

How can we keep older people in Wales safe?

A report by Electrical Safety First in
association with Swansea University.





About Electrical Safety First

Electrical Safety First is the UK charity dedicated to reducing deaths and injuries caused by electrical accidents. Our aim is to ensure everyone in the UK can use electricity safely.

We campaign on behalf of consumers and electrical trade professionals to improve safety regulation and ensure safety messages are appropriate, up to date and well communicated.

We provide expert information and advice to help people protect themselves from faulty, damaged, sub-standard, and poorly maintained electrical installations and electrical appliances.

We are recognised by government and industry as the leading campaigning charity and technical authority on electrical safety.

How can we keep older people in Wales safe?

A report by Electrical Safety First in association with Swansea University. Prepared by Associate Professor Sarah Hillcoat-Nallétamby and Dr. Alexandra Sardani. Centre for Ageing and Dementia Research/Centre for Innovative Ageing Swansea University

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List of abbreviations

AT	Assistive technology
CSSIW	The Care and Social Services Inspectorate Wales
DIY	Do it yourself
F & R	Fire & Rescue
FRA	Fire and Rescue Authorities
HHSRS	Housing, Health and Safety Rating System
HSE	Health and Safety Executive
LiW	Living in Wales (Property/Household Surveys)
PAT	Portable Appliance Test
ST	Smart technologies
SWF&RS	South Wales Fire & Rescue Services
TO	Technical Officer
WHQS	Welsh Housing Quality Standard

④ Introduction by Electrical Safety First and Key Recommendations

1. Introduction by Electrical Safety First and Key Recommendations

More than half of accidental house fires in Wales are caused by electricity. This report finds that older people in Wales are disproportionately at risk of an electrical fire in their homes. The number of people aged 80 or more is expected to double by 2035 with an estimated 50,000 people aged 65+ living with dementia, which presents its own challenges when it comes to electrical safety. There is a clear need for action to be taken to make sure that this ageing population is able to live in homes that are electrically safe.

The majority of older people in Wales – about 80% – own their own homes, most of which will be older housing stock that has never have had an electrical safety check. Older people are likely to use older electrical appliances and rely on electric heaters and blankets, particularly in the winter, without having any fire safety equipment at home.

Many older people understandably want to live independently in their own homes for as long as possible, but this puts the responsibility on individuals to ensure that their homes are safe. Concerns about the cost of repairs and a lack of awareness of the risks can lead to owner-occupiers living in homes with major safety hazards.

The report finds that:

- Older people are significantly affected by domestic fires, representing around a third of all dwelling fire casualties.
- 50,000 people aged 65+ will be living with dementia in Wales by 2025, putting extra challenges on home electrical safety.
- People aged over 80 were at least four times more likely than any other age group to be a casualty in an electrical fire.
- Fatalities caused by an electrical fuel source are significantly higher amongst people aged over 80 than other age groups.

There is an inequality in the way that electrical safety in Wales is legislated, according to tenure. The Welsh *Housing Quality Standard (WHQS)* specifies minimum requirements for safe housing in the social sector, while the *Housing, Health and Safety Rating System (HHSRS)* is the main regulatory instrument for property standards in Wales. The Welsh Government's *Code of Practice* offers best practice advice for privately rented properties, recommending five-yearly electrical checks, but with no legal requirement to have these carried out. Owner-occupiers have no legal obligation to maintain installations or check electrical appliances.

Electrical Safety First recommends that:

- The Welsh Government must consider funding a scheme to provide free five-yearly home electrical safety checks for people aged over 80, regardless of the tenure of their property.
- Local authorities must work with care providers to carry out additional home visits to the over 80s in order to identify risks and prevent electrical fires and accidents, enabling them to live independently in their homes
- Current initiatives undertaken by fire and rescue services for free home fire safety checks in Wales, must be expanded with a focus on potential electrical hazards, not just smoke alarms.
- Regulations for five-yearly electrical safety checks must be introduced in the private rented sector and social rented sector in Wales to help protect older people.
- When raising awareness of electrical safety amongst older people, it should be taken into consideration that the majority of these people will not have regular internet access, so alternative ways of reaching them must be considered.

Executive Summary

2. Executive Summary

This Report provides evidence about electrical safety for older people living in Wales, the majority of whom are home owners. It provides a background about Wales' ageing society, information about the quality of Welsh housing, and statistics relating to dwelling fires and casualties, with a specific focus on those involving an electrical source or cause and the ages of those affected. It then looks at the legislative and policy provisions designed to safe guard people living in the owner/occupied, social and private rental sectors against problems to do with electrical safety; and ends with an overview of some of the provisions and measures in place which can help older people to live in safety at home, with examples of good practice case studies. The Report has been informed by a desk-based literature search; qualitative interviews with some key stakeholders – *South Wales Fire and Rescue Service, Care & Repair Cymru* and some of those working in its affiliated agencies in South Wales – involved in providing services which support older people to live safely at home; and insights from older people themselves about their understanding of issues related to electrical safety. The Welsh Local Government Association also facilitated access to further information at the local authority level. The statistical data in the Report have been drawn from publicly available sources or were provided by the Welsh Government's Community Safety Statistics unit. This has enabled us to have a closer look at Wales' older population in terms of two main groups – the "old" – aged 60-79 – and the "very old" aged 80 or more.

