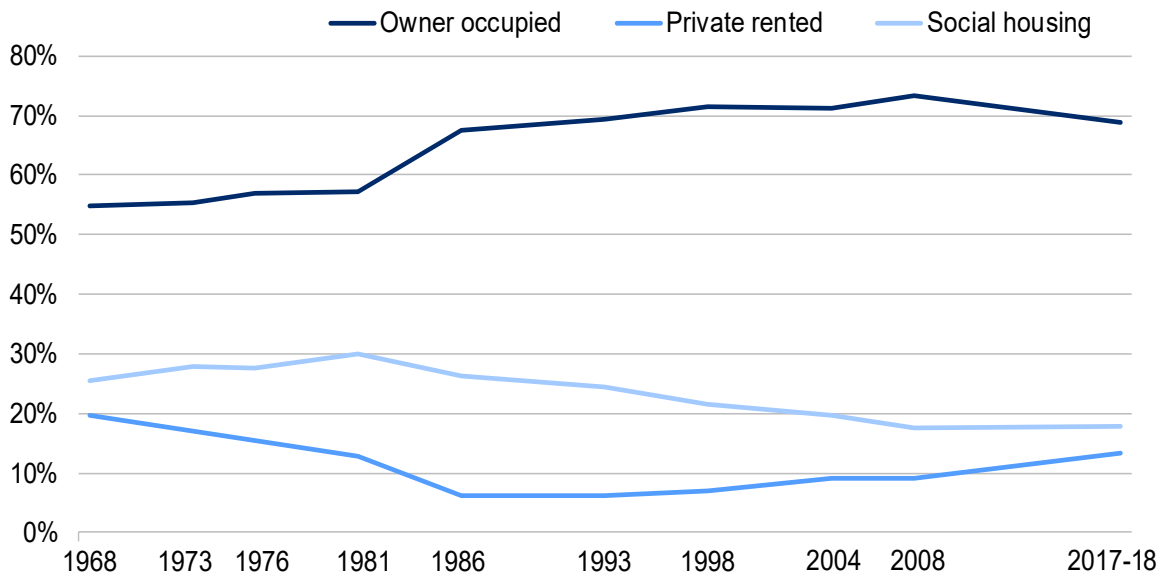


Source: Welsh Housing Conditions Survey 2017-18

^(r) Please note the figure previously shown of 2,449 inspections carried out was incorrect. This was revised on 5th February 2019 and now shows the correct figure of 2,549.

69 per cent of dwellings in Wales were owner occupied in 2017-18: the lowest rate since 1993 and a decrease of 4 percentage points compared with 2008. In contrast, the percentage of privately rented dwellings was at its highest level since 1981 at 13 per cent, but remains lower than the social rented sector (those rented from local authorities or registered social landlords). There is a similar picture across the UK, however the private rented sector is larger than the social rented sector in England and Northern Ireland.¹

Chart 2: Tenure, Wales, 1968 to 2017-8



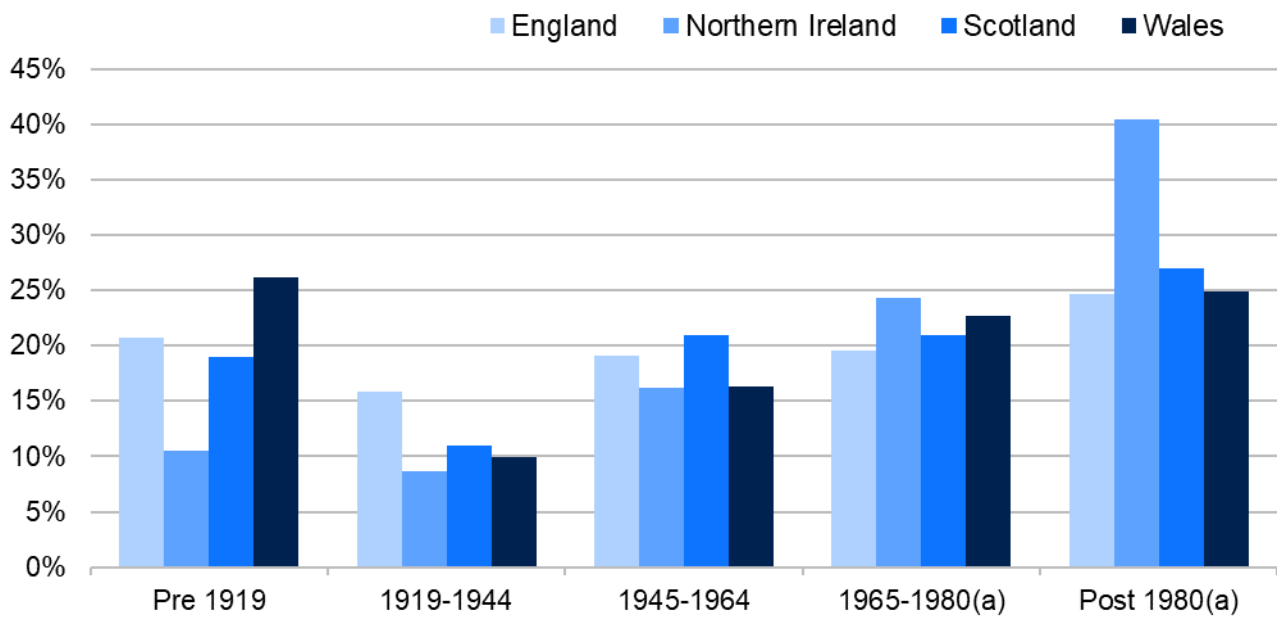
Source: Welsh Housing Conditions Survey 2017-18

Age of dwelling

Wales has the oldest dwelling stock in the UK with over a quarter of all dwellings (26 per cent) built prior to 1919, compared with just 10 per cent in Northern Ireland. In contrast, Northern Ireland has the most modern dwelling stock with 40 per cent of dwellings built since 1980.

¹ Sources: English Housing Survey 2017-18, Scottish House Condition Survey 2018, Northern Ireland House Condition Survey 2016

Chart 3: Age of dwelling by UK nation

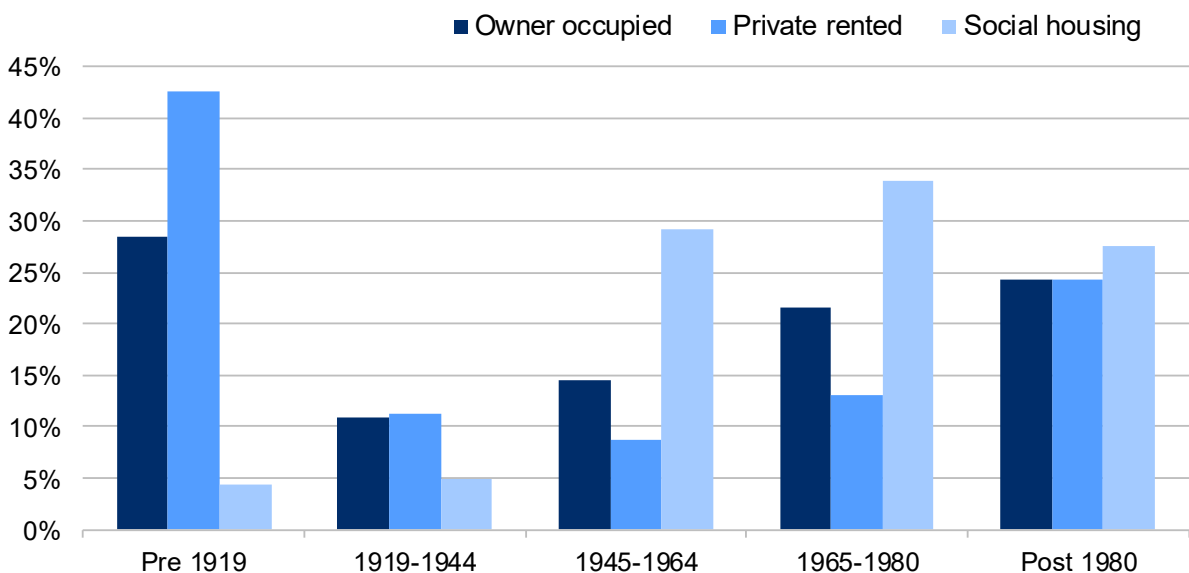


Sources: Welsh Housing Conditions Survey 2017-18
 English Housing Survey 2017-18
 Scottish House Condition Survey 2018
 Northern Ireland House Condition Survey 2016

(a) Scotland figures relate to 1965-1982 and Post 1982

The private rented sector has the oldest stock with 43 per cent of privately rented dwellings built prior to 1919. 91 per cent of the social housing stock was built after the Second World War.

