



Department
for Communities
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English Housing Survey FIRE AND FIRE SAFETY 2013-14



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Department
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& Local Government



English Housing Survey: FIRE AND FIRE SAFETY

Annual report on England's households and housing stock,
2013-14

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Contents

Acknowledgements

Introduction

Main findings

Chapter 1 Incidences of fires in the home

Chapter 2 Smoke alarms and fire safety measures

Chapter 3 Fire hazards

Glossary

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- All the households who gave up their time to take part in the survey.
- NatCen who managed the English Housing Survey on behalf of the department and led the production of the 2013-14 Households report.
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- The NatCen interviewers who conducted the household interviews and the CADS Housing Surveys surveyors who carried out the visual inspections of properties.
- And finally, the team at DCLG who worked on the survey and who were involved in the production of this report.

Introduction

1. The English Housing Survey (EHS) is a national survey of people's housing circumstances and the condition and energy efficiency of housing in England. In its current form, it was first run in 2008-09. Prior to then, the survey was run as two standalone surveys: the English House Condition Survey and the Survey of English Housing. This report provides the latest findings on fire and fire safety.
2. A number of questions relating to fire safety features are included every year. However, as some questions on fire and fire safety rotate in and out of the EHS, this report presents findings from several different survey years. The report focuses on the extent to which the existence of fire and fire safety features vary by household and dwelling type. It is split into three sections.
3. The first chapter provides a profile of households in 2013-14 that experienced a fire at their home, including their tenure and the type of accommodation in which they lived. It will also examine how, where and when these fires started, how these fires were put out and whether there was a working smoke alarm installed before and after the incident of the fire. The second chapter will focus on the characteristics of households who have a working smoke alarm in 2013-14 and whether this provision has changed since 2003-04. In addition, the chapter provides information on the presence of other fire safety measures in the home and how this has altered over time. The final chapter investigates the existence of fire hazards in different types of homes in 2013 and the characteristics of the people that live in dwellings with fire hazards.
4. Results in the first section of the report, on households, are presented for '2013-14' and are based on fieldwork carried out between April 2013 and March 2014 on a sample of 13,276 households. Throughout the report, this is referred to as the '2013-14 full household sample'.
5. Results in the final section of the report are presented for '2013' and are based on fieldwork carried out between April 2012 and March 2014 (a mid-point of April 2013). The sample comprises 12,498 occupied or vacant dwellings where a physical inspection was carried out. Throughout the report, this is referred to as the 'dwelling sample'.
6. In tables, where the numbers of cases in the sample are too small for any inference to be drawn about the national picture, the cell contents

are replaced with a u. This happens when the cell is based on sample of less than five cases. Where cell contents are in italics this indicates a total sample size of less than 30, and the results should be treated as indicative only.

7. Where comparative statements have been made in the text, these have been significance tested to a 95% confidence level. This means we are 95% confident that the statements we are making are true.
8. Additional annex tables, including the data underlying the figures and charts, are published on the DCLG website: <https://www.gov.uk/government/organisations/department-for-communities-and-local-government/series/english-housing-survey> alongside many supplementary tables, which are updated each year but are too numerous to include in our reports. Further information on the technical details of the survey, and information and past reports on the Survey of English Housing and the English House Condition Survey can also be accessed via this link.
9. This report complements fire statistics published by DCLG which are produced from records of all incidents attended by local authority fire and rescue services. Headline data from fire and rescue incident records can be found in the Fire Statistics Monitor: <https://www.gov.uk/government/collections/fire-statistics-monitor>. More detailed analyses including on the locations and causes of fire, and the effectiveness of smoke alarms can be found in Fire Statistics Great Britain: <https://www.gov.uk/government/collections/fire-statistics-great-britain>.
10. If you have any queries about this report, if you would like any further information or have suggestions for analyses you would like to see included in future EHS reports, please contact ehs@communities.gsi.gov.uk
11. The responsible statistician for this report is: Jeremy Barton, English Housing Survey Team, Strategic Statistics Division, DCLG. Contact via ehs@communities.gsi.gov.uk

Fire and fire safety 2013-14

1 in 60 households reported a fire within the previous 2 years.



Households with a **working** smoke alarm.

82%

Private
renters

88%

Owner
occupiers

91%

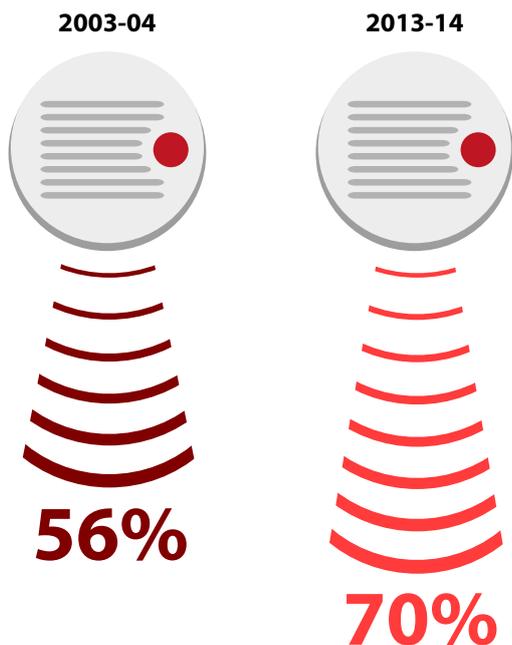
Local
Authority
tenants

94%

Housing
association
tenants



An increasing percentage of households owned more than one working smoke alarm.



Between 2003-04 and 2013-14, there was an increase in the proportion of households with at least one working smoke alarm, from 56% to 70%.

Private rented homes and homes built before 1919 were more likely to have a higher risk of fire.



In 2013 one million dwellings were assessed as having a higher risk of fire. Of the homes with a higher risk of fire, just under half (46%) were built before 1919, and one in three (29%) were in the private rented sector.

Main findings

One in 60 households reported a fire within the previous 2 years

- In the last two years, 385,000 households (1.7%) had one or more fires inside their home or on their property.
- Households with five or more occupants were the most likely to have experienced a fire (3%), while households of two persons were least likely to have had a fire (1%).

Most fires were caused by cooking-related incidents

- More than half (54%) of those households that knew the cause of the most recent fire stated that this was associated with cooking.
- Some 15% of fires were due to electrical appliances or open fires, with nearly a third (31%) of fires due to some other source, such as candles, matches, or bonfires.

In nearly half of home fires, smoke alarms did not go off

- Nearly half of households with smoke alarms who had had a fire (48%) said their alarms did not go off at the time of the fire. In a third (31%) of the households where smoke alarms did not go off this was because they were not located near the fire.

One in ten homes did not have a working smoke alarm, but private renters were least likely to have one

- In 2013/14, almost 2.5 million households (11%) either did not have a smoke alarm or had one but it was not working, while nearly 300,000 households (1%) did not know if their smoke alarm was working or not.
- Private renters (82%) were less likely than other tenures to have a working smoke alarm, whereas housing association households (94%) were most likely to have one.
- Households where the HRP was unemployed were less likely to have a working smoke alarm (80%) than households where the HRP was working part-time (87%), full time (88%) or retired (89%).

Ownership of a working smoke alarm had increased over the previous 10 years across most types of households

- Between 2003-04 and 2013-14, there was an increase in the proportion of households with at least one working smoke alarm, from 80% to 88%.
- Working smoke alarm ownership for households where the HRP was aged 16-24; ownership rose from 72% in 2003-04 to 85% in 2013-14.
- The proportion of ethnic minority HRP households with a working smoke alarm increased from 67% in 2003-04 to 82% in 2013-14.

An increasing percentage of households owned more than one smoke alarm

- In 2013-14, 70% of all households with a working smoke alarm had two or more smoke alarms installed, a rise from 56% in 2003-04.

Private rented homes and properties built before 1919 were more likely to have a higher risk of fire

- In 2013, 4% of homes (one million dwellings) were assessed as having a higher risk of fire.
- Of the homes with a higher risk of fire, just under half (46%) were built before 1919, and one in three (29%) were in the private rented sector.
- Just under a quarter (23%) of households who lived in homes with a higher risk of fire had no working smoke alarm compared with 11% of households in homes without a higher risk of fire who lacked a working smoke alarm.

Chapter 1

Incidences of fires in the home

- 1.1. Government policy seeks to improve fire safety in the home, reducing the incidence of fire and associated injuries and deaths. The Government's fire safety campaign, Fire Kills, which is run in partnership with local fire and rescue authorities, is used to convey important fire safety and behaviour messages to households such as the value of installing smoke alarms, and ensuring that they are tested regularly. Legislation, including Building Regulations, the Furniture and Furnishing Regulations and product safety standards are designed to reduce fire risks in the home. Between 1988 and 2013-14, the number of accidental fire deaths in the home has reduced from 731 to 181¹.
- 1.2. This chapter provides a profile of households that experienced a fire at their home, including their tenure and the type of accommodation in which they lived. It will also examine how, where and when these fires started, how these fires were put out and whether there was a working smoke alarm installed before and after the incident of the fire.
- 1.3. During the interview survey, households were asked, at first, about fires that occurred in their homes in the last 12 months prior to the survey. In 2013-14, 262,000 households (1%) experienced one or more fires inside their home or on their property within the last year. For the majority of these households it was just one fire incident (94%), Annex Table 1.1.
- 1.4. Questions were subsequently asked about any outbreaks of fire that occurred between one and two years prior to the survey, (not necessarily at their current address if they have moved house). To maximise sample sizes, this report will, therefore, look at all households that had a fire in the last two years, focussing on the household's most recent fire incident. The numbers of households reporting a fire incident at their home in the two years prior to the survey were quite small, so care should be taken when interpreting these findings.

¹ <https://www.gov.uk/government/statistics/fire-statistics-monitor-april-2013-to-march-2014>

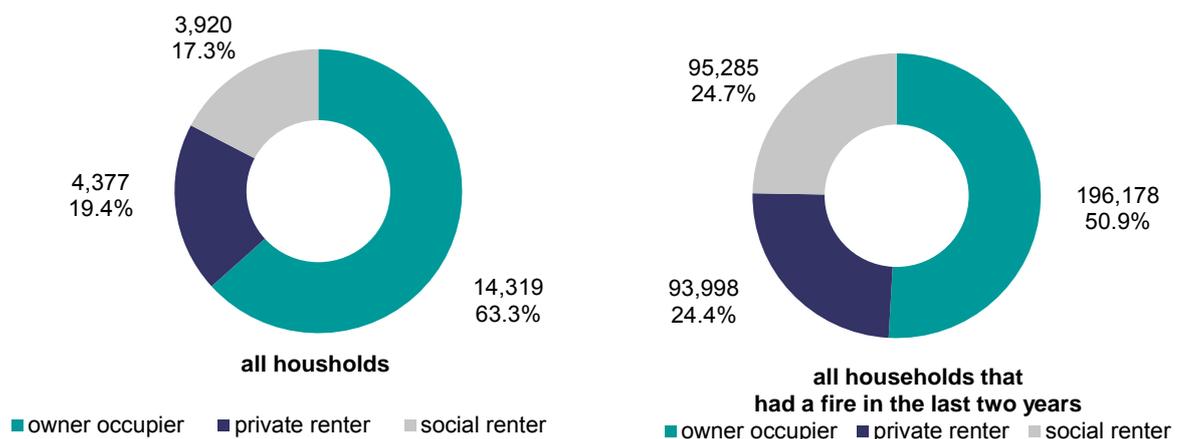
Household's experiencing a fire in the last two years

1.5. In the last two years, 385,000 households (2%) had one or more fires inside their home or on their property; almost all these households had experienced just one fire, Annex Table 1.1

Tenure and property type

1.6. This analysis examines the distribution of the incidence of fire among households by tenure and dwelling type. Around half of all fires were in owner occupier households (51%) although these households comprised 63% of all households in England. In contrast householders in social rented homes were over represented among households who had experienced a fire; a quarter of fires were experienced by social renters (25%) who comprised 17% of all households in England, Figure 1.1.