The Welsh Context – People and Places in an Ageing Society

In 2015, approximately 625,000 people were aged 65 or more, and by 2035 there will be an estimated 839,200. The proportions of people aged 80 or more are projected to double from about 5.3% to 9.6% between 2015 and 2035, and we can expect to have over 75,000 residents aged 90 and over living in Wales by then. Most older people – about 80% – own their homes; another 13% and 6% are social or private tenants, so will benefit from more recent policy and legislative provisions for home safety and security for these tenures. The Welsh Government recognises that many older people will prefer to age in place in their homes, but that some will choose to move, and that policies and services should facilitate these choices. The message here is that service providers should work towards facilitating choices for older people in terms of where they wish to live. This said, as most will continue to live at home in the community, the onus will lie with them in ensuring that their homes are safe environments in which to age, including the repair or updating of electrical installations and appliances.

Official estimates show there could be about 50,000 people aged 65+ living with dementia in Wales by 2025. With about one in four aged 90 or more, problems of memory loss associated with this condition will raise new challenges at home when it comes to electrical safety.

Key Findings

Fires and electricity in older people's homes

- Dwelling fires¹ – causes and sources – electricity at fault

Between 2009-2010 and 2016-17, the number of accidental dwelling fires recorded fell from 1,864 to 1,719. In 2016-17, almost 60% were *caused* by faulty leads or appliances; misuse of equipment or appliances; or a faulty fuel supply; about a quarter were traced to an ignition *source* to do with electrical distribution (e.g. electrical supply of wiring, cables, plugs) or electrical appliances (e.g. office equipment, domestic and other appliances).

Dwelling fires – casualties by age

Between 516 and 639 casualties (fatalities, non-fatal casualties and rescues) in dwelling fires have been recorded each year between 2009-10 and 2016-17 (14 fatalities, 80 rescues and 525 non-fatal casualties in 2016-17).

Both “old” and “very old” people are significantly affected – since 2009-10 they have represented around a third of all dwelling fire casualties; in 2016-17, 15% of victims were “old” and 14% “very old”.

Dwelling fire casualty rates per million of the population show that in 2016-17 for example, 619 people per million in the “very old” age group were affected, making them over five times more likely to have experienced a dwelling fire than young people aged 16 or under.

Dwelling fire casualties – electricity and age

Each year between 47% and 58% of all fire casualties have been caused by an *electric ignition source*. Older people are significantly affected by these fires; since 2009-10, on average, about 37% of these victims have been older people. Rates per million of the population confirm this; in 2016-17, “very old” people were at least four times more likely than any other age groups to have been a casualty in these fires.

Fatalities

Fatality numbers are low and so quite volatile, but when they have occurred in fires where the cause has been an electrical fuel supply, “very old” people have had the highest fatality rates per million of the population compared to other age groups, for 6 out of the 8 years between 2009-10 to 2016-17.

By breaking down statistics into two groups of “old” (60-79) and “very old” (80+) people, we can see more clearly that entering later life increases the risk of experiencing a dwelling fire *per se*, and that this increases even more when people reach 80 and beyond. This is important to recognise as the population of those with dementia is likely to increase amongst this age group in particular.

The quality of Welsh housing as a context for electrical safety

There will be new data about Wales' housing stock when results from the national *Welsh Housing Conditions Survey 2017-18* are made available.

In 2008, about 4% of dwellings were *unfit* for human habitation according to the *Fitness Standard* measure, most frequently because of disrepair; private rental and old dwellings were more likely to be unfit. In 2004, 4 out of 10 people aged 55+ lived in dwellings built before 1945, a quarter of these constructed before 1918; older housing stock may be difficult or impossible to retrofit for safety and comfort purposes.

The *Housing, Health and Safety Rating System (HHSRS)* which replaced the *Fitness Standard*, records the number of hazards in dwellings, including a "prevention of accidents" hazard category. In 2008, about 3 out of 10 dwellings in Wales had one or more of the most dangerous hazards.

Electrical Safety in Wales' Housing Stock

Legislative and policy frameworks

Electrical safety in Wales is regulated and legislated in various ways, particularly for the social and private rented sectors.

- *Welsh Housing Quality Standard – WHQS*

This is a standard that the Welsh Government expects all social housing to meet by 2020, and it includes the quality of accommodation. Local authorities have a duty of care to ensure the standard is met. The *WHQS* sets 'minimum requirements' to meet the standard and it is used by the Welsh Government to monitor how well local authorities and social landlords are progressing in complying with the standard. It does not apply to the private rental sector.

There are some problems with the *WHQS* specifications about electrical installations, heating installations and appliances. For example, the certification standard for electrical lighting and power installations is required on a 10 yearly basis but annually for the other fuel sources. Also, the inspection of electrical appliances can be carried out by landlords; this means there is no requirement to have an appropriately qualified person to complete these inspections.

- *Housing, Health and Safety Rating System – HHSRS*

This system is used by landlords to assess the standards of their residential premises and whether they are safe or hazardous to live in; it also gives local authorities enforcement options if hazards are identified. The assessment of electrical system and fixed appliance hazards is initially based on a visual inspection completed by the landlord rather than by a qualified electrician/electrical engineer.

- Parts P and M of the Building Regulations

These provide standards for all types of building work and have specifications about electrical safety and installations. Whether the work has been carried out by professionals or as a DIY job, landlords and

homeowners are required to prove by law that any electrical installation work meets *Part P* requirements and local authorities are authorised to have installations removed or altered if they do not comply. *Part M* specifies requirements about electrical safety in terms of the height of socket outlets, switches and consumer units.

Social rented housing

- Levels of compliance with the *WHQS*

In 2016, 79% of social housing dwellings had met with the *WHQS*, compared to 72% the previous year.

In 2015-16, registered social landlords were achieving higher compliance levels than local authorities (about 96% and 54% respectively), although about a quarter of social housing dwellings had been granted compliance under *acceptable fail* conditions (e.g. cost of remedy, timing of remedy, resident's choice and physical constraint; a tenant may refuse works and must sign waiver forms). About 7% of local authority and registered social landlord dwellings were not compliant with the *WHQS* requirements for electrical systems, again with social landlords achieving higher compliance levels (99.4% compared to 83.5%).