Chart 4: Age of dwelling by tenure, Wales, 2017-18

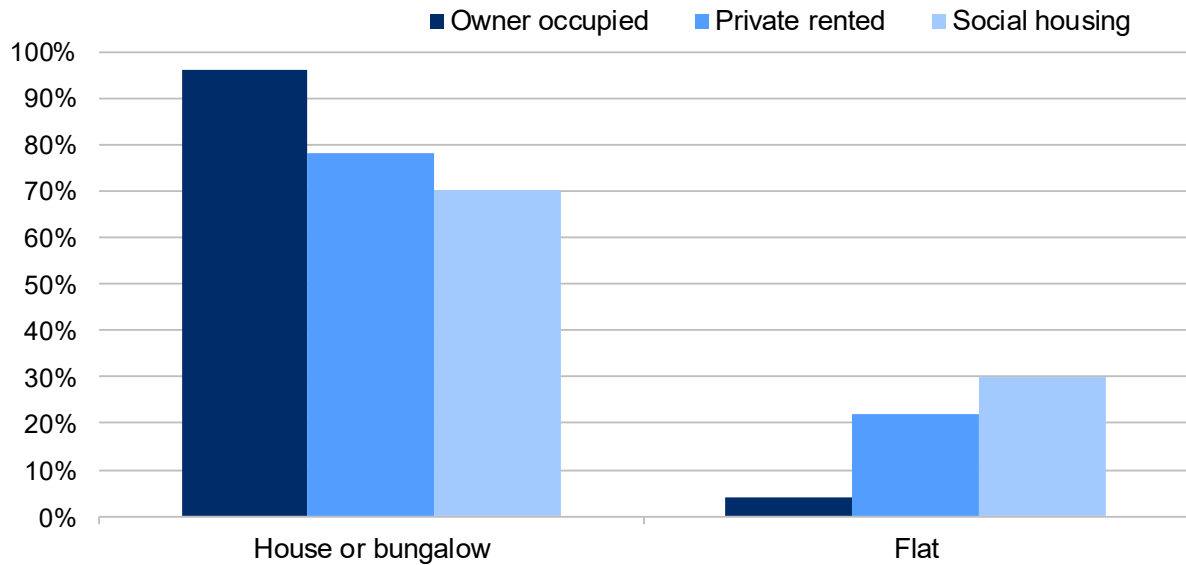


Source: Welsh Housing Conditions Survey 2017-18

Type of dwelling

30 per cent of all social housing dwellings in Wales were flats in 2017-18 compared with just 4 per cent of owner occupied dwellings.

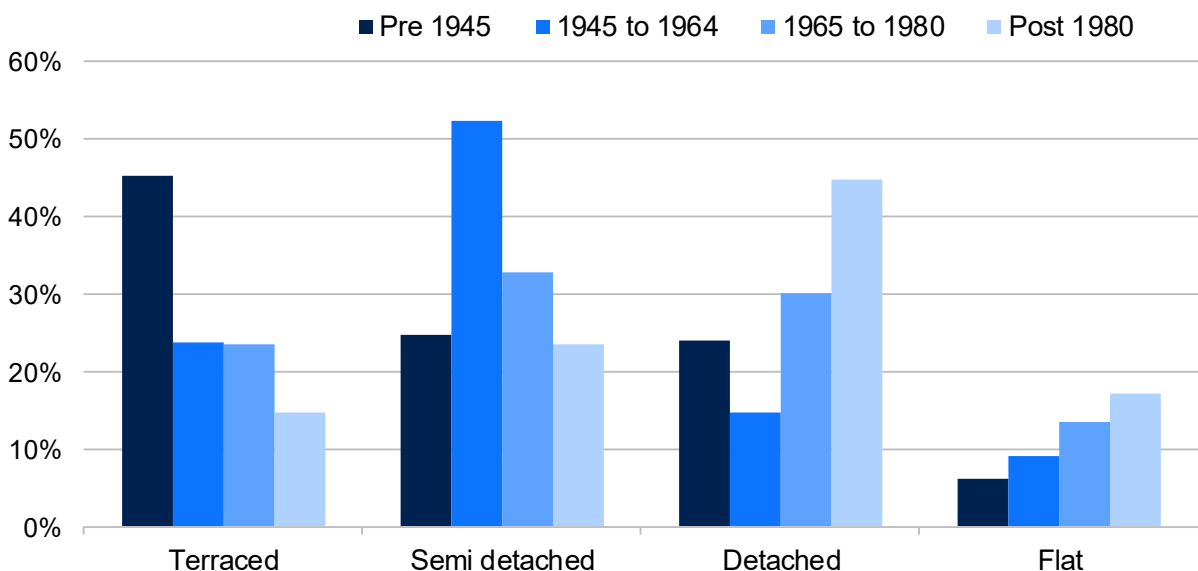
Chart 5: Type of dwelling by tenure, Wales, 2017-18



Source: Welsh Housing Conditions Survey 2017-18

Dwelling type varies over time: 45 per cent of all dwellings built before 1945 were terraced houses, compared with the following two decades where over half of all dwellings built were semi-detached. More modern, post 1980 constructions, were mostly detached properties and flats.

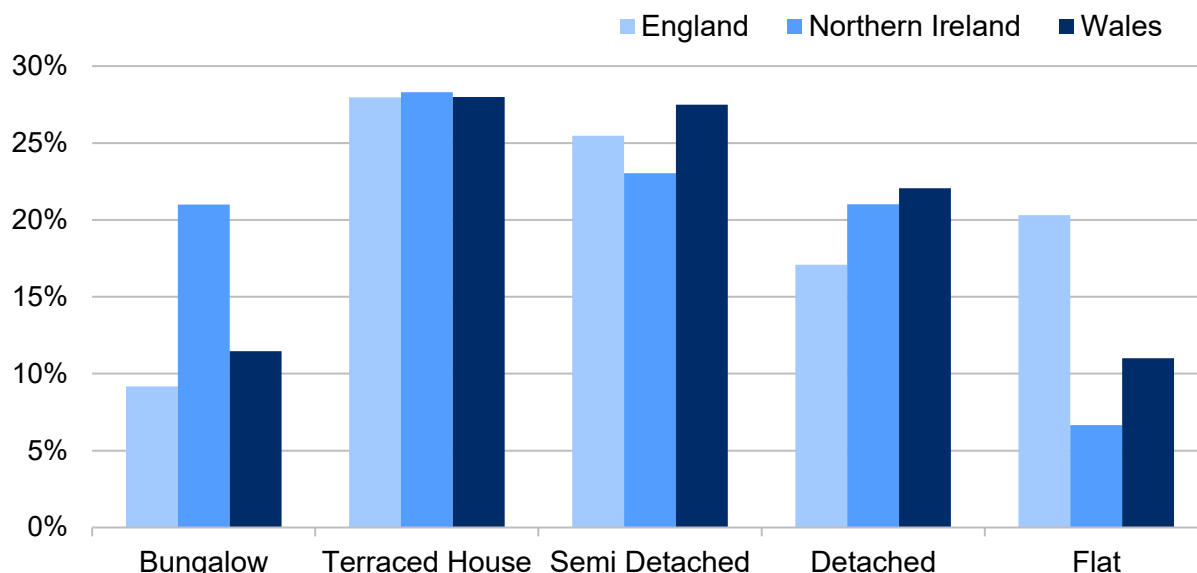
Chart 6: Type of dwelling by age, Wales, 2017-18



Source: Welsh Housing Conditions Survey 2017-18

11 per cent of the Welsh dwelling stock were flats compared with 20 per cent in England² and 36 per cent in Scotland³ (other comparable figures are not available as Scotland do not collect separate information on bungalows). Bungalows made up over a fifth of Northern Ireland's dwelling stock at 21 per cent.