Figure 1.1: Profile of tenure of all households and tenure of households that have had a fire in the last two years 2013-14



Base: all households that had had a fire in the previous two years

Note: underlying data are presented in Annex Table 1.2

Source: English Housing Survey, full household sample

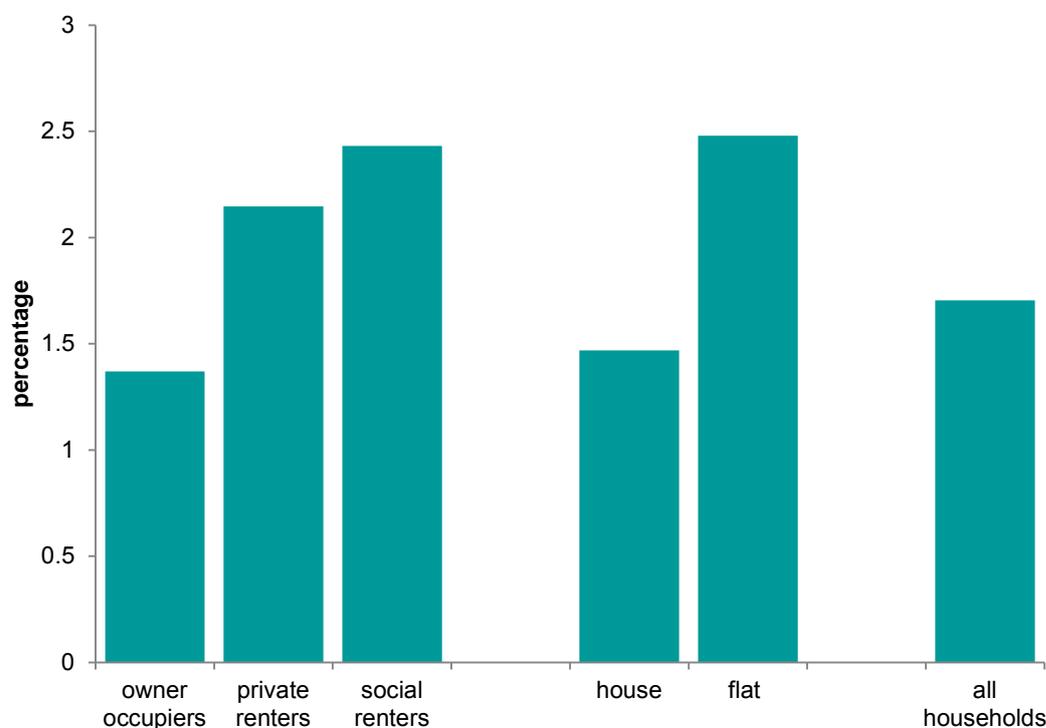
1.7. Two third of fires in the last two years were experienced by households that occupied houses (69%). Households living in flats were over represented: nearly third of these households experienced a fire (29%) although such households comprised 20% of households in England, Annex Table 1.2.

1.8. The following analysis examines the likelihood of a household experiencing a fire according to tenure and dwelling type.

1.9. Households that lived in private rented accommodation (2%) and in social housing (2%) were more likely to have had a fire than owner occupiers (1%). Households that lived in flats (2%) were more likely to have had a fire than those households that occupied houses (1%), Figure 1.2. Due to the small

sample size and the small portion of fires, it was difficult to identify whether household tenure or household property type had the greatest influence.

Figure 1.2: Household's experiencing a fire in the previous two years by tenure and dwelling type, 2013-14



Base: all households that had had a fire in the previous two years

Note: underlying data are presented in Annex Table 1.3

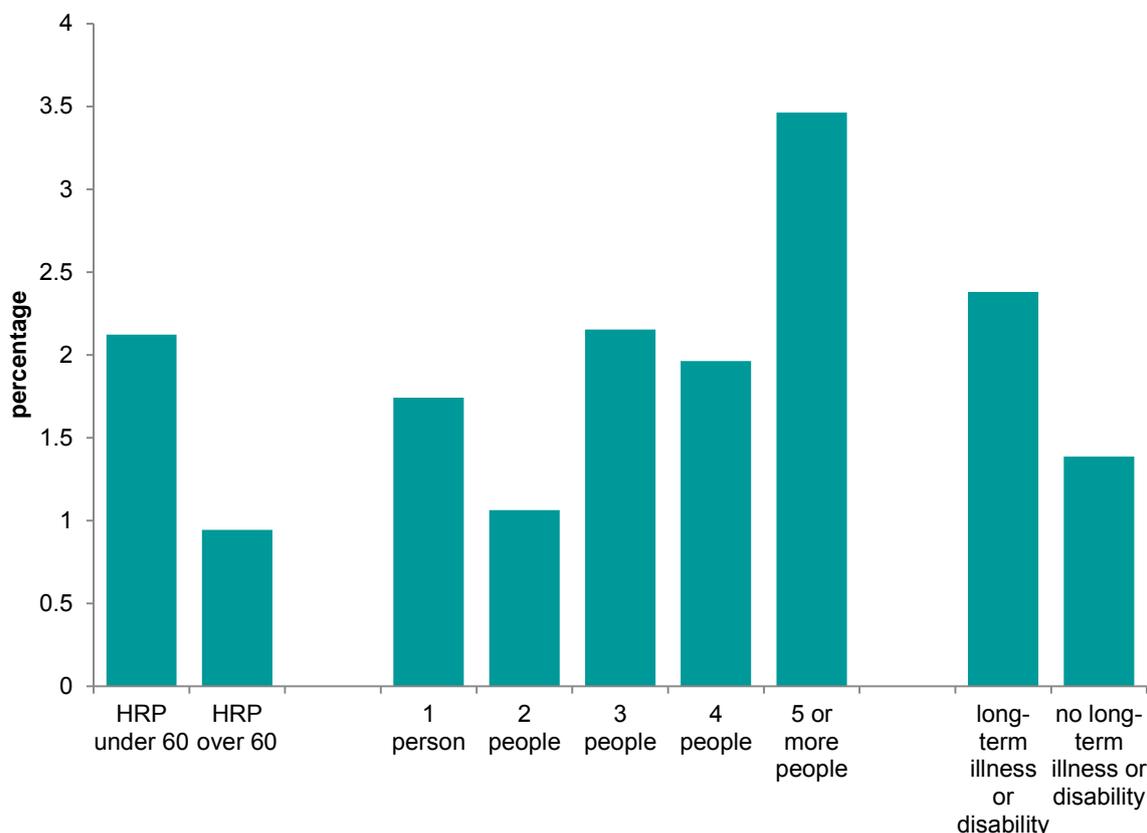
Source: English Housing Survey, full household sample

Household type

- 1.10. Due to the small number of households reporting an incident of fire at their home, it was difficult to determine whether there was any correlation between the household composition type, the ethnicity of the household reference person (HRP) and household income and the incidence of a fire. However, the results did show a relationship between the likelihood of a fire incident and the age of the HRP, household size and long-term disability.
- 1.11. Households with a HRP aged 60 or over (1%) were less likely to have experienced a fire compared with households with a younger HRP (2%), Figure 1.3.
- 1.12. Households with five or more occupants were the most likely to have experienced a fire (3%), while households of two persons were least likely to have had a fire (1%), Figure 1.3.
- 1.13. Households where there was someone in the home with a long-term illness or disability were also more likely to have experienced a fire in the previous two

years (2%) than those households that had none (1%). These results may be related to the time households with a long-term disability or illness spend at home and their ability to respond and prevent a fire, Figure 1.3.

Figure 1.3: Households that had had a fire in the previous two years by age of HRP, household size and disability, 2013-14



Base: all households that had had a fire in the previous two years

Note: underlying data are presented in Annex Table 1.4

Source: English Housing Survey, full household sample

Where, how and when these fires started

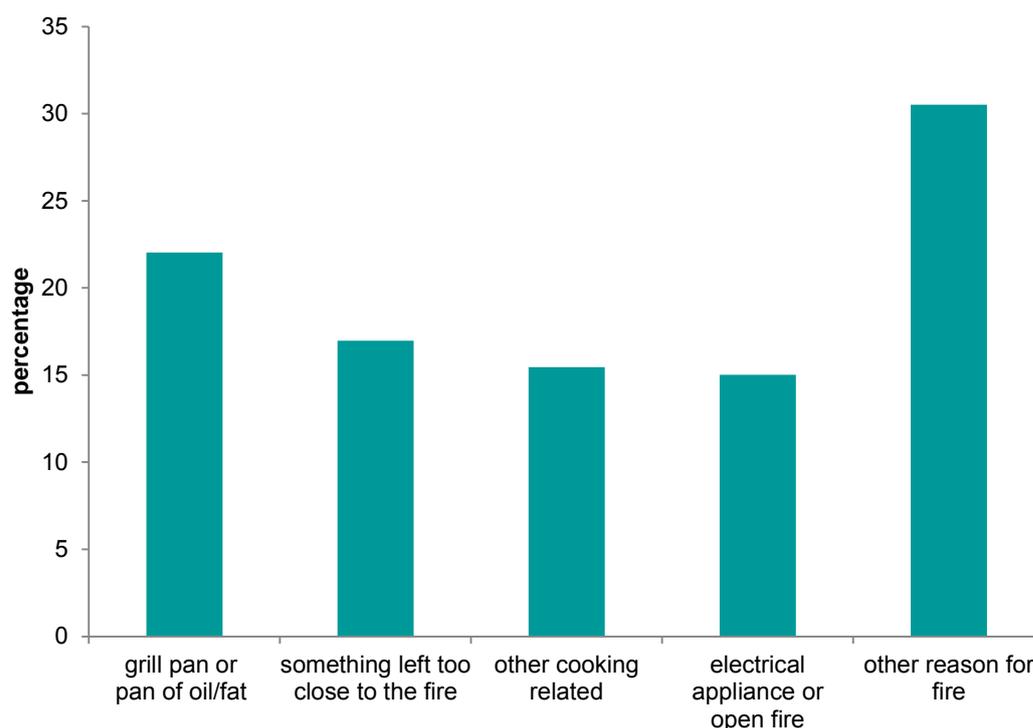
1.14. For households that had a fire, most of these fires started inside the home (79%), whilst one in five started outside the home on the household's property (21%). Where the fire had started inside, the most common place for it to start was in the kitchen (74%), which is not surprising since more than half of all fires (indoors and outdoors) were cooking related (see below). The shared living space (living room, dining room, lounge) was the second most likely place that an indoor fire started (16%), Annex Table 1.5.

1.15. Of those households that knew the cause of the most recent fire, more than half of them stated that this was associated with cooking (54%); 22% of all fires were caused by a grill pan or a pan of oil catching fire, 17% were due to

something catching fire that was too close to the cooker and 15% were caused by another cooking item such as a toaster or microwave, Figure 1.4.

- 1.16. Some 15% of fires were due to electrical appliances or open fires, with a third (31%) of fires due to some other source, such as candles, matches, or bonfires. These results suggest that a high proportion of household indoor fires are linked to risky or negligent behaviours by some households, Figure 1.4.

Figure 1.4: How the fire started, 2013-14



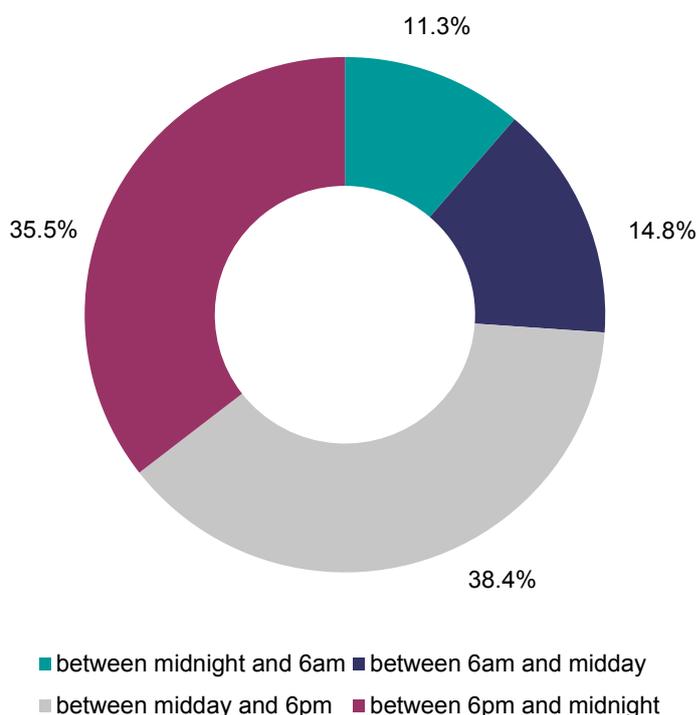
Base: all households that had had a fire in the previous two years and knew the cause of the fire

Note: underlying data are presented in Annex Table 1.6

Source: English Housing Survey, full household sample

- 1.17. Of those households that remembered the time of day that the fire started, three-quarters of households stated the fire started between midday and midnight (74%), which is perhaps to be expected given that this period would cover the most common cooking times, Figure 1.5.