Private rental housing

The Welsh Government has issued a *Code of Practice* ("the Code" Oct 2015) for licensed landlords and agents in the private rental sector about standards for letting and managing rental properties; it aims to improve practices in this sector.

The standards outlined in the *Code of Practice* do not require landlords or agents to provide tenants with an up to date electrical safety certificate for appliances before they move in; they are required to provide them with a *Landlords Gas Safety Certificate*, dated within the last 12 if the property has any gas appliances.

With regard to property conditions, the *Code of Practice* states that: "*a check on the electrical installation should be carried out at least once every five years by a competent electrician, and the results...recorded in the form of an Electrical Installation Condition Report*"; however, these specifications are included as "*Best practice*" so this means that landlords and letting agents have no legal obligation to carry out such checks.

There is no legal requirement for private landlords to do a PAT test on portable appliances.

Owner-occupied housing

The 2008 *Living in Wales Property Survey* which measured the *HHSRS* showed that owner occupier dwellings were more likely than other tenures to have the most dangerous Category 1 hazard, and these include an electrical hazard.

Maintaining electrical appliances and installations for home owners

Qualitative evidence from our interviews with stakeholders and older citizens highlighted several factors which are important when it comes to trying to address the risks of electrical incidents, including the costs of repair and maintenance work, and attitudes and behaviour towards electrical safety:

- the cost of electrical work can be prohibitive, and variations in local authority funding can affect how much financial support is available for remedial works;
- remedying basic electrical problems can often lead to identifying more complex electrical circuit issues which are too costly to address;
- faced with prohibitive costs, stakeholders note that some older people will either undertake electrical work themselves or have it done by unqualified electricians;
- people's attitudes towards the safety of electrical appliances also suggest that there is scope to raise awareness amongst older home owners about the dangers of holding on to old appliances.

Care Homes

The *Regulation and Inspection of the Social Care (Wales) Act 2016* specifies that care home owners and managers are responsible for ensuring that the homes they operate are safe and secure. *The Care and Social Services Inspectorate – CSSIW* monitors standards in care homes and these include safety.

To meet national minimum standards for older people's individual accommodation, furniture and fittings need to provide each resident with at least two accessible double electric sockets. The *CSSIW* also refers to guidance provided by the *Health and Safety Executive* about the legal requirements for electrical equipment in environments such as care homes.

For fixed electrical installations, they must be inspected and tested by a specialist every five years or less depending on the risk assessment carried out by the professional. If care home staff participate in visual checks of electrical installations, they need training to do so.

For portable electrical appliances (e.g. kettles, toasters), there is no legal requirement for testing on a yearly basis so care home managers or owners can decide on the frequency and level of maintenance, and a visual inspection by staff is generally considered sufficient, with some exceptions for PAT testing.

Home Safety in Wales

The financial costs of electrical hazards

The 2008 *Living in Wales Household and Property Surveys* provide information about household hazards, including those for fire and electrical safety, which are part of the most dangerous Category 1 hazards. In 2008, about 70% of all dwellings did not have a C1 hazard; the greatest hazard was the risk of falling (13.3%) and excess cold (11%). Less than 1% of dwellings had fire or electrical safety hazards. However, in terms of financial costs, both these hazards are the most costly to remedy when estimated on a per dwelling basis – £10,400 for fire hazards and £22,500 for electrical hazards.

Fire safety at home

The 2008 *Living in Wales Household Survey* asked about fire prevention measures, and found that the most commonly used types of fire safety equipment were smoke alarms, wide-opening windows, fire extinguishers and fire blankets, but that households with older people (60+), and those in all-pensioner households, were the least likely to have any one of these preventative installations at home.

The *National Survey for Wales* showed for 2013-14 that 7% of households with people aged 60 or more did not have a smoke alarm at home or had one but it did not work (5% with none and 2% with at least one but not working). This has improved since 2008 when about 75% of households with older people did not have a mains powered fire alarm.

Home safety and living with dementia

Focus group discussions with older people illustrated how memory loss can change previously safe home environments to ones where there is increasing likelihood of danger.

The *National Dementia Vision for Wales* (2011) and its *Together for a Dementia Friendly Wales 2017-2022* strategy could reflect the issues of electrical safety at home, and explore possible solutions, for example by extending their agendas to include the use of smart technologies as preventative measures.

Supporting older people to stay at home safely

Wales' three *Fire and Rescue Authorities* (FRA) serving North, Mid-West and South Wales recognise the challenges of protecting an ageing population, and focus on prevention initiatives and cross-partnership collaboration, which include electrical safety.

Care & Repair Cymru and its affiliated agencies offer advice and practical services across Wales which help older people to live independently at home. In 2015-16, their clients benefitted from a range of electrical safety improvements including electrical safety checks/reviews (103 completed), full or part rewiring of their electrical installations (181 completed) and improvements to electrical socket installations (141 completed). *Care & Repair Cymru* administers a small fund on behalf of *Electrical Safety First*; in 2016 this fund enabled them to help 39 clients with an average spend of £256 per client.

Raising awareness – local authority information through the web

If older people have access to the internet, they may be able to find information about electrical safety from their local authority website. However, recent survey data show that accessing information provided by government public services online is something that older people are not very likely to do. For example, 69% of younger people aged between 16-29 who said they had used the internet at least once a week had visited a government or public service website for personal use over the past 12 months, compared to only 35% of those aged 75 or more.

The *National Survey for Wales* also shows that it is older people who are the least likely to be current users of the internet.

Some service providers in Wales recognise the limitations of online information sources and are targeting vulnerable groups through more direct communication strategies.