Chart 7: Type of dwelling by UK nation



Sources: Welsh Housing Conditions Survey 2017-18
 English Housing Survey 2017-18
 Northern Ireland House Condition Survey 2016

Housing stock condition

Energy efficiency of dwellings

The [Standard Assessment Procedure](#) (SAP) is the methodology used by the Government to assess and compare the energy and environmental performance 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.

SAP ratings are divided into bands from A to G. These are the bands used for [Energy Performance Certificates](#) (EPC). The highest values (i.e. the highest levels of energy efficiency) are assigned to band A and the lowest values are assigned to band G.

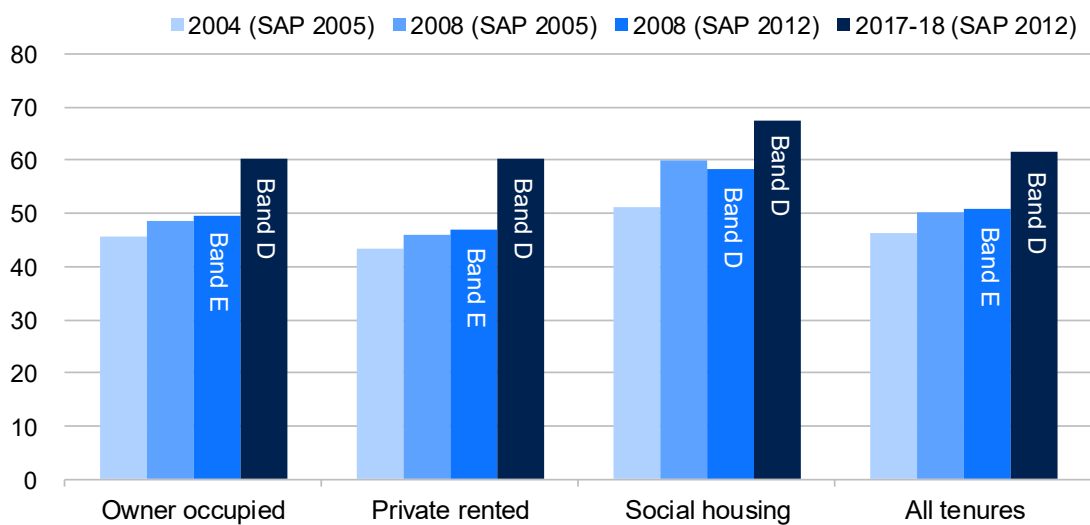
² English Housing Survey 2017-18

³ Scottish House Condition Survey 2018

The 'SAP 2012' methodology was used in the Welsh Housing Conditions Survey 2017-18. For further information see the Glossary on the [WHCS webpage](#).

The average SAP rating for a residential dwelling in Wales was 61, which is equivalent to an EPC band D. The average for social rented dwellings was 68 (EPC band D), whilst owner occupied and private rented dwellings both averaged 60 (EPC band D). SAP 2012 was calculated on the Living in Wales Property Survey 2008 data to enable trend analysis. Overall, the average SAP rating increased by 11 SAP points between 2008 and 2017-18 and the private rented sector showed the biggest increase in SAP ratings during this time of 13 SAP points.

Chart 8: Average SAP rating by tenure, Wales, 2004, 2008, 2017-18

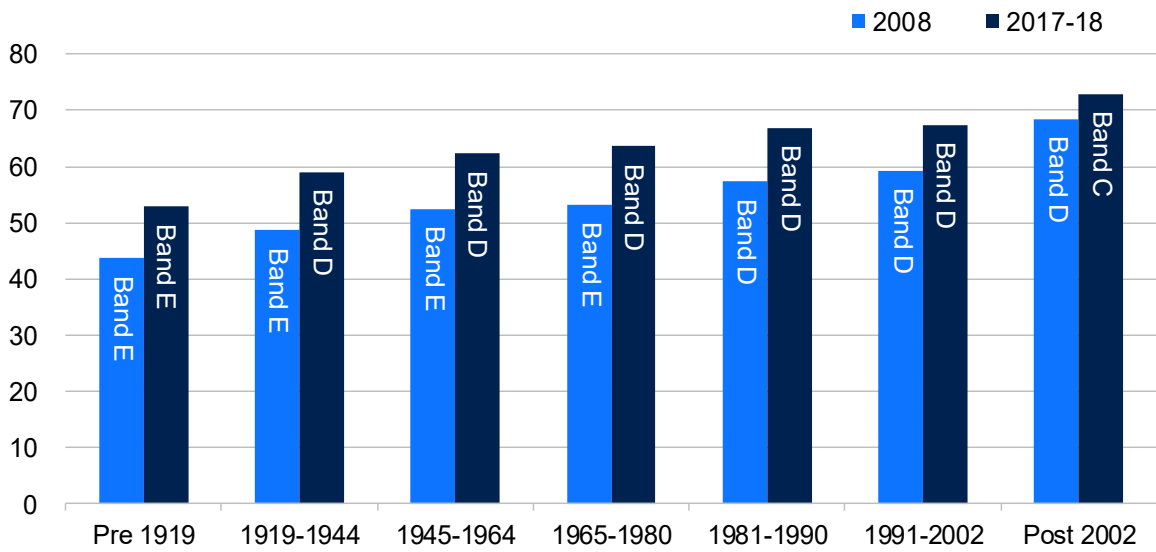


Sources: Welsh Housing Conditions Survey 2017-18
Living In Wales Property Survey 2004 & 2008

The SAP methodology has been through two major updates since the 2005 version originally used for the Living in Wales Property Survey 2008 data. In addition, the RdSAP methodology for SAP 2012 was updated in November 2017. This series of updates along with continual improvements to the models, have introduced numerous changes to the way SAP is calculated. Most changes will affect each tenure in a similar way however because social housing has a different profile to private housing (e.g. more insulated cavity walls) the mean SAP of the 2008 data dropped slightly when calculated using SAP 2012. Full details can be found in the [Key Quality Information](#).

In 2017-18, the average SAP rating for all dwellings in England was 62. The average SAP rating in Scotland was 65 in 2018 and in Northern Ireland it was 65 in 2016. The differences in energy efficiency between the UK nations could be attributed, at least in part, to the age and or type of the dwelling stock: Wales has the oldest stock and the lowest average SAP rating; Northern Ireland has the newest stock and the highest average SAP rating.