Figure 1.5: Time of day the fire was discovered, 2013-14

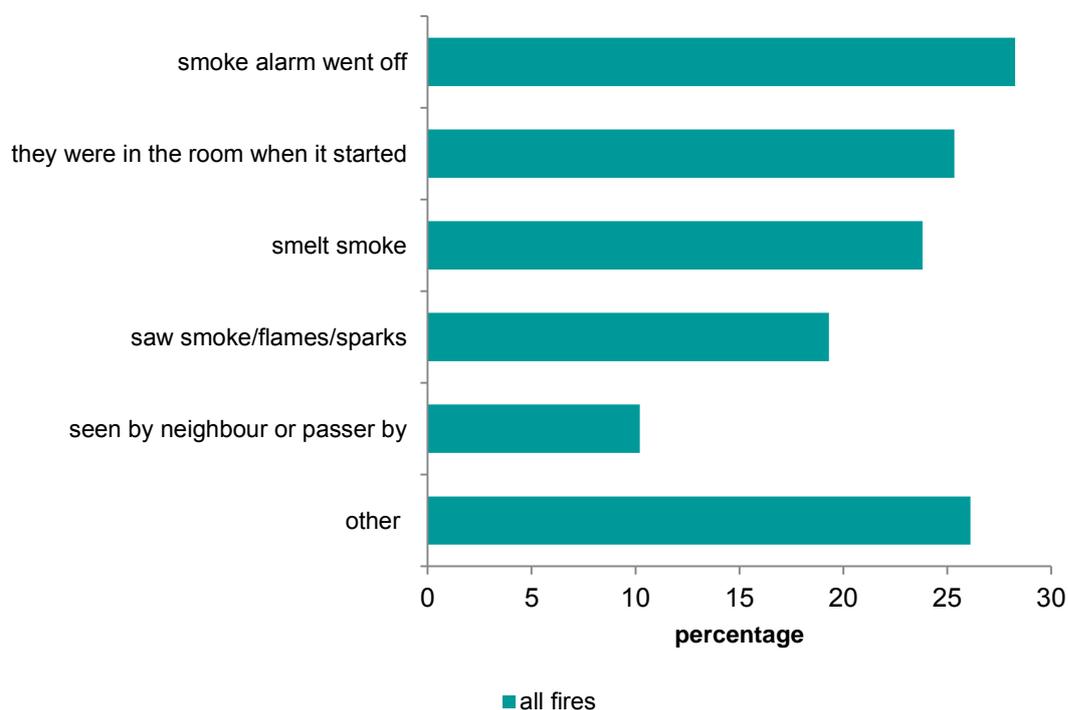


Base: all households that had had a fire in the previous two years and remembered the time of the fire
Note: underlying data are presented in Annex Table 1.7
Source: English Housing Survey, full household sample

- 1.18. Households were also asked about how they discovered the fire². For all fires, irrespective of whether they were inside or elsewhere on the property, the most prevalent response was that the smoke alarm went off (28%); this, perhaps surprisingly low, finding may be due to there being no smoke alarm at the source of the fire or that the fire was not big enough to activate the smoke alarm, Figure 1.6.
- 1.19. A quarter of households reported that they were in the room where the fire started (25%) or they smelt smoke (24%), whilst a fifth of households were alerted due to seeing flames, sparks or smoke (19%). Around a quarter of households stated 'other' reasons for how they discovered the fire (26%), Figure 1.6.

² multiple responses were allowed for this question so figures in the supporting Annex Table will not add up to 100%

Figure 1.6: How households discovered the fire, 2013-14



Base: all households that had had a fire in the previous two years

Note: underlying data are presented in Annex Table 1.8

Source: English Housing Survey, full household sample

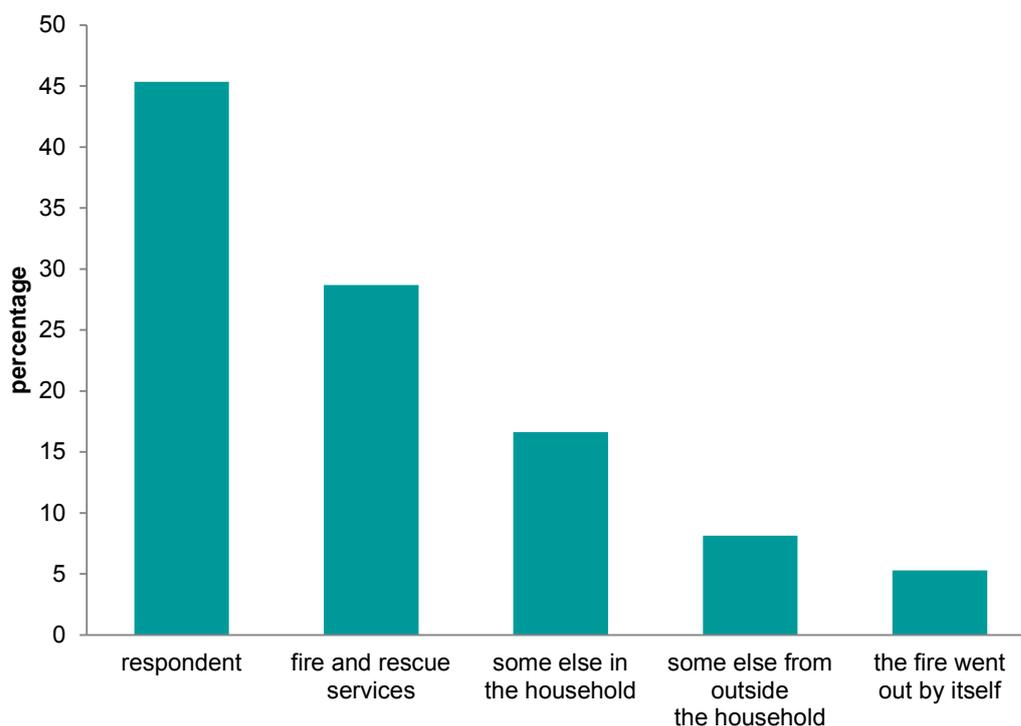
How these household fires were put out

1.20. Households were asked who put out the fire³ and nearly half of all respondents (45%) said they put out the fire themselves. Some 29% of households stated that the fire was put out by the fire and rescue services and 17% said someone else in the household had put out the fire. A small proportion of households stated that either the fire was put out by someone outside the household (8%) or it went out by itself (5%), Figure 1.7.

1.21. Only 40% of households called the fire and rescue services to assist them with putting out the fire and, as stated above, around a third of all household fires were put out by the fire and rescue services, Annex Table 1.9

³ multiple responses were allowed for this question and so the supporting figures in the Annex Table will not add up to 100%

Figure 1.7: How household fires were put out, 2013-14



Base: all households that had had a fire in the previous two years

Note: underlying data are presented in Annex Table 1.9

Source: English Housing Survey, full household sample

1.22. For 93% of all households that had had a fire in the previous two years, no member of these households had suffered any related injuries. The remainder of households reported minor injuries, such as smoke inhalation, or scratches or bruises, Annex Table 1.9.

The relationship between a household's incident of a fire and having at least one smoke alarm

1.23. In 2013-14, 92% of all households in England had at least one smoke alarm installed in their home, although not all of these were in working order (see chapter 2 of this report); some 88% of households had at least one working smoke alarm installed. In either case, there was no observable relationship between whether or not a household had a non-working or working smoke alarm at the time of the survey and whether or not they had experienced a fire at their home in the previous two years: the incidence of fires was the same in each case. This finding may suggest that having a non-working or working smoke alarm does not necessarily impact on risky or neglectful behaviour in relation to fire hazards, Annex Table 1.10

1.24. As the above finding is based on smoke alarm ownership at the time of the survey, the following analyses examines whether households had a smoke

alarm installed at the time of the fire. Most households (80%) that had a fire in the last two years had had a smoke alarm installed at the time of the fire, Annex Table 1.10

- 1.25. Of these households that had had a fire in the last two years and an alarm was installed at the time of the incident, around half of these alarms were triggered by the fire (50%), Annex Table 1.11.
- 1.26. Nearly half of households with smoke alarms (48%) said their alarms did not go off at the time of the fire, Annex Table 1.11. There were legitimate reasons why most smoke alarms were not set off by the fire, for example nearly a third of these smoke alarms (31%) did not go off because they were not located near the fire, the fire was outside (17%)⁴ or the fire was put out very quickly (27%), Annex Table 1.12.

⁴ outside fires have not been reported on further as the sample size was too small

Chapter 2

Smoke alarms and fire safety measures in the home

- 2.1 In 2013-14, 181 people were killed by accidental house fires¹. Dwellings with no smoke alarm accounted for 38% of deaths in home fires in Great Britain, and nearly one fifth of deaths occurred where no smoke alarm worked². The Fire Kills Campaign has promoted fire safety especially in regard to promoting the installation of smoke alarms including advertising campaigns to remind households to regularly test their smoke alarms. Correctly installed and maintained smoke alarms are essential in helping to reduce fire deaths and injuries in the home. Since June 1992, building regulations (Part B)³ require that every new build home must allow for mains wired, interconnected smoke alarms to be installed.
- 2.2 Although there is no legal requirement for homes built prior to June 1992 in single household occupation to install smoke alarms, landlords are advised by DCLG's Fire Kills campaign to install at least one smoke alarm on each floor of the property. Landlords have a legal obligation to do this if their property is registered as a House in Multiple Occupation (HMO).
- 2.3 This chapter will focus on the characteristics of households who have a working smoke alarm in 2013-14 and whether this provision has changed since 2003-04⁴. In addition, the chapter provides information on the presence of other fire safety measures in the home and how this has altered over time. For more information on the profile of households that did not have a working smoke alarm refer to the English Housing Survey, Fire and fire safety report 2012-13⁵.

¹ <https://www.gov.uk/government/statistics/fire-statistics-monitor-april-2013-to-march-2014>

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/410287/Fire_Statistics_Great_Britain_2013-14_PDF_Version_.pdf

³ http://www.planningportal.gov.uk/uploads/br/BR_PDF_ADB1_2006.pdf

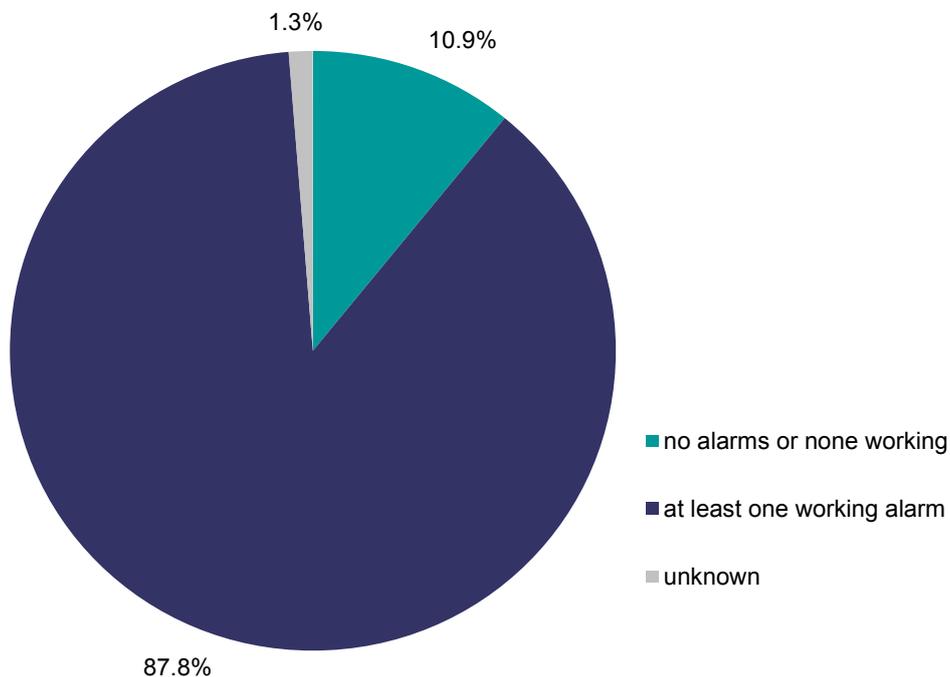
⁴ The household's response to the presence and working order of their fire safety equipment was taken as correct. None of the fire safety measures have been checked as present or tested as working.

⁵ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335757/EHS_Fire_and_Fire_Safety_2012-13.pdf

Smoke alarm ownership

2.4 In 2013-14, 20.8 million (92%) of all households in England stated they had one or more smoke alarms installed in their home (Annex Table 2.7) but 19.9 million (88%) reported they had at least one alarm working at the time of the survey. Almost 2.5 million households (11%) either did not have a smoke alarm or had one but it was not working, while nearly 300,000 households (1%) did not know if their smoke alarm was working or not, Figure 2.1.