Focus group participants said that if there was one message they would like to send to the Welsh Government about electrical safety and older people, for home owners it would be: *“To have somebody come around and check”*.

Acknowledgements

We would like to thank the older citizens living in Wales who agreed to participate in the development of this Report by providing us with their time and ideas as members of three different focus groups. Particular thanks go to *Solva Care*, members of the *British Society of Gerontology's* 2017 Annual Conference, the “*An audience with...*” event organisers, and the “*With Music in Mind*” group for helping us to organise, run and participate in these focus groups.

For stakeholders who have provided their expert knowledge in helping to compile the evidence base for the Report, we would also like to thank *South Wales Fire and Rescue Services*, the *Welsh Local Government Association*, *Care & Repair Cymru*, and agencies in Rhondda Cynon Taff and Merthyr Tydfil.

The Welsh Government's *Community Safety Statistics* unit have provided invaluable support in developing some of the statistical content in the Report and we would like to thank them for their time and expertise in ensuring rigorous interpretation of Welsh data.

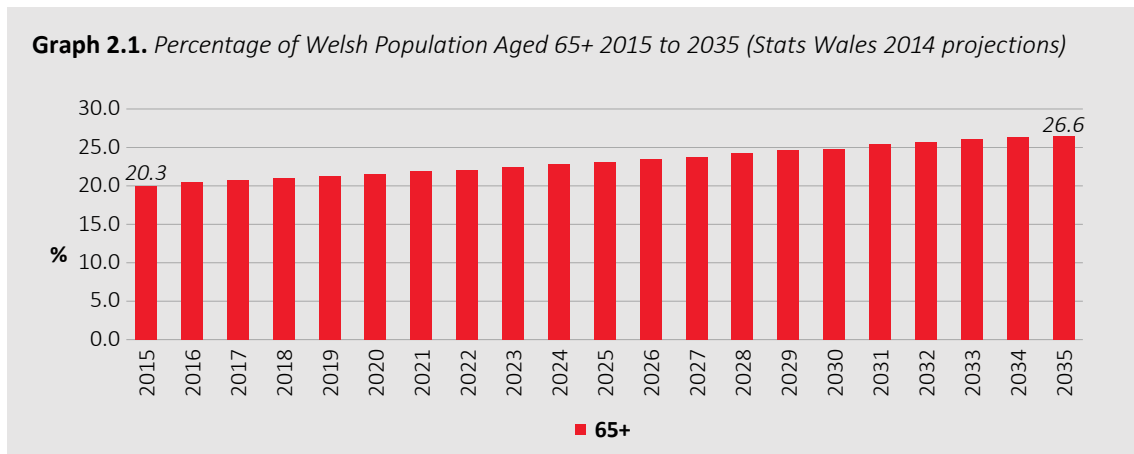
© Wales' Ageing Society – People and Places

3. Wales' Ageing Society – People and Places

Population

Europe's populations are ageing and this means that the numbers and proportions of older citizens is increasing, and will continue to do so over the next few decades². The large number of babies born after the Second World War – the “Baby Boomers” – are also adding to this process.

Wales is no exception to these changes and has an older population structure than Scotland, England or Northern Ireland³. In 2015, 3.1 million people were living in Wales, and approximately 625,000 were 65 or more and by 2035 their numbers will have grown to nearly 839,200. This means that about 1 in 4 people in Wales will be 65 and over by then. Graph 2.1 shows how this age group will grow as a proportion of the total population of Wales from 2015 until 2035.



The older population is also ageing so for the near future, the proportions of people aged 80 or more are projected to double between 2015 and 2035 from about 5.3% to 9.6%, and their numbers will increase from about 161,700 to 301,700. We can also expect to have over 75,000 residents aged 90 and over living in Wales by then.

Population Living with Dementia

In 2015, there were an estimated 38,830 people aged 65 or more living with dementia, and about 2 out of 3 were women. The likelihood of living with dementia increases with age; in 2015, 7.6% of people aged 65-69 were affected, compared to 22.4% of people aged 90 or more⁴. There will be a growth in the numbers of people with dementia in the future as the population ages; official estimates suggest that there could be about 50,000 people aged 65+ living with the condition in Wales by 2025, with about one in four aged 90 or more⁵.

Where Do Older People Live?

The majority of older people live in their own homes as owner-occupiers. In 2011, 81%⁶ of people aged 65 or more in Wales owned or had shared ownership of their property. Another 13% lived in the social, and 6% in the private rental sectors or were living rent free. At present, there is only limited data available about older people's housing tenure, so we do not have an accurate picture of the numbers living in extra care or sheltered housing. Welsh Government figures about the social rented stock in 2017 show that there were about 193,300 units catering to general needs housing, 33,000 supported (including sheltered), and 2,300 extra care units; these figures do not tell us whether the units are actually occupied, nor the total number of occupants⁷. Very small proportions of the older population now live in care home settings in England and Wales (in 2011, about 3% of those aged 65 or more).⁸ This suggests that they are managing to remain in their own homes with support from their local communities and localised services.

In their recent Report⁹ about the issues and potential solutions involved in meeting the housing needs of an ageing population, the Welsh Government recognises that older people should be able to live independently where they chose, either by staying put and *ageing in place* or by moving to more suitable accommodation if they prefer^{10, 11}. In view of some of the evidence provided in the Report one of the key action points highlighted is that Wales should:

“Continue to invest in and strengthen aids and adaptations services and the organisations which provide these, expanding their role where possible, to enable more people to “stay put” or move to a safer (our emphasis), more energy efficient, affordable and connected environment with community support” (Welsh Government, 2017: 17).