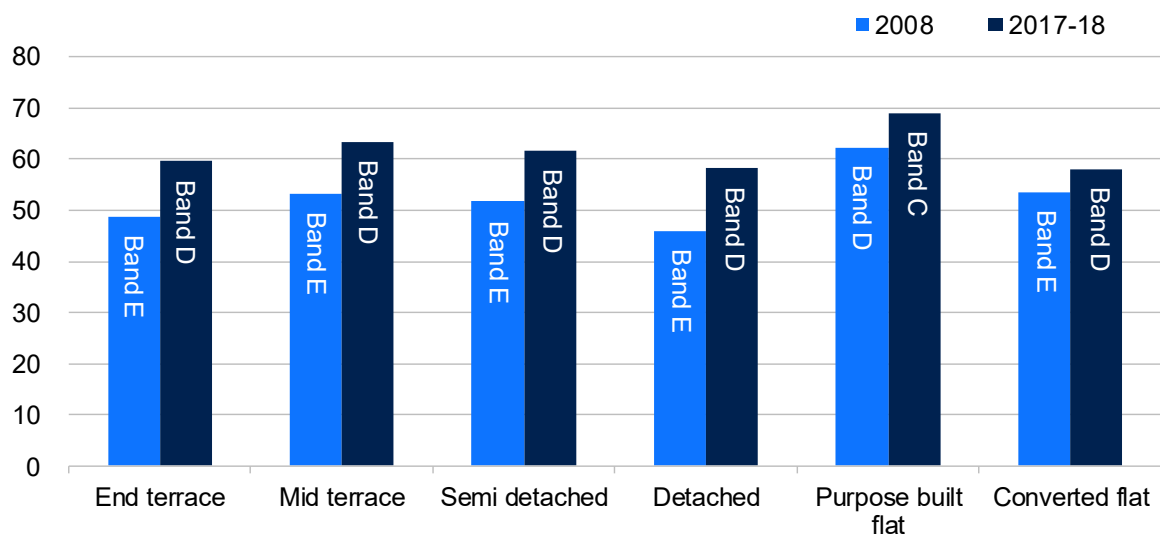
Chart 9: Average SAP rating by age of dwelling (SAP 2012), Wales, 2008, 2017-18



Sources: Welsh Housing Conditions Survey 2017-18
Living In Wales Property Survey 2008

As would be expected the age of a dwelling is strongly related to its energy efficiency, with older dwellings having much lower SAP ratings. Dwellings built since 2002 had an average SAP rating of 73 compared with an average SAP rating of just 53 for dwellings built prior to 1919. Dwellings of all ages showed an overall increase in their average SAP rating between 2008 and 2017-18. The lowest increase of 5 SAP points was for dwellings built since 2002; however this changed their band from a D to a C rating, the only age category within this band.

Chart 10: Average SAP rating by type of dwelling (SAP 2012), Wales, 2008, 2017-18



Sources: Welsh Housing Conditions Survey 2017-18
Living In Wales Property Survey 2008

The energy efficiency of a dwelling also differs according to the type of dwelling. In 2017-18 purpose built flats had the highest average SAP rating, increasing by 7 SAP points since 2008 to an average rating of 69, and moving them into band C. Detached dwellings had the lowest average SAP rating in 2008 but showed the biggest increase (12 SAP points) in 2017-18 which changed their band from an E to a D rating.

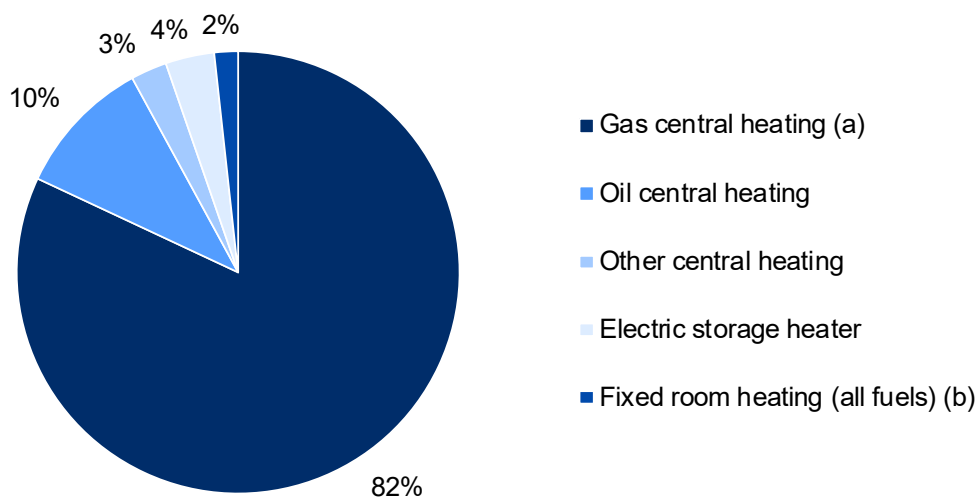
Detailed analysis on the energy efficiency of dwellings including heating and energy measures is planned for publication in early 2019.

Heating

95 per cent of dwellings in Wales used central heating to heat their homes in 2017-18.

The proportion of dwellings in Wales with gas central heating⁴ was 82 per cent, compared with 85 per cent in England⁵ and just 24 per cent in Northern Ireland (67 per cent of dwellings in Northern Ireland had oil central heating)⁶. At the time of publication there was no comparable figure for Scotland, however 81 per cent of Scottish dwellings⁷ used mains gas as the primary heating fuel compared with 80 per cent of dwellings in Wales.

Chart 11: Heating system and main fuel type, Wales, 2017-18



(a) Includes mains gas, bulk LPG and bottled gas (propane) Source: Welsh Housing Conditions Survey 2017-18

(b) For example, gas fires, coal fires, log burners, electric fires

⁴ Includes mains gas, bulk LPG and bottle gas (propane).

⁵ English Housing Survey 2017-18

⁶ Northern Ireland House Condition Survey 2016

⁷ Scottish House Condition Survey 2018

Housing Health and Safety Rating System

The Housing Health and Safety Rating System (HHSRS) is a risk-based evaluation tool to help local authorities identify and protect against potential risks, and hazards, to health and safety from any deficiencies identified in dwellings. It is used to determine whether residential premises are safe to live in, or whether a hazard exists that may cause harm to the health and safety of a potential occupant.

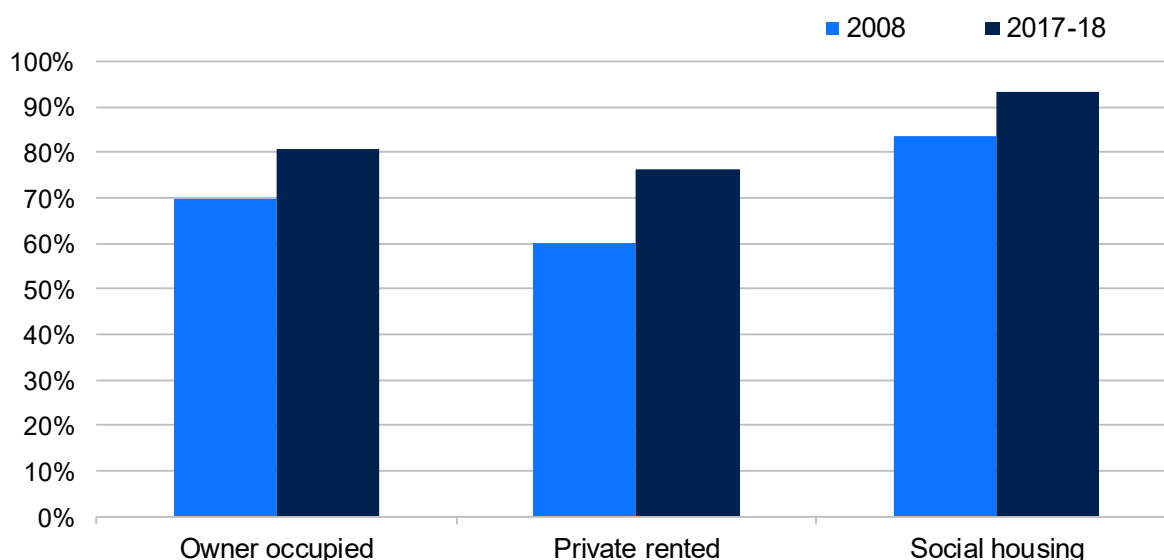
The System assesses 29 types of housing hazard and provides a rating for each one. Those which score high on the scale (and are therefore the greatest risk) are called category 1 hazards – if, after a local authority inspection, a dwelling contains a category 1 hazard the local authority has a duty to take the appropriate enforcement action. Those that fall lower down the scale and pose a lesser risk are called category 2 hazards – when these occur the local authority may take enforcement action.