Figure 2.1: Profile of smoke alarm ownership, 2013-14



Base: all households

Note: underlying data are presented in Annex Table 2.1

Source: English Housing Survey, full household sample

Working smoke alarm ownership

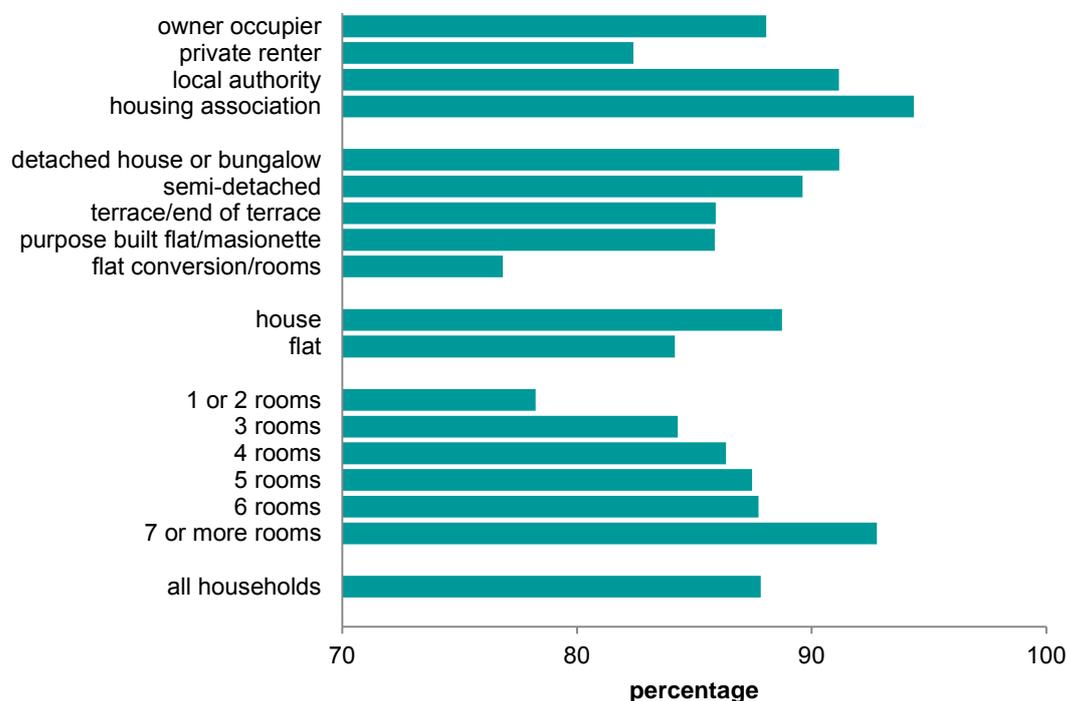
Tenure and property type

2.5 Housing association households (94%) were most likely to have at least one working smoke alarm in their home, reflecting the greater proportion of newer homes in this tenure. Some 91% of local authority tenants and 88% of owner occupiers had this feature. Private renters

(82%) were least likely to have a working smoke alarm, highlighting the need for improvement within this sector, Figure 2.2.

- 2.6 Overall, households living in houses (89%) were more likely to have a working smoke alarm than those living in flats (84%); although the prevalence of ownership was related to the type of house or flat that a household lived in, Figure 2.2.
- 2.7 For households that occupied houses, those living in detached houses and bungalows (91%) and semi-detached houses (90%) were more likely to have a working smoke alarm than those households living in terraced houses (86%), Figure 2.2.
- 2.8 Among households living in flats, households were more likely to have a working smoke alarm if they lived in a purpose built flat (86%) compared with those households that lived in a converted flat (77%). The latter were most likely to be privately rented (see chapter 1 of the Profile of English housing report), Figure 2.2.
- 2.9 There was a general relationship between the likelihood of having a working smoke alarm and the number of habitable rooms available to the household. Households that had one or two habitable rooms (78%) were less likely to have this feature than those households that had five (87%) six (88%) or seven or more habitable rooms (93%). Households which had seven or more habitable rooms were most likely to have this feature compared with all other households. This finding may be linked to those regarding property type and household composition (examined below).

Figure 2.2: Households with at least one working smoke alarm by tenure, property type and number of habitable rooms 2013-14



Base: all households

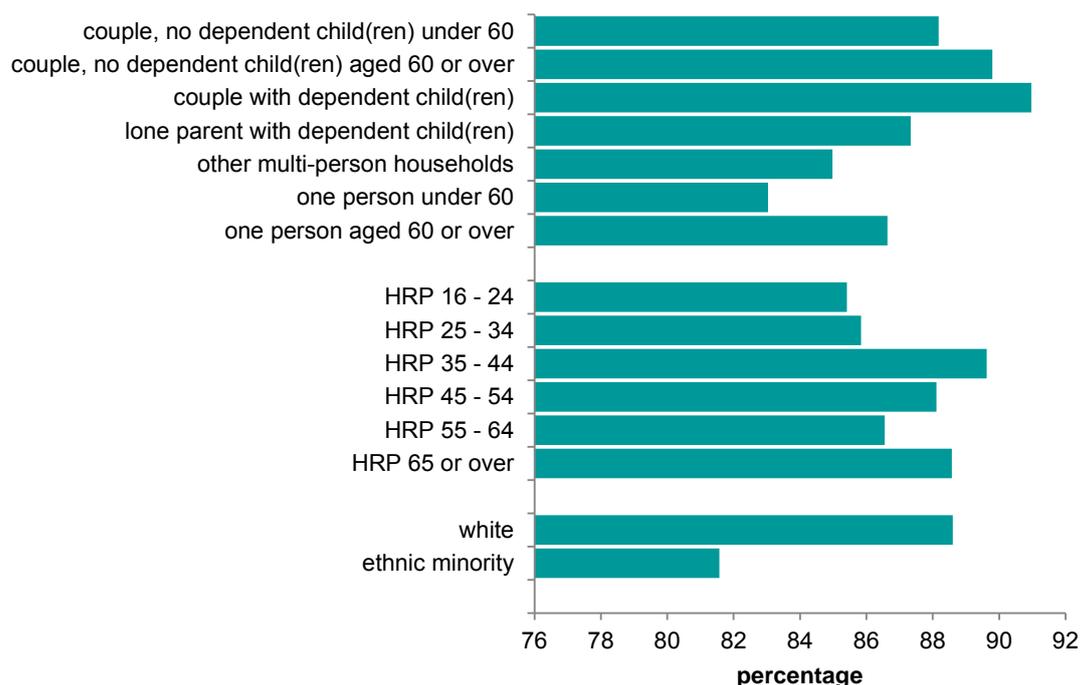
Note: underlying data are presented in Annex Table 2.1

Source: English Housing Survey, full household sample

Household characteristics

- 2.10 In 2013-14, households comprising of a couple with dependent children were most likely to have a working smoke alarm (91%) compared with any other household type. Single households under 60 years of age were less likely to have this feature (83%) compared with all other types of households except multi-person households.
- 2.11 The age of the HRP is related to the likelihood of working smoke alarm ownership; households with a HRP aged under 35 years of age were less likely to have a working smoke alarm (85%) compared with older households, except those where the HRP was aged between 55 and 64 years of age.
- 2.12 Households with a white HRP were more likely to have at least one working smoke alarm compared with households that had a HRP from an ethnic minority background (89% compared with 82%), Figure 2.3.

Figure 2.3: Households with at least one working smoke alarm by household composition, age and ethnicity of HRP, 2013-14



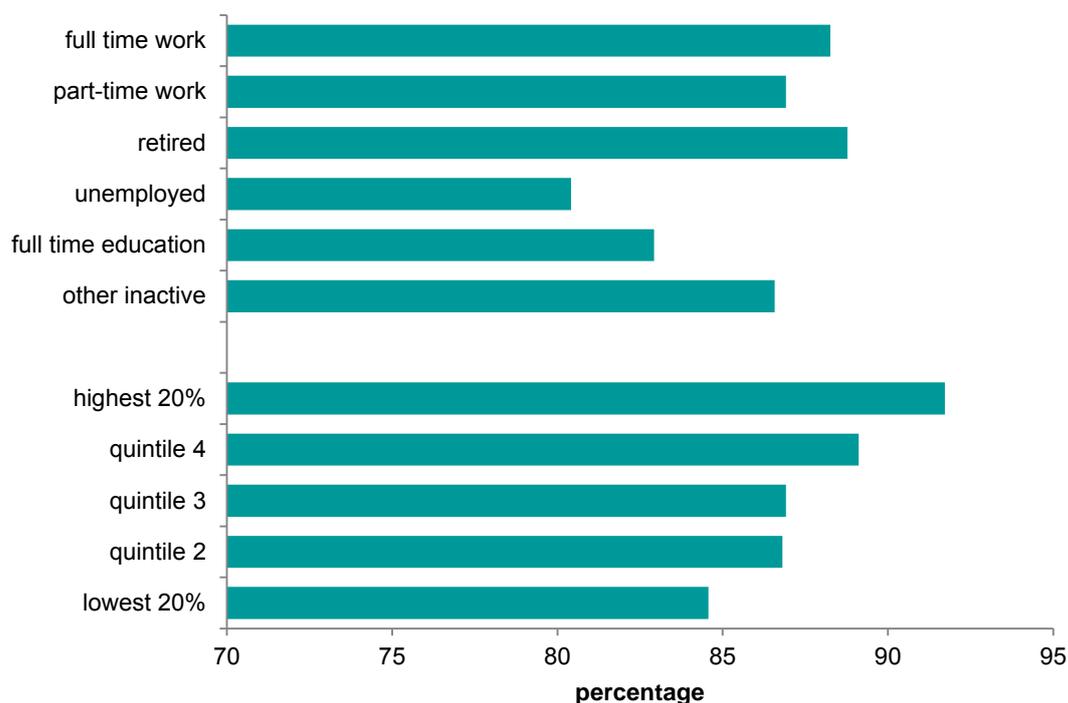
Base: all households

Note: underlying data are presented in Annex Table 2.2

Source: English Housing Survey, full household sample

- 2.13 Households where the HRP was unemployed (80%) were less likely to have a working smoke alarm than households where the HRP was working part-time (87%), full time (88%) or retired (89%), Figure 2.4.
- 2.14 Figure 2.4 shows that in 2013-14 households in the lowest 20% of household incomes were less likely to have this feature compared with all higher income bands.

Figure 2.4: Households with at least one working smoke alarm, by employment status of HRP and income band, 2013-14



Base: all households

Note: underlying data are presented in Annex Table 2.3

Source: English Housing Survey, full household sample

2.15 The proportion of households with working smoke alarms was similar for households irrespective of whether they were in receipt of means tested benefits or not (87 and 88% respectively). Households with either the HRP or partner registered disabled were a little more likely to have this feature (90%) compared to households without a registered disabled HRP or partner (88%), Annex Table 2.3.

2.16 The analysis for this chapter has been undertaken using simple bivariate analysis, namely, each factor was examined separately against the variable for the ownership of a working smoke alarm to determining any relationship between them. In the 2012/13 EHS Fire and fire safety report⁶, however, multivariate analysis (using logistic regression) was undertaken to identify those factors most likely to result in the ownership of a working smoke alarm. This multivariate analysis found that household composition was the strongest predictor of whether a household had a working smoke alarm, followed by

⁶ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/335757/EHS_Fire_and_Fire_Safety_2012-13.pdf

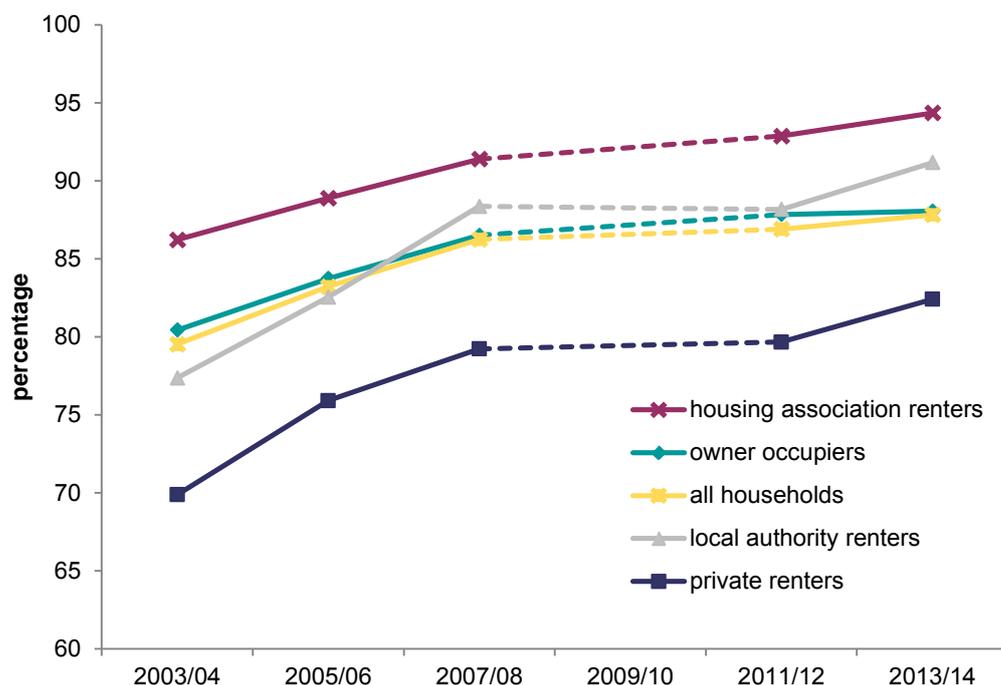
household income and tenure. Within these three groups, couples with dependent children, households in the highest income band and housing association tenants respectively, were found to have the highest likelihood of having a working smoke alarm.