The important message here is that service providers should work towards facilitating choices for older people in terms of where they wish to live. This said, as most will continue to live at home in the community, the onus will lie with them in ensuring that their homes are safe environments in which to age, including the repair or updating of electrical installations and appliances.

The Quality of Welsh Housing as a Context for Electrical Safety

The most recent data available in Wales¹² show that a large proportion of older people aged 65+ or more live in old housing stock which means it is often difficult or impossible to retrofit for safety and comfort purposes; in 2004 for example, about 40% were living in dwellings built before 1945, a quarter of which were constructed before 1918.¹³

In 2008, about 4% of all Welsh dwellings¹⁴ were classified as unfit for human habitation according to the *Fitness Standard* measure, most frequently because of disrepair, with private rental dwellings and old properties more likely to be unfit. This proportion has however been declining steadily over previous years.

The *Fitness Standard* was replaced by the *Housing, Health and Safety Rating System (HHSRS)*, which helps gauge the quality and safety of Welsh housing by recording the number of hazards in dwellings, and includes a “prevention of accidents” hazard category. In 2008, about 3 out of 10 dwellings had one or more of the most dangerous hazards¹⁵.

The *Welsh Housing Conditions Survey 2017-18*¹⁶ will enable us to capture more up-to-date information about dwellings with hazards and those which are compliant with electrical safety features, and measured as part of the *WHQS* and *HHSRS*.

Recent figures for 2015-16¹⁷ about local authority assistance for housing improvements in Wales (e.g. Disabled Facility Grants for private sector housing or housing renewal schemes for social housing) do show that the proportion of dwellings improved for older people aged 60 or more increased from 32% to 35%. It is not possible to know from the information available whether these improvements cover electrical installations, but as noted in one of our interviews with a *Care and Repair Cymru* Technical Officer, there is considerable variation in how much is spent on improving dwellings, depending on local authority resources.

What do we know about fires and electricity in older people’s homes?

Dwelling fires – causes and sources – electricity at fault

Between 2009-2010 and 2016-17, the number of accidental dwelling fires recorded in Wales fell from 1,864 to 1,719¹⁸. Similar percentages were seen for 2009-10 to 2016-17 for North Wales (25.7%), just over a third in Mid- and West Wales (32.8%), and the remainder in South Wales.

The most recent figures for 2016-17 show that almost 60% of these fires were caused¹⁹ by faulty leads or appliances²⁰, misuse of equipment or appliances or a faulty fuel supply (Table 2.1²¹).

Table 2.1. Causes of accidental primary fires in dwellings. 2016-17 (N = 1,719)

	Faulty fuel supply	Faulty leads or appliance	Misuse of equipment or appliance	Chip pan/ deep fat fryer	Playing with fire	Careless handling	Placing articles too close to heat	Other	Total %
% by cause	11.2	14.4	33.3	7.7	0.4	7.6	11.9	13.4	100

As Table 2.2 shows, nearly half of all these fires were traced to an ignition source – “the flame, spark or heat that started the fire” – to do with cooking appliances, and about another quarter to problems with electrical distribution (e.g. electrical supply of wiring, cables, plugs) or electrical appliances (e.g. office equipment, domestic and other appliances).

Table 2.2. Source of accidental primary fires in dwellings. 2016-17 (N = 1,719)

	Total %
Smoking materials	6.6
Matches and candles	4.0
Cooking appliances	48.3
Space heating appliances	4.5
Central and water heating appliances	1.7
Blowlamps, welding and cutting equipment	0.6
Electrical distribution	11.4
Other electrical appliances	12.9
Other sources	7.9
Unknown	2.0
Total	100

Dwelling fires – casualties

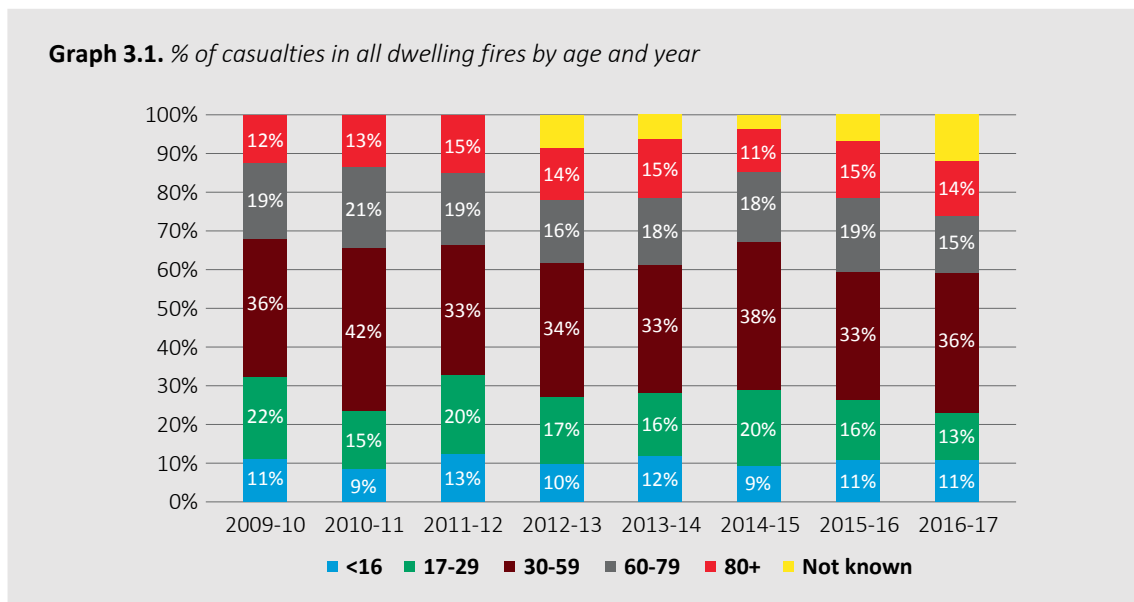
As the focus of this Report is on older people, the Welsh Government was able to provide us with statistics about casualties from fires and electrical related incidents for two different age groups, those aged between 60-79 (the “old”) and those 80 or more (the “very old”). This makes sense because risks of frailty and multiple sensory loss can become more accentuated with age, and potentially increase the likelihood of experiencing a problem with electrical installations or appliances.