Full details of the measurement and modelling of these hazards can be found in the Survey Technical Report on the [WHCS webpage](#). A list of the hazards and their measured/modelled status is provided in [Appendix B](#).

Detailed analysis of the Survey assessment of HHSRS is planned for publication in early 2020

82 per cent of dwellings were free from category 1 hazards in 2017-18, compared with 71 per cent in 2008. Social housing had the highest rate of dwellings free from category 1 hazards (93 per cent), with private rented the lowest (76 per cent), although the difference between private rented and owner-occupied was not statistically significant. All tenures showed an improvement on 2008, with private rented showing the greatest improvement. It should be noted that only 16 of the 29 hazards were assessed in 2008, whilst 26 were assessed in 2017-18.

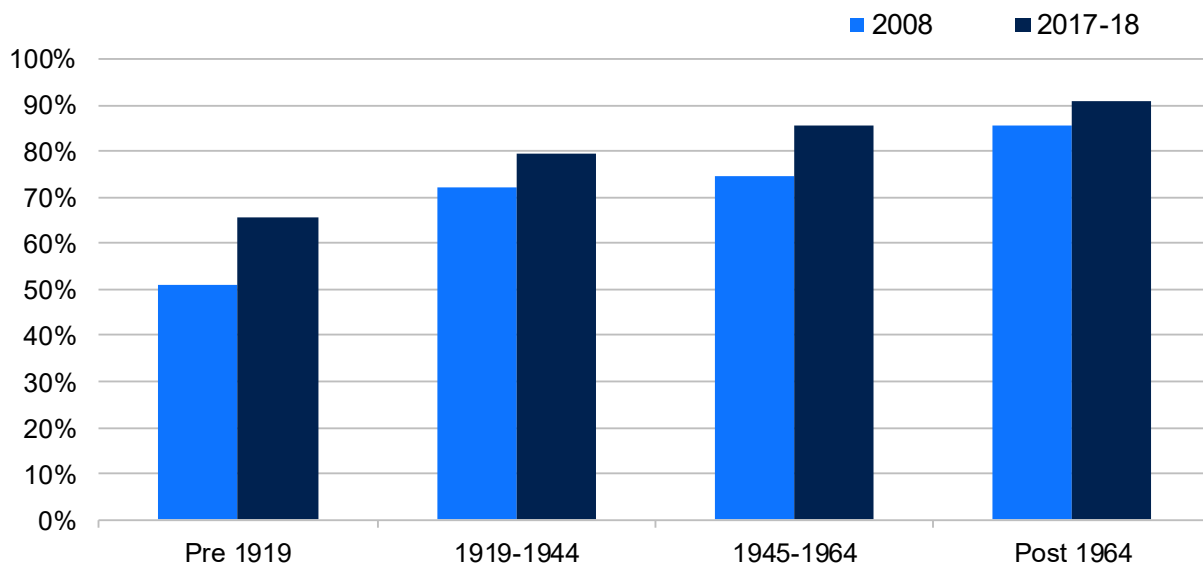
Chart 12: Dwellings free from category 1 hazards by tenure, Wales, 2008, 2017-18



Sources: Welsh Housing Conditions Survey 2017-18
Living In Wales Property Survey 2008

Newer dwellings were more likely to be free from category 1 hazards. In 2017-18, more than 9 in 10 dwellings built after 1964 were free from one category 1 hazards compared with around two-thirds of dwellings built before 1919. Dwellings of all ages have seen an improvement since 2008, with dwellings built before 1919 improving the most.

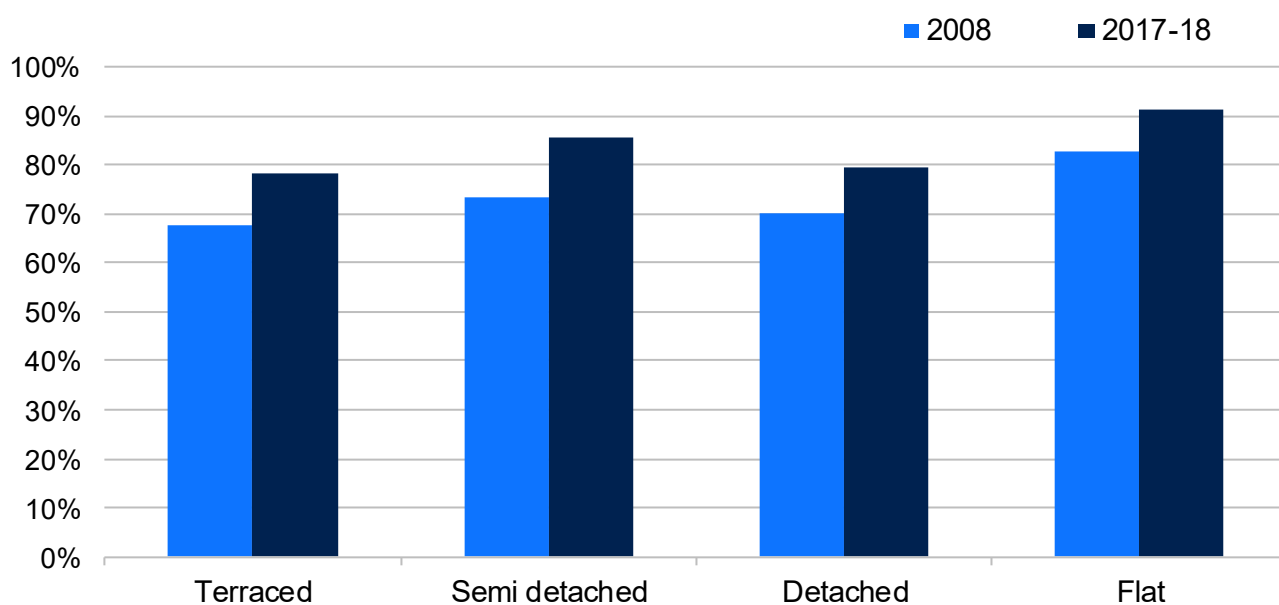
Chart 13: Dwellings free from category 1 hazards by dwelling age, Wales, 2008, 2017-18



Sources: Welsh Housing Conditions Survey 2017-18
Living In Wales Property Survey 2008

Flats were more likely to be free from category 1 hazards than houses. This is, in part, due to newer buildings being less likely to contain category 1 hazards; most flats were built after 1980 whereas a large proportion of terraced houses were built prior to 1919.