Changes in working smoke alarm ownership since 2003-04

- 2.17 Between 2003-04 and 2013-14⁷, there was an increase in the proportion of households with at least one working smoke alarm, from 80% to 88%. This increase occurred across all tenures and was likely to be partly due to factors such as the National Smoke Alarm Campaign and the Fire and Rescue Services community fire safety activities which included the free installation of smoke alarms, Figure 2.5.
- 2.18 The most noticeable improvement over this period was for both local authority tenants (from 77% to 91%) and private renters (from 70% to 82%). This is likely to reflect social sector improvements in home safety, as part of planned and responsive maintenance programmes, the Decent Homes programme as well as the relatively high proportion of newer homes within the housing association sector. For private renters the increase was partly due to a shift in the age profile of their homes; a marked rise in the proportion of newer stock which would have smoke alarms installed due to the building regulations governing new build properties.

⁷ it is not possible to provide a complete time line trend for this analysis as questions regarding smoke alarm ownership were not collected for 2009-10 EHS household interview survey.

Figure 2.5: Household ownership of at least one working smoke alarm by tenure, 2003-04 to 2013-14



Base: all households

Note: underlying data are presented in Annex Table 2.4

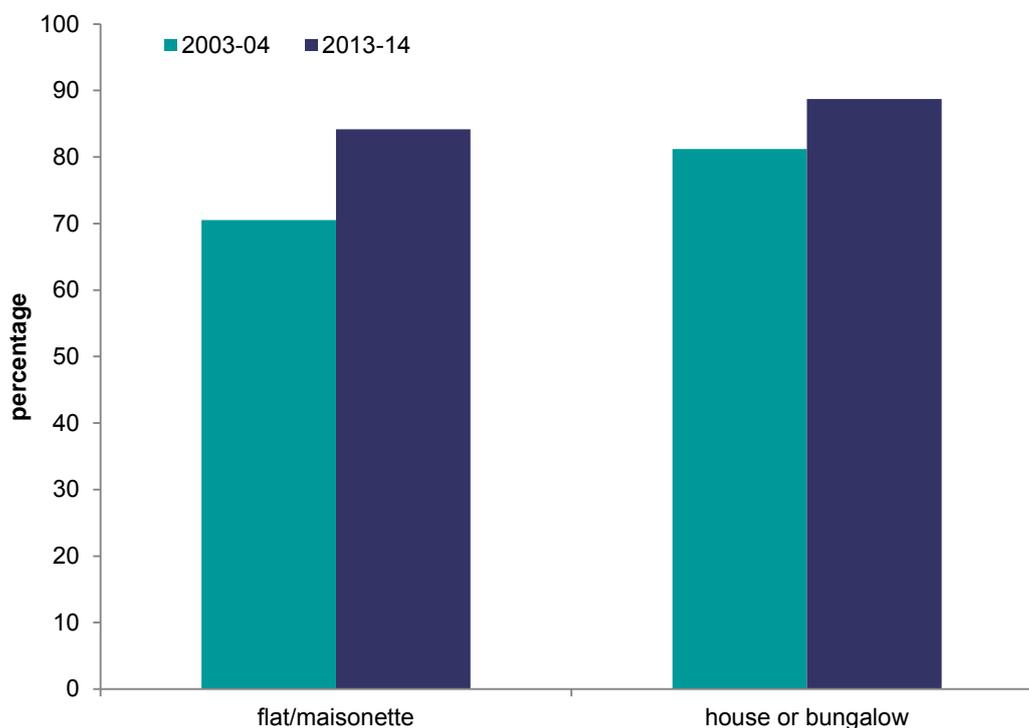
Sources:

2003-04 to 2007-08 English House Condition Survey, full household sample

2011-12 to 2013-14 English Housing Survey, full household sample

2.19 Over this 10 year period there has been an increase in the proportion of households with at least one working smoke alarm in all types of homes (from 80% to 88%), but particularly for households living in flats (from 71% to 84%) since 2003-04. In the same period, the presence of this feature increased among households living in houses by 8 percentage points (from 81% to 89%), Figure 2.6 and Annex Table 2.1.

Figure 2.6: Household ownership of at least one working smoke alarm by property type, 2003-04 and 2013-14



Base: all households

Note: underlying data are presented in Annex Table 2.1

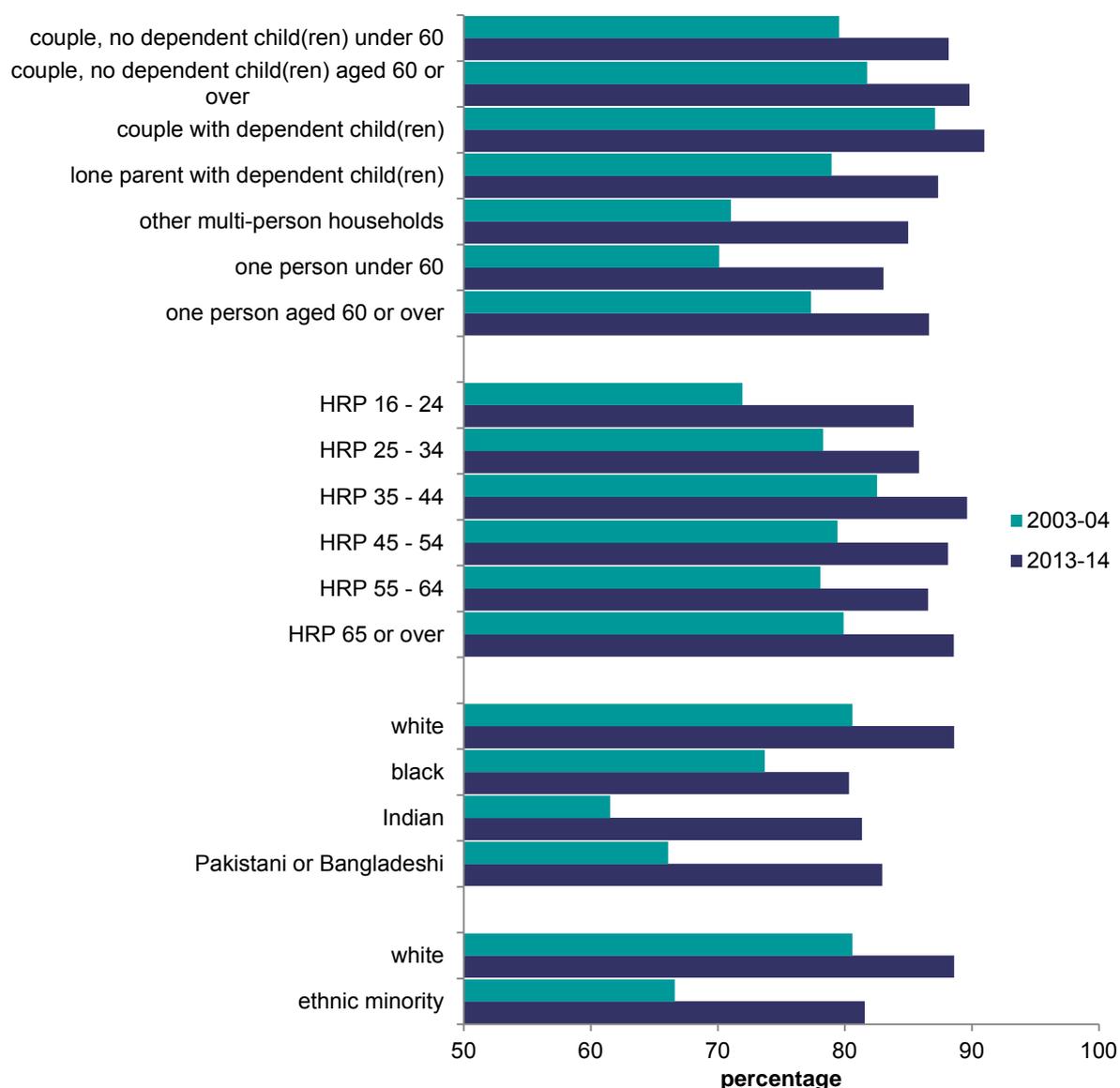
Sources:

2003-04 English House Condition Survey, full household sample

2013-14 English Housing Survey, full household sample

- 2.20 For all types of households, there has been an increase in the proportion who had a working smoke alarm in this ten year period, particularly multi-person households (from 71% to 85%) and single person households under 60 years of age (from 70% to 83%), Figure 2.7.
- 2.21 There was also a considerable increase in working smoke alarm ownership for households where the HRP was aged 16-24; ownership rose by 13 percentage points from 72% in 2003-04 to 85% in 2013-14, Figure 2.7.
- 2.22 Over this 10 year period, the proportion of ethnic minority HRP households with a working smoke alarm increased at a greater rate (67% to 82%) compared with white HRP households (81% to 89%). Within ethnic minority HRP households, the proportion of households with a Pakistani or Bangladeshi HRP had the most marked growth in ownership of working smoke alarms (61% to 84%). The proportion of Indian HRP households with a working smoke alarm also increased notably over the period (63% to 77%), Figure 2.7.

Figure 2.7: Household ownership of at least one working smoke alarm by household type, age and ethnicity of HRP, 2003-04 and 2013-14



Base: all households

Note: underlying data are presented in Annex Table 2.2

Sources:

2003-04 English House Condition Survey, full household sample

2013-14 English Housing Survey, full household sample

2.23 The proportion of households with a working smoke alarm has improved for all income and working status categories over this period. There was a noticeable increase for those households in the lowest 20% of incomes category (from 75% to 85%). There was a similar percentage point increase in working smoke alarm ownership for the second lowest income quintile. There were also similar increases in the proportion of households with a working smoke alarm for the following groups; unemployed households (from 69% to 80%), those in part-time

(from 80% to 87%) or full time work (from 81% to 88%), and those who were retired (from 80% to 89%). Unemployed households were least likely to have at least one working smoke alarm in their homes throughout this period, Annex Table 2.3.

Number of smoke alarms

2.24 The number of smoke alarms in homes has increased over the last ten years. In 2003-04, nearly half (44%) of all households with a working smoke alarm had only one smoke alarm installed. By 2013-14, this proportion had fallen to around a third (30%) of households due to the increase in the proportion of households with two (from 43% to 49%) or three or more (from 13% to 21%) smoke alarms installed, Annex Table 2.5.

How smoke alarms are powered

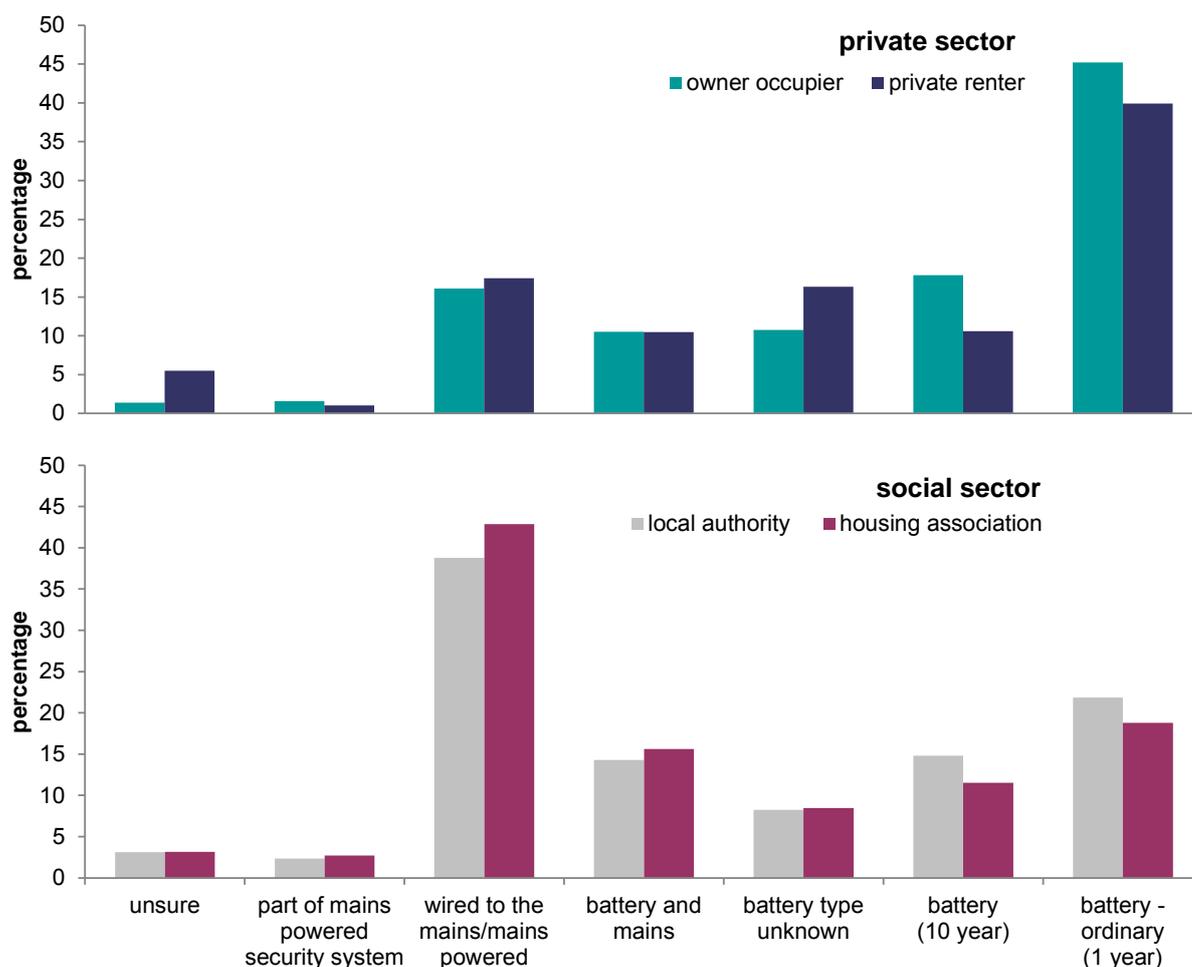
2.25 Households were asked how their smoke alarms were powered during the interview survey; multiple responses were allowed as households may have had differently powered alarms.