The numbers of casualties²² in dwelling²³ fires are small in Wales – between 516 and 639 have been recorded each year between 2009-10 and 2016-17. In 2016-17, there were 14 fatalities, 80 rescues and 525 non-fatal casualties.

Data about the specific circumstances in which fatal and non-fatal casualty victims were found (e.g. being bed-ridden, discovering the fire) show that in 2016-17, about 3% were *bed or chair ridden* (n=14) and another 2% (n=10) had *other immobility constraints*. Although the numbers of people found in these particular circumstances have remained low over the period 2009-10 to 2016-17, on average, the majority of these victims (about 81%) were aged 60 or more.

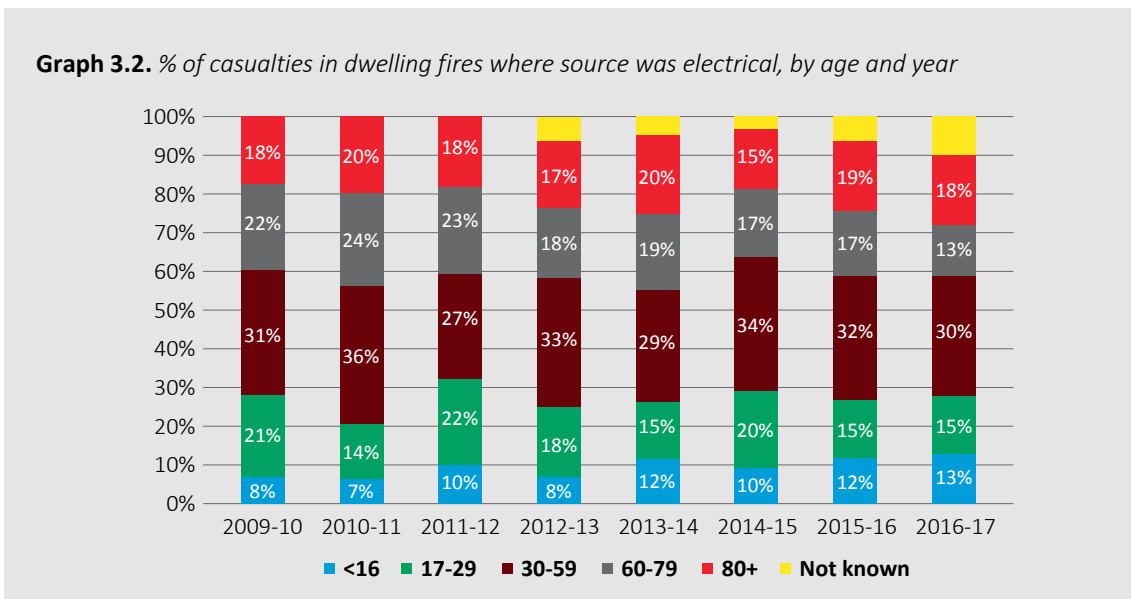
Dwelling fires – casualties by age

Graph 3.1 shows that since 2009-10 older people aged 60 or more represent around a third of all dwelling fire casualties. In 2016-17, 29% were over the age of 60 (15% “old” and 14% “very old”), compared to 36% of casualties amongst people aged 30-59, 13% of young adults aged 17-29 and 11% were children. Both “old” and “very old” people are therefore significantly affected by fires.