Chart 14: Dwellings free from category 1 hazards by dwelling type, Wales, 2018, 2017-18



Source: Welsh Housing Conditions Survey 2017-18

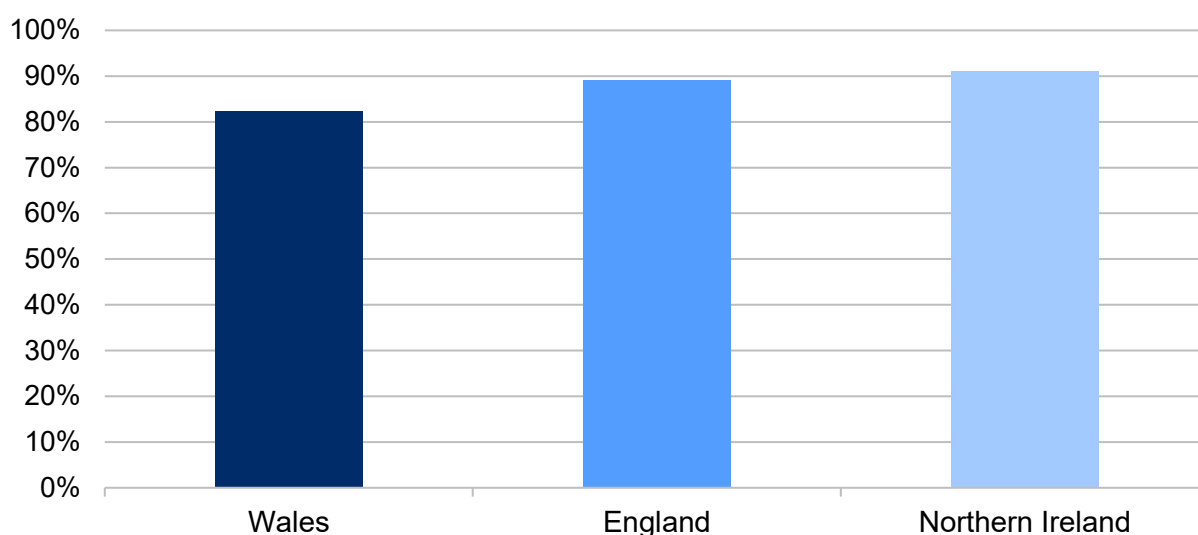
Comparisons with other published HHSRS statistics for Wales

The Welsh Government publishes statistics collected from local authorities on their own assessments of dwellings under HHSRS. These are available on the Housing hazards and Licences [webpage](#). Local authorities carried out around 6,300 HHSRS assessments in 2017-18 and while these cover all residential premises, most assessments are made on private sector housing. An assessment may be carried out by a local authority for a number of reasons. For example, an HHSRS assessment is carried out when licensing a house in multiple occupation or when a complaint about a property is received from the occupier or a neighbour. This information is not comparable with the WHCS assessment as it only covers those residential dwellings which were assessed by local authorities during the reporting year and not all residential dwellings in that year.

UK Comparisons

89 per cent of dwellings in England were free from category 1 hazards in 2017-18⁸. As in Wales, the private rented sector had the lowest rate of dwellings free from category 1 hazards in England (86 per cent). Although HHSRS is not formally adopted in Northern Ireland, in 2016 91 per cent of all dwellings were free from category 1 hazards⁹. Owner-occupied dwellings had the lowest rate of dwellings free from category 1 hazards in Northern Ireland. Scotland does not have a comparable measure for the health and safety of dwellings.

Chart 15: Dwellings free from category 1 hazards, by UK nation (a)



Sources: Welsh Housing Conditions Survey 2017-18
English Housing Survey 2017-18
Northern Ireland House Condition Survey 2016

(a) Comparable figure not available for Scotland

⁸ English Housing Survey 2017-18

⁹ Northern Ireland House Condition Survey 2016

Detailed analysis of the Survey assessment of HHSRS is planned for publication in early 2020.

Carbon monoxide detectors

46 per cent of dwellings had a working carbon monoxide detector.

Smoke detectors

54 per cent of dwellings had a working mains-powered smoke detector on each floor.

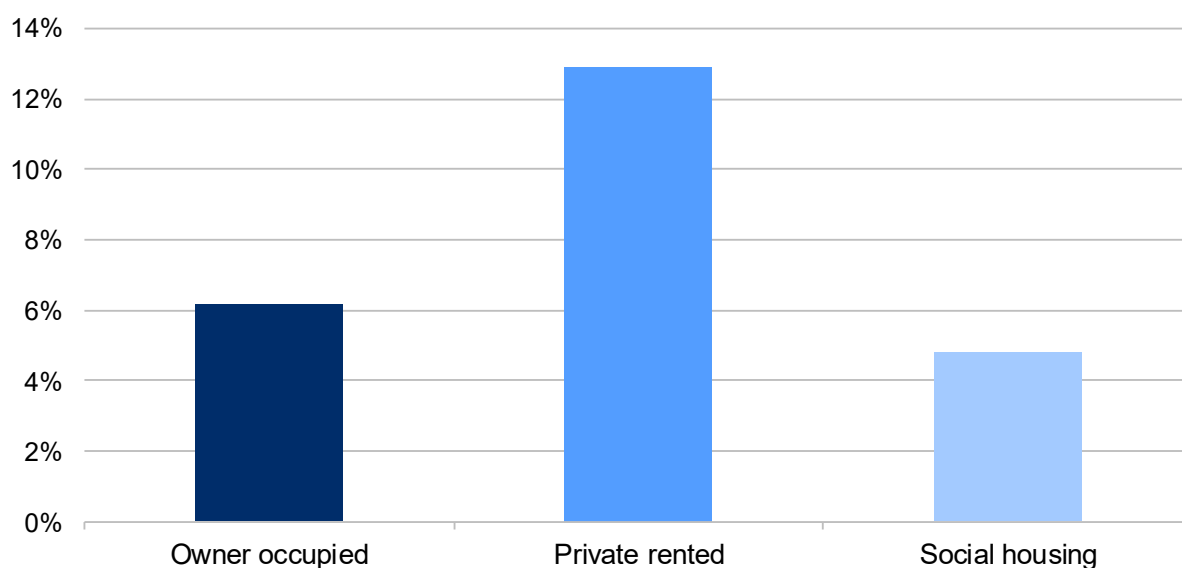
Water meters

42 per cent of dwellings had a water meter present. Owner-occupied dwellings had the highest rate of water meters present (44 per cent), followed by private rented (40 per cent). Social housing had the lowest rate (33 per cent), although differences between tenures were not statistically significant.

Damp

93 per cent of dwellings were free from any form of condensation, mould or damp in 2017-18. Of the 7 per cent that did have damp, privately rented dwellings had the highest prevalence. 13 per cent of all privately rented dwellings had damp issues in one or more rooms.

Chart 16: Presence of damp, mould or condensation, by tenure, Wales, 2017-18



Source: Welsh Housing Conditions Survey 2017-18

Condensation, rising or penetrating damp can cover anything from a small damp patch or area of condensation/mould on a single wall in one room (caused for example by ineffective ventilation whilst cooking) to prevalence throughout a dwelling. Therefore presence of damp or condensation does not necessarily indicate a serious housing condition issue.

- Penetrating damp was found in 4 per cent of all dwellings.

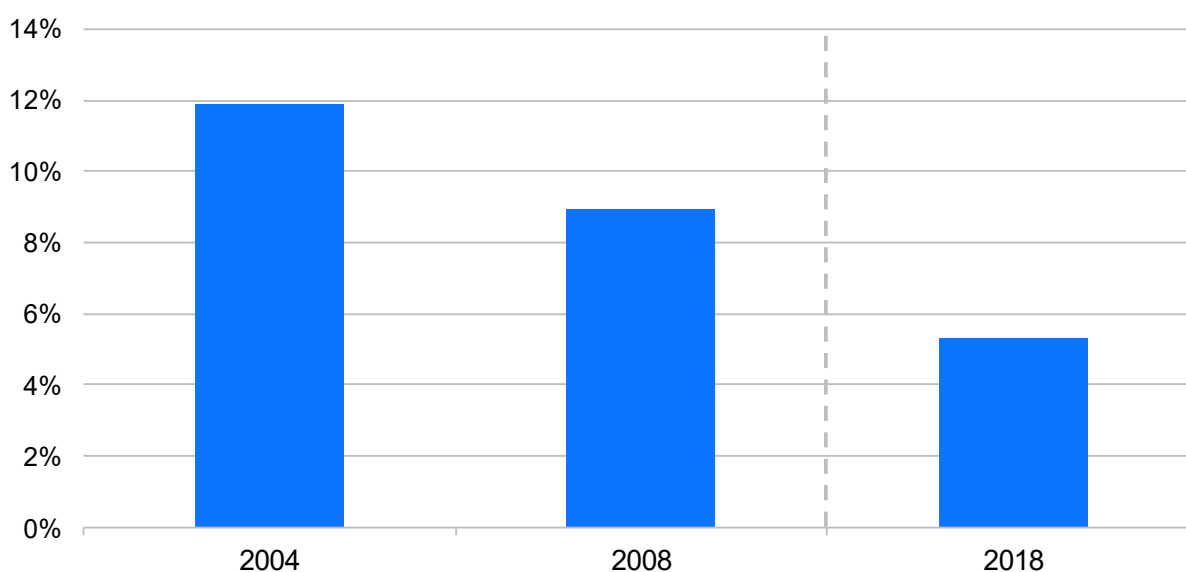
- Condensation / mould growth was found to be serious in 3 per cent of all dwellings.
- Rising damp was found in 2 per cent of all dwellings.