2.26 In 2013-14, two-thirds (67%) of working smoke alarms were battery powered with no other power source; these comprised 1 year battery (40%), 10 year battery (16%) and type of battery unknown (11%). A fifth (21%) of working smoke alarms were mains only powered and a very small proportion (2%) of smoke alarms were part of the mains security system. Some 11% of smoke alarms were powered by a combination of both battery and mains, Annex Table 2.6.

2.27 Owner occupiers (74%) and private renters (67%) were much more likely to have smoke alarms powered by batteries only compared with local authority households (45%) and housing association households (39%), Figure 2.8.

2.28 Just over a quarter of private renters (29%) and owner occupiers (28%) had a smoke alarm powered by mains power including any mains powered security system, or by a combination of mains and battery power. This was considerably less than the proportion of housing association (61%) and local authority households (55%) that had their smoke alarms powered by this means, Figure 2.8.

Figure 2.8: How working smoke alarms are powered, by tenure 2013-14



Base: all households with at least one working smoke alarm

Notes:

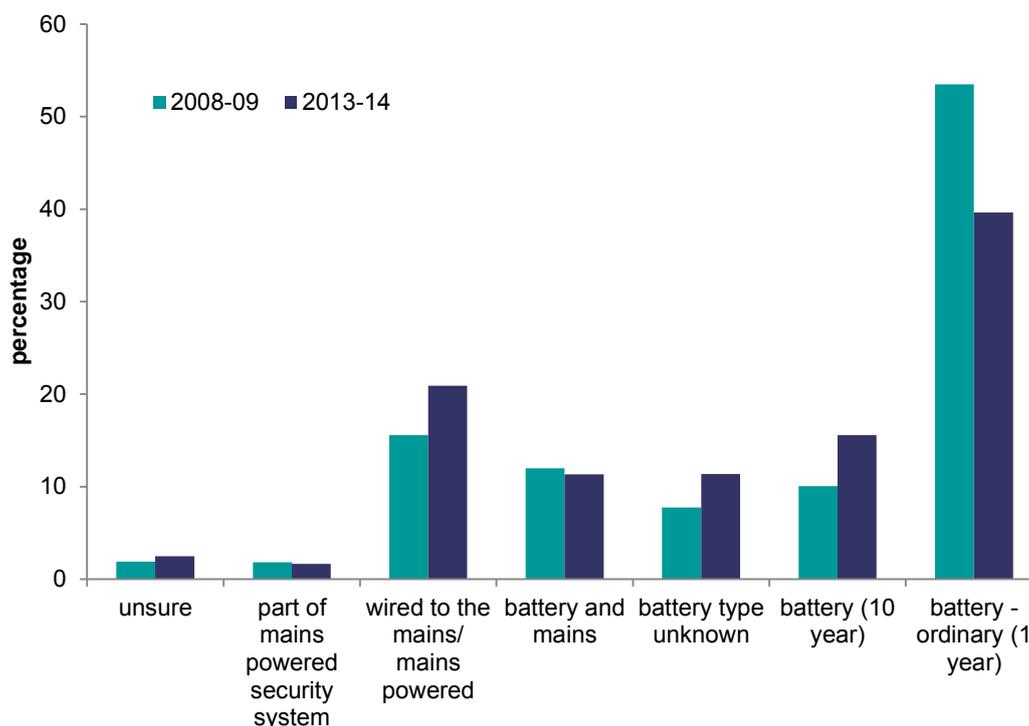
1) multiple responses allowed for households with more than one smoke alarm

2) underlying data are presented in Annex Table 2.6

Source: English Housing Survey, full household sample

2.29 From 2008-09 to 2013-14, there was a 13 percentage point reduction in the number of smoke alarms that were powered by a 1 year ordinary battery (from 53% to 40%) and an increase in smoke alarms that were powered by a 10 year battery (10% to 16%) or that were mains powered only (from 16% to 21%). These findings are likely to reflect the increase in new homes within the housing stock that were subject to building regulation requirements on the installation of smoke alarms, Figure 2.9.

Figure 2.9: How working smoke alarms are powered, 2008-09 and 2013-14



Base: all households with at least one working smoke alarm

Notes:

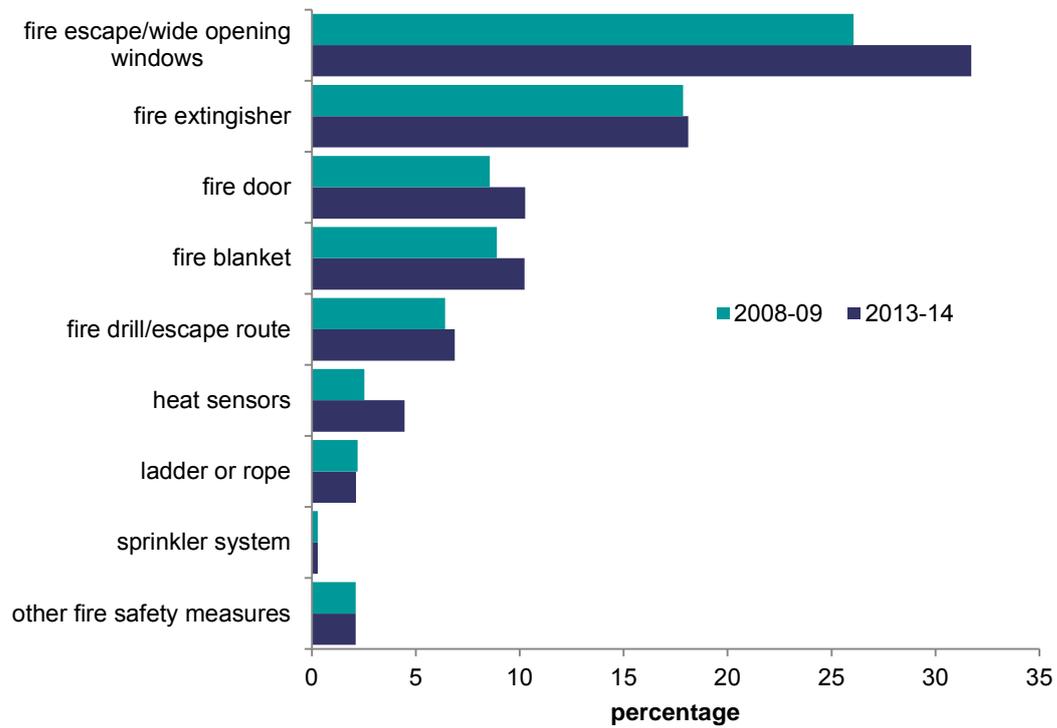
- 1) multiple responses allowed for households with more than one smoke alarm
- 2) underlying data are presented in Annex Table 2.6

Sources: English Housing Survey, full household sample

Other fire safety measures in the home

- 2.30 All households were asked which fire safety measures were present in the habitable part of their home; items kept in, for example, a garage or shed were excluded.
- 2.31 A third of households reported having a fire escape/wide opening window(s) (32%), while smaller proportions of households had a fire extinguisher (18%), a fire door (10%) or a fire blanket (10%), Figure 2.10. Only 5% of households had none of these fire safety measures or a smoke alarm installed in their home, Annex Table 2.7.
- 2.32 Between 2008-09 and 2013-14 the presence of fire escapes/wide opening windows rose from 26% to 32% among households, Figure 2.10.

Figure 2.10: Other fire safety measures in the home, 2008-09 and 2013-14



Base: all households

Note: underlying data are presented in Annex Table 2.7

Source: English Housing Survey, full household sample

2.33 Overall, the proportion of households that had no fire safety features, including a smoke alarm, reduced from 8% in 2008-09 to 5% in 2013-14, Annex Table 2.7

Chapter 3

Fire hazards

- 3.1 Fire and rescue authorities attended 170,000 fires (outdoor and indoor) in England in 2013-14. During this period, there were 3,614 non-fatal fire casualties and 275 fire fatalities of which 181 were from accidental dwelling fires¹. Although occupier behaviour is a major reason for fires starting, the design and characteristics of a building will affect the potential for a fire to spread or to be undetected and, therefore, impact on the likelihood of the fire causing harm. The main sources of ignition attributable to dwellings are cooking appliances, space heating appliances and electrical distribution equipment (wiring and cabling).
- 3.2 This chapter examines the existence of fire hazards in different types of homes and households in England in 2013. For the purpose of this analysis, a fire hazard exists where the risk of fire is determined to be significantly higher than average as part of the Housing Health and Safety Rating System (HHSRS) assessment². This chapter also investigates the risk of fire in relation to poor electrical safety. For ease of reporting, homes with a significantly higher than average risk of fire are termed as having a 'higher risk' of fire and all other dwellings as 'without a higher risk'.

Fire hazards

- 3.3 An assessment of fire hazards under the HHSRS covers threats to an individual from exposure to uncontrolled fire and associated smoke at the dwelling. It includes assessment of potential injuries caused by clothing catching alight from a controlled fire or flame, such as a flame from a gas cooker or open fire used for space heating.
- 3.4 Any impairment of mobility increases vulnerability to fire as it impacts on the ability to, and speed of, escape. For this reason people aged 60 years or over are considered to be the age group most at risk from fire hazards.
- 3.5 A number of factors are considered by EHS surveyors for the HHSRS assessment of each home, which impact on both the likelihood of any harm

¹ Source:

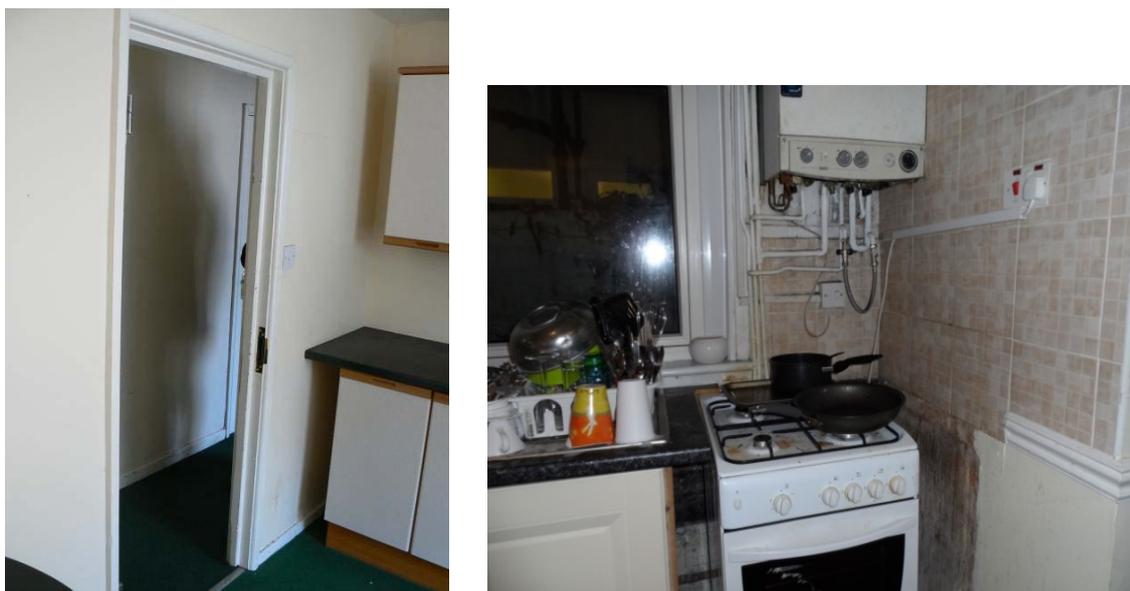
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/325696/Fire_Statistics_Monitor_April_2013_to_March_2014_final_3.pdf