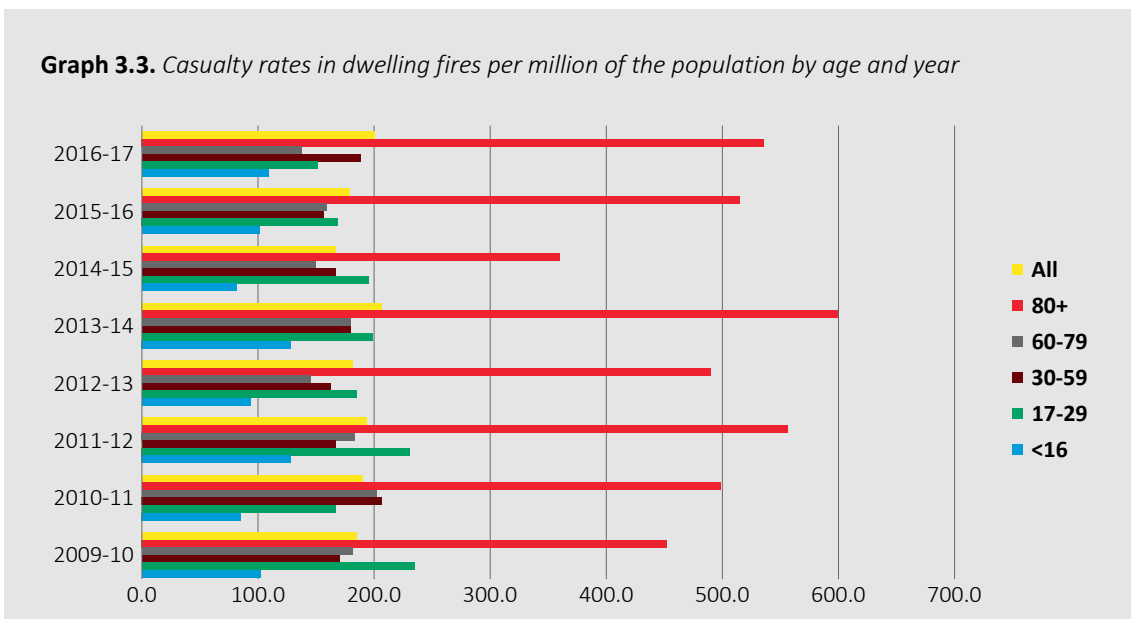


Dwelling fires – casualties by electricity and age

The numbers of people injured at home from a fire caused by an electrical source has remained relatively constant since 2009, ranging from 261 out of a total of 558 to 334 out of 619 in 2016-17. However, this means that each year between 47% and 58% of all fire casualties have been caused by an electric ignition source. Older people are also significantly affected by these fires; since 2009-10, on average, about 37% of these victims have been older people. In 2016-17 (Graph 3.2) about 13% were “old” and another 18% “very old”. The previous year these groups had made up over 35% of all those involved in a dwelling fire triggered by an electrical source.

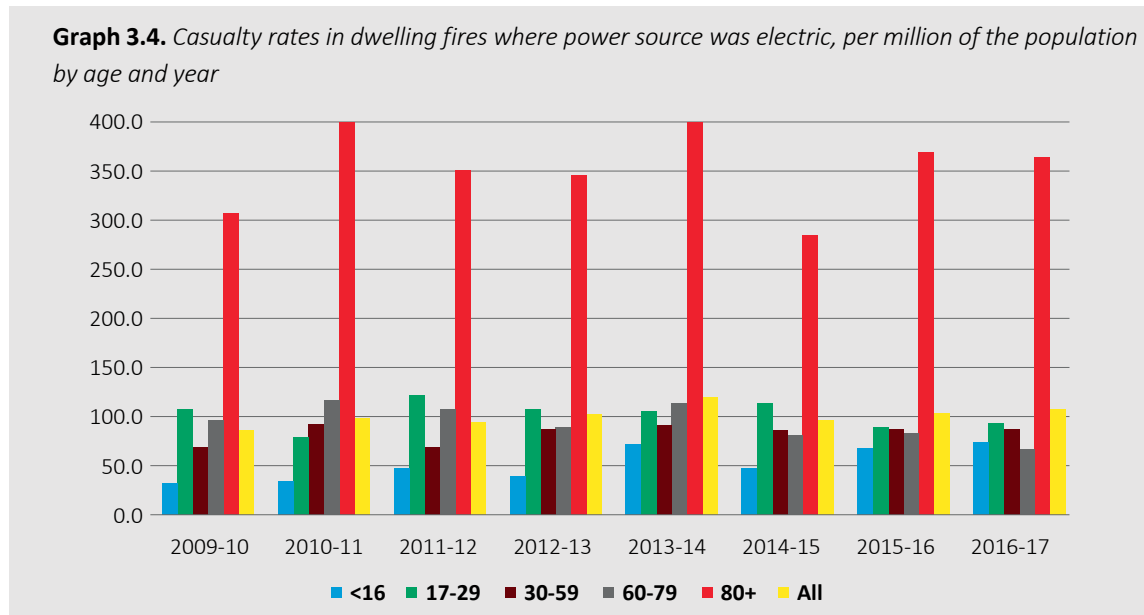


Looking at numbers in terms of dwelling fire casualty rates per million of the population, rates have not changed much over the past decade, but Graph 3.3 shows it is the “very old” who are much more at risk.



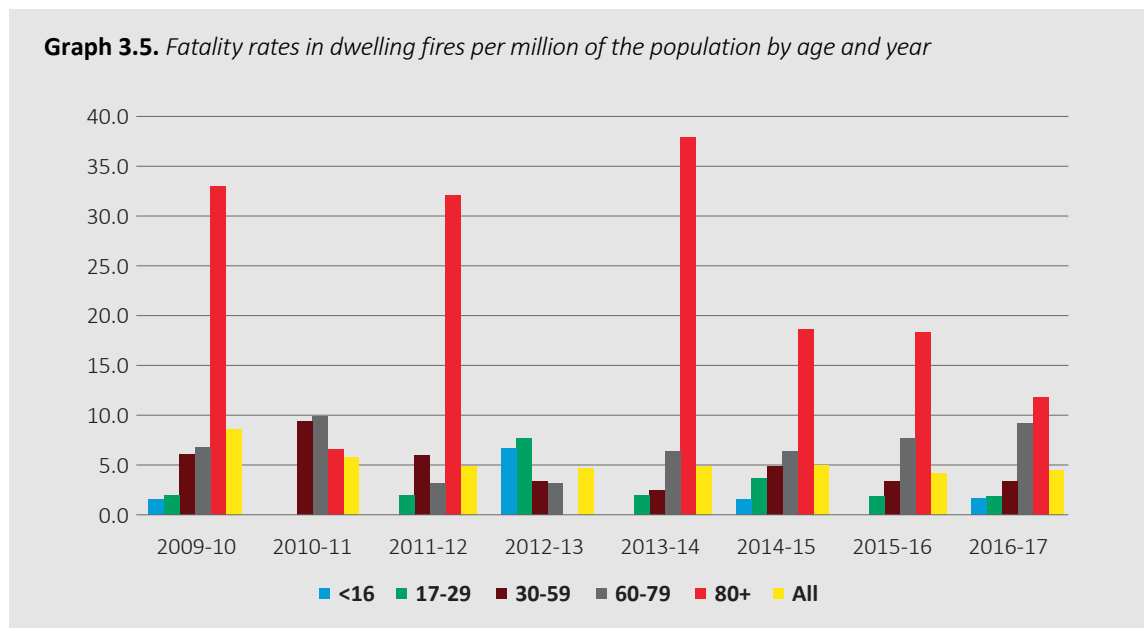
In 2016-17 for example, 619 people per million in this age group were affected, making them over five times more likely to have experienced a dwelling fire than young people aged 16 or under.