Each of the UK nations has their own methodology for determining the presence of damp in a dwelling. Applying the English methodology to the Wales data, the figure of dwellings free from damp is 94 per cent, compared with 96 per cent in England¹⁰. In Northern Ireland¹¹ around 1 per cent of homes are classed as unfit due to dampness, which is not a comparable measure. The figure for Scotland¹² (89 per cent of dwellings free from damp) is also not directly comparable with Wales.

Structural defects

Dwellings were assessed for a number of different structural defects, including issues with the roof, walls and floors. A complete list of these defects can be found in Appendix A. 5 per cent of dwellings were found to have at least one structural defect in 2017-18, less than half the number in 2004.

Chart 17: Dwellings with at least one structural defect, Wales, 2004 to 2017-18



Sources: Welsh Housing Conditions Survey 2017-18
Living In Wales Property Survey 2008 & 2004

2 per cent of dwellings in Northern Ireland¹³ had at least one structural defect. A comparable figure for England was not available whilst preparing this release. In Scotland levels of disrepair are measured differently and as such a comparable figure is not available.

¹⁰ English Housing Survey 2017-18

¹¹ Northern Ireland House Condition Survey 2016

¹² Scottish House Condition Survey 2018

¹³ Northern Ireland House Condition Survey 2016

Lead in drinking water pipework

8 per cent of dwellings were observed to have lead present in drinking water pipework, either before or after the stopcock. 5 per cent had lead in the pipework before the stopcock, with 5 per cent after the stopcock (some dwellings had lead present both before and after the stopcock). In the Welsh Government's [Water Strategy](#) a commitment was made to consider management options for lead in drinking water. This data will be used to further understand the scale of the issue in Wales.

Electrical system

All dwellings surveyed had an electrical system present, and all were on the normal mains supply, 23 per cent of dwellings had a smart meter¹⁴ and 14 per cent had a prepayment meter.

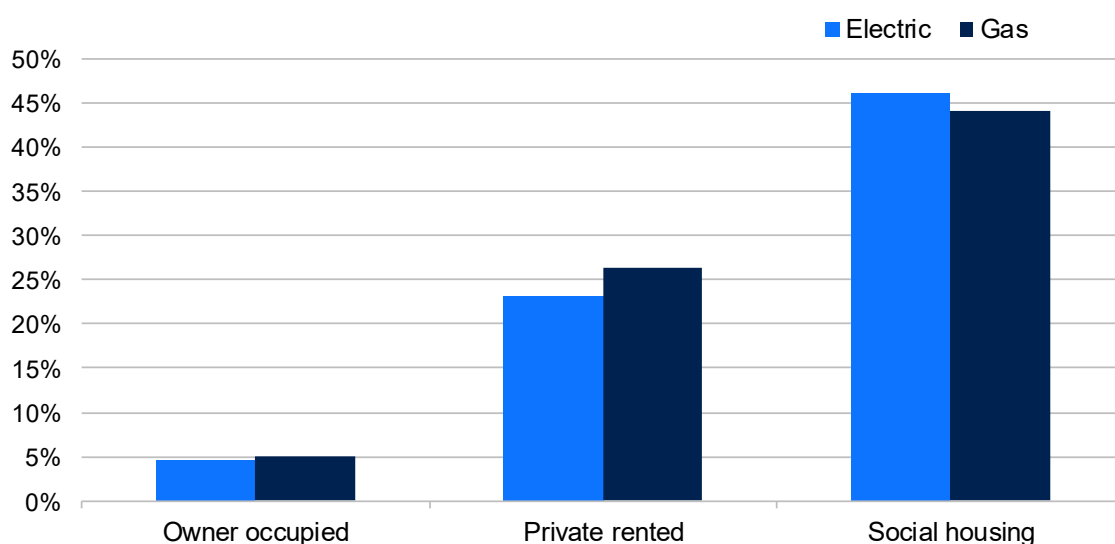
The presence of electric prepayment meters varied with tenure with 5 per cent of owner occupied dwellings having an electric prepayment meter, compared with 46 per cent of social housing and 23 per cent of privately rented dwellings.

Gas system

85 per cent of dwellings had a gas system present, and of these 95 per cent were on the mains supply. 22 per cent of dwellings with a gas system had a smart meter¹⁵ and 15 per cent had a prepayment meter.

As with electric prepayment meters, the presence of gas prepayment meters varied widely with tenure:

Chart 18: Dwellings with prepayment meters by fuel type and tenure, Wales, 2017-18



Source: Welsh Housing Conditions Survey 2017-18

¹⁴ surveyors recorded presence, not if the meter was working.

¹⁵ surveyors recorded presence, not if the meter was working.

Policy context

Since the last Welsh Housing Conditions Survey in 2008 various Welsh Government policy, funding and programmes relating to housing will have had an impact of different sectors of housing across Wales; private housing (owner occupied and private rented) and social housing. Wider social and economic circumstances may also have influenced the extent and condition of different types of housing

The Welsh Government's legislative programme has, and continues to focus on ensuring that everyone lives in a decent home that meets their needs and supports their wellbeing.

Private rented sector

In relation to the private rented sector, the Housing (Wales) Act (2014) brought in mandatory registration for all landlords and licensing for all self-managing landlords and agents, delivered through Rent Smart Wales. The Rent Smart Wales Code of Practice contains a requirement for all landlords to comply with any improvement notices served under the Housing Health and Safety Rating System. Non-compliance with any notices can lead to removal of a licence to let or manage rental properties. Tenants can also make use of Rent Smart Wales as a first point of call to complain about the condition of their rented properties with complaints logged against the property, landlord or agent and referred to the relevant local authority for follow-up action.

Social rented sector: Welsh Housing Quality Standard (WHQS)

For social housing providers the Welsh Government provides £108m of capital funding every year for improving existing social housing which can be used to help their housing meet the Welsh Housing Quality Standard (WHQS) by December 2020. This is provided to Local Housing Authorities (through [Major Repairs Allowance](#)) and to Stock Transfer Registered Social Landlords (through [Dowry Gap funding](#))

Other support for housing improvement

Since 2011, the Welsh Government have invested more than £240 million to improve the energy efficiency of more than 45,000 homes of those on low incomes or living in the most disadvantaged areas of Wales through the Warm Homes Programme. Further investment of £104 million is being provided for the Welsh Government Warm Homes for the period (2017-2021).

The Welsh Government's Fuel Poverty Strategy ends in December 2018. The outcome of this Welsh Housing Conditions Survey will provide the evidence base to develop outcome focussed objectives, using more up to date data, to tackle fuel poverty and improve home energy efficiency from 2019 onwards.

Building Regulations for homes

Changes to Building Regulations and related technical guidance for Part L (Conservation of Fuel and Power) of the Building Regulations introduced in July 2014 raised standards for new homes.