² see Glossary and Chapter 5, Annex 5, 2012-13 English Housing Survey Technical Report for further details of the HHSRS.

arising from a fire and on the severity of this possible harm. The source of fire, the chances of fire spreading and means of escape are all components of the assessment. These relevant factors include³:

- heater/cooker position – inappropriate siting and or close proximity of flammable materials
- adequacy of the heating system to avoid the use of supplementary heaters, and any defects to the system
- electrical safety and the number/siting of sockets
- disrepair to the fabric of the dwelling (walls, ceilings and floors) and internal doors which may allow smoke or fire to spread
- fire safety equipment including smoke alarms/heat detectors
- the presence of self-closing fire doors
- means of escape and adequate lighting

Figure 3.1: Examples of dwelling features which may contribute towards homes having a higher risk of fire



Notes:

1) above left: missing fire door to kitchen

2) above right: electrical wiring to cooker point positioned near flames. Cooking facilities are directly beneath the boiler

Sources: BRE photo library

3.6 In 2013, 4% of homes (one million dwellings) were assessed as having a higher risk of fire. Of these, 88,000 had the most serious Category 1 fire

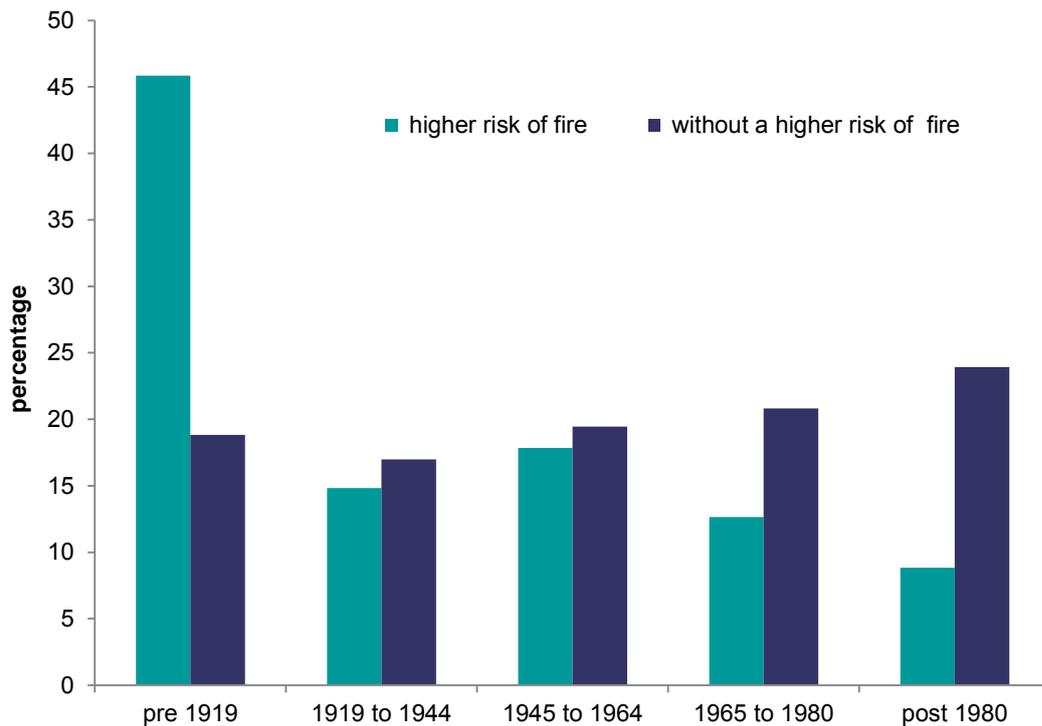
³ Further details on the fire hazards and the HHSRS can be found in the Housing Health and Safety Rating System Guidance, <https://www.gov.uk/government/publications/housing-health-and-safety-rating-system-enforcement-guidance-housing-conditions>

hazards such as the example shown in the case study at the end of this Chapter, Annex Table 3.1.

- 3.7 As the sample size of homes with Category 1 fire hazards was low, the following analysis will examine the profile of all the one million homes that were assessed as having a higher risk of fire.
- 3.8 The profile of homes with a higher risk of fire looked different to the rest of the English stock (which had a lower risk of fire); the latter comprised the vast majority of all the English Housing stock (96%). Privately rented homes were overrepresented among dwellings with a higher risk of fire (29%) compared with other private rented homes in the housing stock (19%). Some 31% of homes in urban areas also had a higher risk of fire compared with 21% of such homes with a lower level of risk. Small terraced houses, medium sized terraced houses and converted flats were also more common among homes with a higher risk of fire (19%, 28% and 7% respectively) compared with the rest of the housing stock (9%, 18% and 4% respectively), Annex Table 3.2
- 3.9 Private rented homes, terraced houses, converted flats and homes in urban areas all contained a higher proportion of older homes, which were more likely to have a higher risk of fire.
- 3.10 Dwelling age was closely related to the risk of fire; just under half (46%) of homes with a higher risk of fire were built before 1919, compared with only 19% of the rest of the total stock. The poor design of some of these older homes, for example, inadequate means of escape in older converted flats, and the greater numbers of non-decent homes⁴ are key factors. The proportion of homes built between 1919 and 1964 with a higher risk of fire was similar to the proportion of homes of this age without this level of risk. However, homes with a higher risk of fire were less likely to be built after 1964 compared with the remaining housing stock, Figure 3.2.

⁴ see Live Tables <https://www.gov.uk/government/statistical-data-sets/dwelling-condition-and-safety>

Figure 3.2: Dwelling age profile of homes with and without a higher risk of fire, 2013



Base: all dwellings with a higher risk of fire/without a higher risk of fire

Note: underlying data are presented in Annex Table 3.2

Source: English Housing Survey, dwelling sample

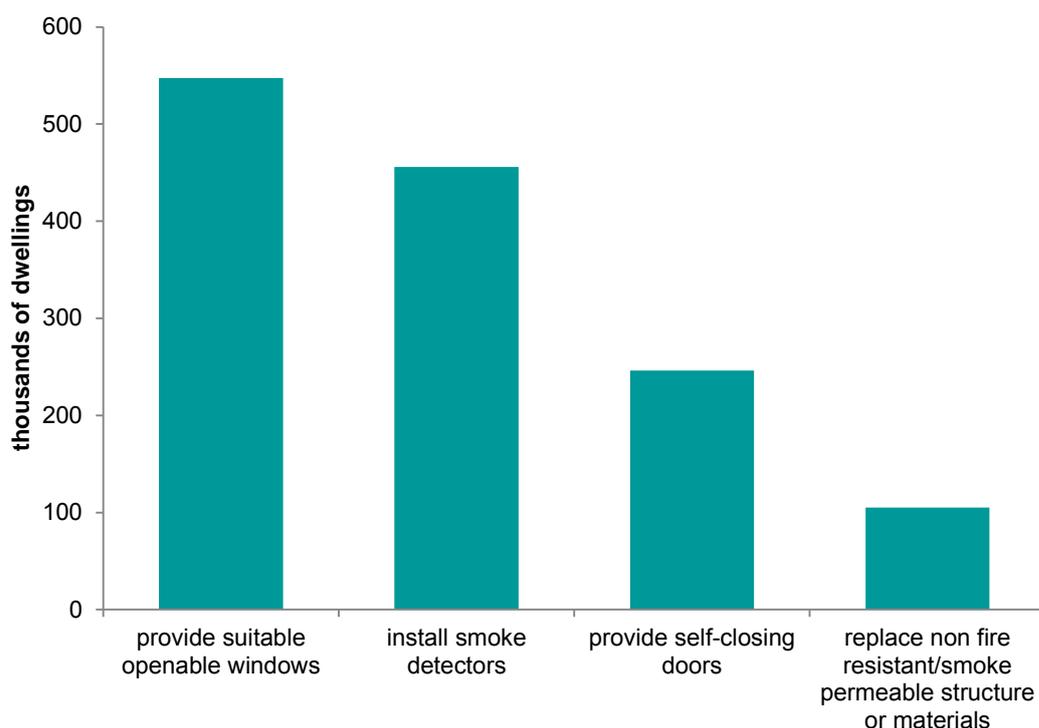
Remedial action for homes with higher risks of fire

3.11 Where a higher risk of fire exists, surveyors identify appropriate remedial action(s) to limit the chances of any fire occurring, limit the spread of a fire, however caused, and provide safe and ready means of escape.

3.12 Figure 3.3 shows the most common actions required to reduce the risk of a fire causing harm in these one million dwellings to an acceptable level. These were:

- provide suitable opening windows and/or doors for improved means of escape (547,000 homes)
- install smoke detectors (456,000 homes).
- provide self-closing fire doors (246,000 homes)
- replace any non-fire resistant or any smoke permeable materials that may be found, for example, in doors. This would also include the removal of any polystyrene tiles that may be present (105,000 homes)

Figure 3.3: Most common actions to remedy higher risks fire, 2013



Base: all dwellings with a higher risk of fire

Note: underlying data are presented in Annex Table 3.3

Source: English Housing Survey, dwelling sample

3.13 A small proportion of homes with a higher risk of fire (6%) were also assessed as having a higher risk of harm from flames and hot surfaces⁵, Annex Table 3.4. Figure 3.4 below is a room within a house in multiple occupation where the tenant sleeps in the kitchen, beneath a boiler and next to two cookers used by many of the 10 occupants. The proximity of the cookers to the occupants bedding provides both an added risk of a fire starting and of any fire spreading quickly. The lack of adequate workspace and overcrowded conditions also increase the risk of burns and scalds from the cooker.

⁵ Assessed under the HHSRS section of the EHS physical survey, this hazard covers threats of burns (injuries caused by contact with a hot flame or fire, and contact with hot objects/hot non-water based fluids) and scalds (injuries caused by contact with hot liquid and vapours).

Figure 3.4: Dwelling with a higher than average risk of fire and harm from flames and hot surfaces



Note: bedding adjacent to the cooker adds to the risks of a fire starting and spreading quickly. The lack of adequate workspace also increases the risk of burns and scalds
Source: BRE photo library

Households living in homes with a higher risk of fire

- 3.14 In 2013 around 944,000 households were living in the one million dwellings⁶ with a higher risk of fire. Younger households where the HRP was aged 16-24, and those in poverty were over represented in occupied homes with a higher risk of fire. Households where the HRP was aged 60 years and over, households with a child under 5 years and those containing someone who had a long term sickness or disability were no more likely to live in a dwelling with a higher risk of fire than a dwelling with a lower risk, Annex Table 3.5.
- 3.15 Just under a quarter (23%) of households who lived in homes with a higher risk of fire had no working smoke alarm⁷. However, 11% of households in homes without a higher risk of fire also lacked a working smoke alarm, demonstrating the potential for reducing the fire risk in these 'safer' homes, Annex Table 3.6.

Electrical hazards and fire safety in dwellings

- 3.16 To reduce the risks of fire, the electrical installation in a home (distribution board, wiring etc.) should meet the current building requirements, be properly installed and maintained, and be regularly checked and tested. The provision of sufficient and appropriately sited electric sockets helps reduce the need for extension leads and overloaded sockets. Defects to socket outlets or switches increase the risk of fire. RCDs (residual current devices) can reduce the incidence and severity of fire associated with earth faults in electrical systems,

⁶ the larger number of dwellings compared with households is because some dwellings were vacant

⁷ the presence or absence of a smoke alarm forms part of the HHSRS fire risk assessment. The data on the presence of a smoke alarm is from the EHS household interview survey

equipment and components. They do this by cutting the electrical current when it senses a 'leakage' of electric current from a circuit, for example, when a cable is damaged.

Figure 3.5: Examples of inadequate electrical safety which increase the risk of fire in homes



Notes:

- 1) top left: overloading the electrical sockets with too many appliances and inadequate adaptors
- 2) top right: old and dangerous electrical wiring in a recently vacated home

Sources: BRE photo library

3.17 Of those one million dwellings assessed as having a higher risk of fire, around 425,000 (42%) had all five electrical safety features present (modern PVC wiring, modern earthing, a modern consumer unit, overload protection and personal protection (RCD)⁸). This compared with 57% for the stock with a lower risk, Annex Table 3.7.

3.18 Surveyors assessed that some remedial work to the electrical system (including the addition of electrical sockets) was required in around 119,000 homes with a higher risk of fire (12% of these homes), Annex Table 3.7.

Case study – Mid terrace property with a Category 1 fire risk⁹

3.19 This privately rented mid terraced home has two floors plus a third attic bedroom. The staircase is internal and accessed from the kitchen. The home has no central heating. Gas fires heat the ground floor rooms with heating for the bedrooms provided by portable electric heaters. The main bedroom windows only open at the top, making them impossible to use as a means of

⁸ see Glossary for further details or chapter 3 of the EHS Profile of English Housing Report, 2013

⁹ the home in this case study is not a property surveyed for the English Housing Survey

escape, Figure 3.6. There are no smoke detectors. The dwelling has been assessed as a Category 1 fire risk due to the following factors:

- the lack of central heating means that there is a reliance on room heaters
- no fire precautions or smoke detectors in the home. The absence of these allows a fire to spread quickly with the possibility that the occupiers would not be aware of the fire
- poor means of escape. There is no means of escape from the bedrooms without passing through the kitchen where a fire is most likely to start. Occupiers in the bedroom on the third floor would have a reduced chance of an early escape
- there are no fire escape windows

Figure 3.6: Example of a mid-terrace property with a Category 1 fire risk



Notes:

1) left: poor means of escape from upper storey windows

2) right: (top and bottom): reliance on room heaters

Sources: BRE photo library

3.20 To remedy the Category 1 fire hazard, the dwelling requires:

- Installation of additional electrical sockets to the bedrooms
- replacing the heaters in the living rooms; ideally central heating should be provided
- installation of smoke detectors
- provision of windows allowing means of escape to the main bedrooms.

Glossary

Area type:

- **city or other urban centre:** includes
 - *city centre:* the area around the core of a large city.
 - *other urban centre:* the area around towns and small cities, and also older urban areas which have been swallowed up by a metropolitan area.
- **suburban residential:** the outer area of a town or city; characterised by large planned housing estates.
- **rural:** includes:
 - *rural residential:* a suburban area of a village, often meeting the housing needs of people who work in nearby towns and cities.
 - *village centre:* the traditional village or the old heart of a village which has been suburbanised.
 - *rural:* an area which is predominantly rural e.g. mainly agricultural land with isolated dwellings or small hamlets.

Dependent children: Includes persons aged under 16 and persons aged 16 to 18 and in full time education.

Dwelling: A unit of accommodation which may comprise one or more household spaces (a household space is the accommodation used or available for use by an individual household). A dwelling may be classified as shared or unshared. A dwelling is shared if:

- the household spaces it contains are 'part of a converted or shared house', or
- not all of the rooms (including kitchen, bathroom and toilet, if any) are behind a door that only that household can use, and
- there is at least one other such household space at the same address with which it can be combined to form the shared dwelling.

Dwellings that do not meet these conditions are unshared dwellings.

The EHS definition of dwelling is consistent with the Census 2011.

Dwelling age: The date of construction of the oldest part of the building.

Dwelling type: Dwellings are classified, on the basis of the surveyor's inspection, into the following categories:

- **terraced house:** a house forming part of a block where at least one house is attached to two or more other houses. A small terraced house has a total floor area of less than 70m². A medium/large terraced house has a total floor area of 70m² or more.
- **semi-detached house:** a house that is attached to just one other in a block of two.
- **detached house:** a house where none of the habitable structure is joined to another building (other than garages, outhouses etc.).
- **bungalow:** a house with all of the habitable accommodation on one floor. This excludes chalet bungalows and bungalows with habitable loft conversions, which are treated as houses.
- **converted flat:** a flat resulting from the conversion of a house or former non-residential building. Includes buildings converted into a flat plus commercial premises (such as corner shops).
- **purpose built flat/maisonette:** a flat or maisonette in a purpose built block. Includes cases where there is only one flat with independent access in a building which is also used for non-domestic purposes.
- **rooms:** e.g. bedsit or flatlet
- **other:** none of the above

Economic status: Respondents self-report their situation and can give more than one answer.

- **working full time/part time:** full-time work is defined as 30 or more hours per week. Part time work is fewer than 30 hours per week. Where more than one answer is given, 'working' takes priority over other categories (with the exception that all those over State Pension Age (SPA) who regard themselves as retired are classified as such, regardless of what other answers they give).
- **unemployed:** this category covers people who were registered unemployed or not registered unemployed but seeking work.
- **retired:** this category includes all those over the state pension age who reported being retired as well as some other activity. For men the SPA is 65 and for women it is 60 if they were born before 6th April 1950. For women

born on or after the 6th April 1950, the state pension age has increased incrementally since April 2010¹.

- **full-time education:** education undertaken in pursuit of a course, where an average of more than 12 hours per week is spent during term time.
- **other inactive:** all others; they include people who were permanently sick or disabled, those looking after the family or home and any other activity.

Electrical safety:

- **wiring:** this is the cabling from the input electrical supply point, which runs through the meters and consumer units and leading out into the dwelling. The earliest types of wiring used lead or black rubber sheathings to enclose the wires. The danger with this type of cable is the degrading of the rubber: any failure of the insulation can cause the outer covering to become live. Modern wiring is PVC sheathed.
- **earthing:** these are the wires joining the components at the electrical distribution centre. The early forms of earthing wires were unsheathed then later covered with green rubber, then green plastic. In 1977 the colour convention changed and all wires had to be coloured green and yellow.
- **consumer unit arrangement (fuse boxes):** in older systems, each individual electrical circuit was fed through an individual switch and fuse box. From 1960s through to the 1980s, fuses were collected together into a small number of smaller boxes, normally with a switch on the front which controlled all the circuits leading to the box. These boxes were normally fitted with a cover, the removal of which gave access to the fuses hidden inside. From the early 1980s, the newly named consumer unit (some dwellings have two) catered for the whole dwelling and was also designed to accommodate modern safety measures namely circuit breakers and residual current devices.
- **overload protection / miniature circuit breakers (MCBs):** these provide the most modern form of electrical current overload protection, replacing cartridge fuses and the original wire fuses (these simply melt when overheated) which formed the earliest form of protection.
- **Residual current devices (RCDs):** these are designed to break an electrical current very easily by detecting any abnormality in the circuit, for example, through someone touching a live wire. They are normally located in the consumer unit but a separate RCD may exist to protect an additional circuit, for example, an electrical circuit used in the garden.

Full time education: Full time education is education undertaken in pursuit of a course, where an average of more than 12 hours per week is spent during term time.

¹ For further information see: www.gov.uk/browse/working/state-pension

Gross annual income: The annual income of the household reference person and (any) partner. This includes income from private sources (regular employment, self-employment, government schemes, occupational pensions, private pensions and other private income), state benefits/allowances and tax credits, as collected on the EHS survey (this includes housing benefit/Local Housing Allowance but excludes council tax benefit and Support for Mortgage Interest) and interest from savings. It is a gross measure i.e. income before Income Tax or National Insurance deductions.

Habitable room: A room in the dwelling that offers “living accommodation”. Includes a kitchen if there is additional space to provide a dining area large enough to accommodate a table and chairs (typically an area of 2m² in additional to kitchen space). A fully converted room in the loft space is classified as a habitable room even if it can only be reached by a fixed ladder or unsafe staircase.

Household: One person living alone, or a group of people (not necessarily related) living at the same address who share cooking facilities and a living room or sitting room or dining area. The EHS definition of household is consistent with the Census 2011.

Household groups: The report focuses on certain key household groups which include people who are potentially vulnerable on account of their age, long term illness or disability; and groups which tend to be disadvantaged such as ethnic minorities and those in poverty.

- ethnic minority HRP: where the HRP defines their ethnicity as other than white.
- illness or disability: a household where at least one person in the household has a long-term illness or disability. The respondent assesses this, and long-term is defined as anything that has troubled the person, or is likely to affect them, over a period of time.
- in poverty: a household with income below 60% of the equivalised median household income (calculated before any housing costs are deducted). Income equivalisation is the adjustment of income to take into account the varied cost of living according to the size and type of household (see the EHE Technical Report, Chapter 5, Annex 4 for further information).
- HRP 60 years or over: the household reference person is aged 60 years or more
- youngest under 5: the youngest person in the household is aged 4 or under.

Household reference person (HRP): The person in whose name the dwelling is owned or rented or who is otherwise responsible for the accommodation. In the case of joint owners and tenants, the person with the highest income is taken as the HRP. Where incomes are equal, the older is taken as the HRP. This procedure increases the likelihood that the HRP better characterises the household’s social and economic position. The EHS definition of HRP is not consistent with the Census 2011, in which the HRP is chosen on basis of their economic activity. Where economic activity is the

same, the older is taken as HRP, or if they are the same age, HRP is the first listed on the questionnaire.

Household type: The main classification of household type uses the following categories:

- married/cohabiting couple under 60 with no dependent children or with non-dependent child(ren) only.
- married/cohabiting couple age 60 or over with no dependent children or with non-dependent child(ren) only.
- married/cohabiting couple with dependent child(ren) – may also include non-dependent child(ren).
- lone parent family (one parent with dependent child(ren) – may also include non-dependent child(ren)).
- other multi-person household (includes flat sharers, lone parents with non-dependent children only and households containing more than one couple or lone parent family).
- one person aged under 60.
- one person aged 60 or over.

The married/cohabiting couple and lone parent household types (the first four categories above) may include one-person family units in addition to the couple/lone parent family.

Housing Health and Safety Rating System (HHSRS): A risk assessment tool used to assess potential risks to the health and safety of occupants in residential properties in England and Wales. It replaced the Fitness Standard in April 2006.

The purpose of the HHSRS assessment² is not to set a standard but to generate objective information in order to determine and inform enforcement decisions. There are 29 categories of hazard, each of which is separately rated, based on the risk to the potential occupant who is most vulnerable to that hazard. The individual hazard scores are grouped into 10 bands where the highest bands (A-C representing scores of 1,000 or more) are considered to pose Category 1 hazards. Local authorities have a duty to act where Category 1 hazards are present, and may take into account the vulnerability of the actual occupant in determining the best course of action. For the purposes of the decent homes standard, homes posing a Category 1 hazard are non-decent on its criterion that a home must meet the statutory minimum requirements.

The EHS is not able to replicate the HHSRS assessment in full as part of a large scale survey. Its assessment employs a mix of hazards that are directly assessed by surveyors in the field and others that are indirectly assessed from detailed related information collected. For 2006 and 2007, the survey (the then English House Condition Survey) produced estimates based on 15 of the 29 hazards. From 2008, the survey is able to provide a more comprehensive assessment based on 26 of the

² <https://www.gov.uk/government/organisations/department-for-communities-and-local-government/series/housing-health-and-safety-rating-system-hhsrs-guidance>

29 hazards. See Chapter 5, Annex 5, of the EHS Technical Report for a list of the hazards covered.

Income/equivalised income: Household incomes have been ‘equivalised’, that is adjusted (using the modified OECD scale) to reflect the number of people in a household. This allows the comparison of incomes for households with different sizes and compositions.

The EHS variables are modelled to produce a Before Housing Cost (BHC) income measure for the purpose of equivalisation. The BHC income variable includes: Household Reference Person and partner’s income from benefits and private sources (including income from savings), income from other household members, housing benefit, winter fuel payment and the deduction of net council tax payment.

Tenure: Four categories are used for most reporting purposes, and for some analyses these four tenure categories are collapsed into two groups:

- **private sector:** includes:
 - *owner occupied:* includes all households in accommodation which they either own outright, are buying with a mortgage or are buying as part of a shared ownership scheme.
 - *private rented:* includes all households living in privately owned property which they do not own. Includes households living rent free, or in tied dwellings and tenants of housing associations that are not registered.

- **social sector:** includes:
 - *local authority:* includes Arms Length Management Organisations (ALMOs) and Housing Action Trusts.
 - *housing association:* mostly Registered Social Landlords (RSLs), Local Housing Companies, co-operatives and charitable trusts.

A significant number of Housing Association tenants wrongly report that they are Local Authority tenants. The most common reason for this is that their home used to be owned by the Local Authority, and although ownership was transferred to a Housing Association, the tenant still reports that their landlord is the Local Authority. There are also some Local Authority tenants who wrongly report that they are Housing Association tenants. Data from the EHS for 2008-09 onwards incorporate a correction for the great majority of such cases in order to provide a reasonably accurate split of the social rented category.

Vacant dwellings: The assessment of whether or not a dwelling is vacant is made at the time of the interviewer’s visit. Clarification of vacancy is sought from neighbours. Surveyors are required to gain access to vacant dwellings and undertake full inspections.

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