Reducing carbon emissions

The Welsh Government's Decarbonisation Programme requires that the carbon demand of Welsh Homes reduces by 80% (of 1990 levels) by 2050. A programme for the next term of government is being developed. The use of WHCS data in combination with other research will inform the programme direction on what works, how to target resources most effectively and how we can address issues such as fuel poverty and quality of housing while tackling the decarbonisation agenda.

Appendix A: structural defects

1. Roof spreading
2. Sulphate attack
3. Unstable parapet
4. Wall bulging
5. Differential movement
6. Roof sagging
7. Roof humping
8. Lintel failure
9. Wall tie failure
10. Unstable floors, stairs or ceilings
11. Dry rot/Wet rot
12. Wood-borer infestation
13. Adequacy of balconies / projections
14. Foundation settlement
15. Integrity of structural frame
16. Integrity of wall panels
17. Boundary wall - unsafe height
18. Boundary wall - out of plumb
19. Boundary wall - horizontal cracking
20. Unstable retaining wall
21. Any other problems

Appendix B: Housing Health and Safety Rating System

	Hazard	How assessed	Specified vulnerable age group
1	Excess cold	Modelled	Age 65 or over
2	Falling on level surfaces	Fully measured	Age 60 or over
3	Falling on stairs etc.	Fully measured	Age 60 or over
4	Radiation	Modelled	None
5	Collision and entrapment	Flagged if an extreme risk	Age under 5
6	Flames, hot surfaces etc.	Fully measured	Age under 5
7	Crowding and space	Modelled	None
8	Fire	Fully measured	Age 60 or over
9	Dampness and mould growth	Fully measured	Age under 14
10	Entry by intruders	Flagged if an extreme risk	None
11	Falls associated with baths	Flagged if an extreme risk	Age 60 or over
12	Noise	Flagged if an extreme risk	None
13	Falling between levels	Fully measured	Age under 5
14	Food safety	Flagged if an extreme risk	None
15	Electrical safety	Flagged if an extreme risk	Age under 5
16	Carbon monoxide and fuel combustion products	Flagged if an extreme risk	Age 65 or over
17	Personal hygiene, sanitation and drainage	Flagged if an extreme risk	Age under 5
18	Explosions	Flagged if an extreme risk	None
19	Position and operability of amenities etc.	Flagged if an extreme risk	Age 60 or over
20	Structural collapse and falling elements	Flagged if an extreme risk	None
21	Excess heat	Flagged if an extreme risk	Age 65 or over
22	Asbestos (and MMF)	Not assessed	None
23	Biocides	Not assessed	None

24	Lead	Modelled	Age under 3
25	Uncombusted fuel gas	Flagged if an extreme risk	None
26	Volatile organic compounds	Not assessed	None
27	Lighting	Flagged if an extreme risk	None
28	Domestic hygiene pests and refuse.	Flagged if an extreme risk	None
29	Water supply	Flagged if an extreme risk	None

Key Quality Information

This section provides a summary of WHCS 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.

Background to the WHCS

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](#).

Response rates

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%.

95% confidence intervals have been calculated for key WHCS variables and are included in the Results Viewer, available on the [WHCS website](#).

How is the WHCS used?

Key information gathered in the WHCS allows properties to be assessed for energy efficiency, cost of repair, the [Welsh Housing Quality Standard \(WHQS\)](#), [fuel poverty](#) and the [Housing Health and Safety Rating System \(HHSRS\)](#). It will also help improve the Housing domain in the [Welsh Index of Multiple Deprivation](#) 2019 update and underpin two of the

[Well-being of Future Generations National Indicators](#) for Wales, specifically homes free from hazards and homes with adequate energy efficiency measures. The WHCS 2017-18 is closely linked to the Welsh Government's [Decarbonisation Programme](#) and is recognised as one of the crucial data sources, especially for the domestic buildings working group. The survey will also be used to provide data for many other housing, environmental and social policy needs e.g. the impact of poor housing on health, education and economic activity.

Who are the users of the WHCS?

The survey is used for policy making purposes by the Welsh Government mainly for housing and environmental areas, but also social policy needs. There are a wide range of other users of the survey including: Welsh Government Sponsored Bodies; local authorities across Wales; Public Health Wales; Third Sector Organisations; 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 the WHCS is provided in Section 3.1 (Relevance) of the [Quality Report, available on the WHCS website](#).

Technical report

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

Glossary

[A detailed Glossary is available on the WHCS website](#) which provides definitions for the key terms found in this report.

Interpreting the results

Some questions on the physical inspection form were only answered by the surveyor for a sub-sample of properties and other questions were not answered where the question was not applicable.

Where a relationship has been discussed between two factors, this does not mean it is a causal relationship. More detailed analysis is required to identify whether one factor causes change in another, or if other factors are actually more important.

The results are weighted by households and persons within each household and calibrated to Wales levels. Weighting for non-consent is also applied.

Statistical significance

A selection of key measures in the Results Viewer include approximate 95% confidence intervals. Confidence intervals were calculated using the statistical package Stata. These provide an indication of the precision of the estimates. A confidence interval can be calculated around a survey estimate and gives a range within which the true value is likely to

fall. There is a 95% chance that the 95% confidence intervals include the true value. In general, the smaller the sample size the wider the confidence interval. As a rough guide to interpretation, when comparing two variables, if the confidence intervals around the estimates overlap, it can be assumed that the estimates are not statistically significantly different – this approach is not as rigorous as doing a formal statistical test, but is straightforward, widely used and reasonably robust. Unless stated otherwise, differences in this report are significant.

Coherence

The Welsh Government publishes [annual statistical reports](#) on the [Welsh Housing Quality Standard](#) and the [Housing Health and Safety Rating System](#). Data in these reports are not comparable to the WHCS due to differences in the way the data are collected. More information is available in the Quality Report, available on the [WHCS website](#). Links to other UK Housing Surveys

All countries of the UK carried out a housing conditions survey covering the period 2016 – 2017-18. The latest results can be found at the links below.

[English Housing Survey](#)

[Scottish House Condition Survey](#)

[Northern Ireland House Condition Survey](#)

Updates

Since the first publication of this release on 6 December 2018, the English Housing Survey 2017-18 and the Scottish House Conditions Survey 2018 results have been published. The UK comparison figures have been updated in this release in order to make comparisons to the same survey years.

Changes to SAP

The SAP methodology has been through two major updates since the 2005 version used for the LiW 2008 modelling, first to SAP 2009 and then SAP 2012. In addition, the RdSAP methodology for SAP 2012 was updated in November 2017. This doesn't change the SAP calculation but changes the way that inferences are made for elements of the SAP calculation that are not directly measured in a non-intrusive survey. This series of updates along with continual improvements to the models used to calculate SAP, have introduced numerous changes to the way SAP is calculated. One such change that is likely to have had a more significant impact is the adjustment to the U-values that was made in the November 2017 update for certain categories of wall. U-values for solid walls and uninsulated cavities built before 1966 were revised downwards (i.e. made better) and U-values for insulated cavity walls built before 1975 were revised upwards (i.e. made worse). Most changes will affect each tenure in a similar way however because social housing has a different profile to private housing (e.g. more insulated cavity walls) the mean SAP has dropped slightly.

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](#). The [assessment report](#) can be viewed on the Office for Statistical Regulation webpages.

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 and this release includes two of the national indicators, namely Indicator 31 (percentage of dwellings which are free from hazards) and Indicator 33 (percentage of dwellings with adequate energy performance).

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](#).

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.

Further details

The document is available at: <https://gov.wales/welsh-housing-conditions-survey>

The WHCS Quality Report, Technical Report and Glossary can be found on the [WHCS website](#). There is also an easy-to-use Results Viewer which presents results on a range of topics.

Next update

Detailed topic specific analysis (at the national level) will be published from early 2019 onwards. You can find out more about the planned publications on the [WHCS website](#). 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.

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