Rates for dwelling fires which were caused by an electrical ignition source show much the same pattern (see Graph 3.4); in 2016-17, “very old” people were at least four times more likely than any other age group to have been a casualty in these fires.

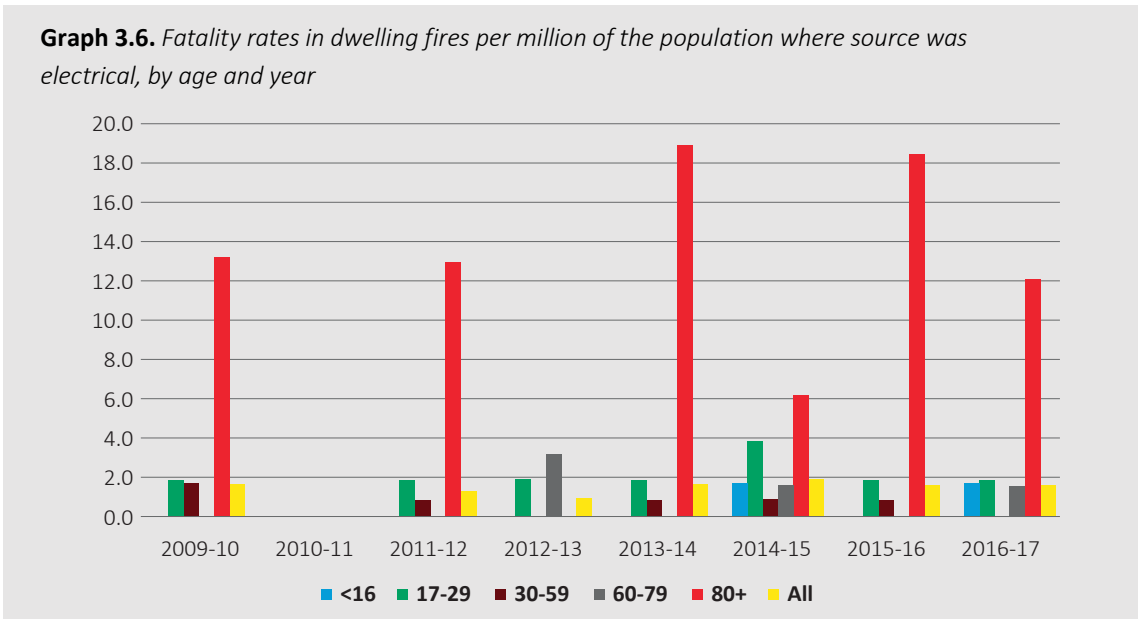


Fatalities

Trends in fatality, casualty and rescue rates for dwelling fires have stayed fairly stable since 2009, but as Graph 3.5 shows, it is the “very old” who are the most at risk of losing their lives in these fires, including those where the source of ignition was electrical (see Graph 3.6).



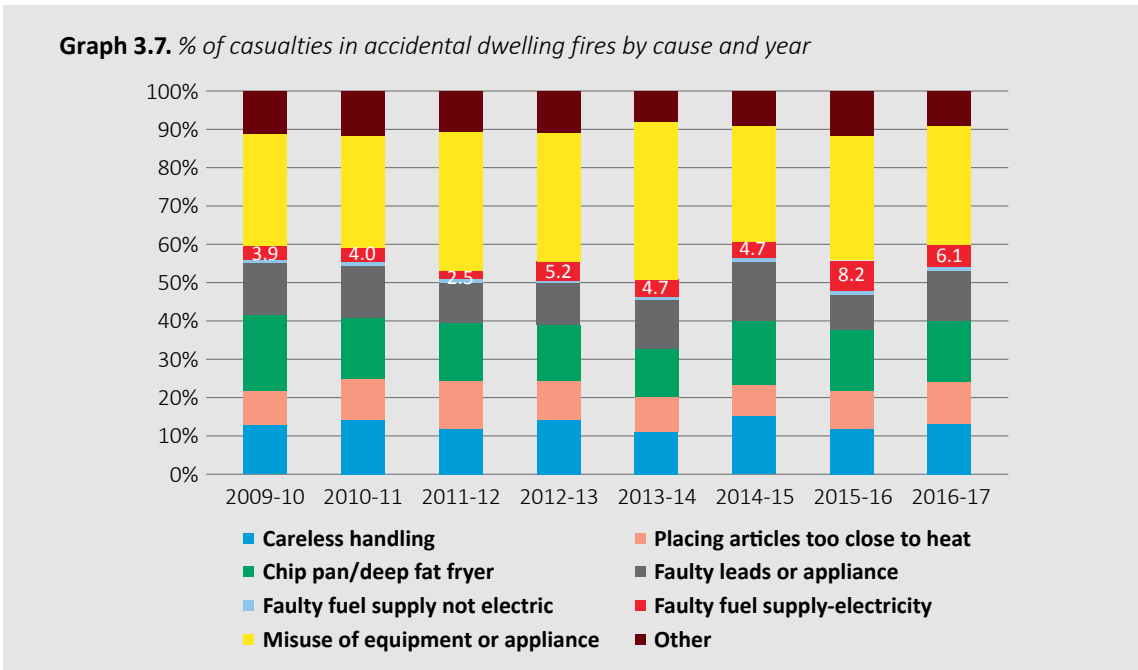
Graph 3.6. Fatality rates in dwelling fires per million of the population where source was electrical, by age and year



Causes of casualties

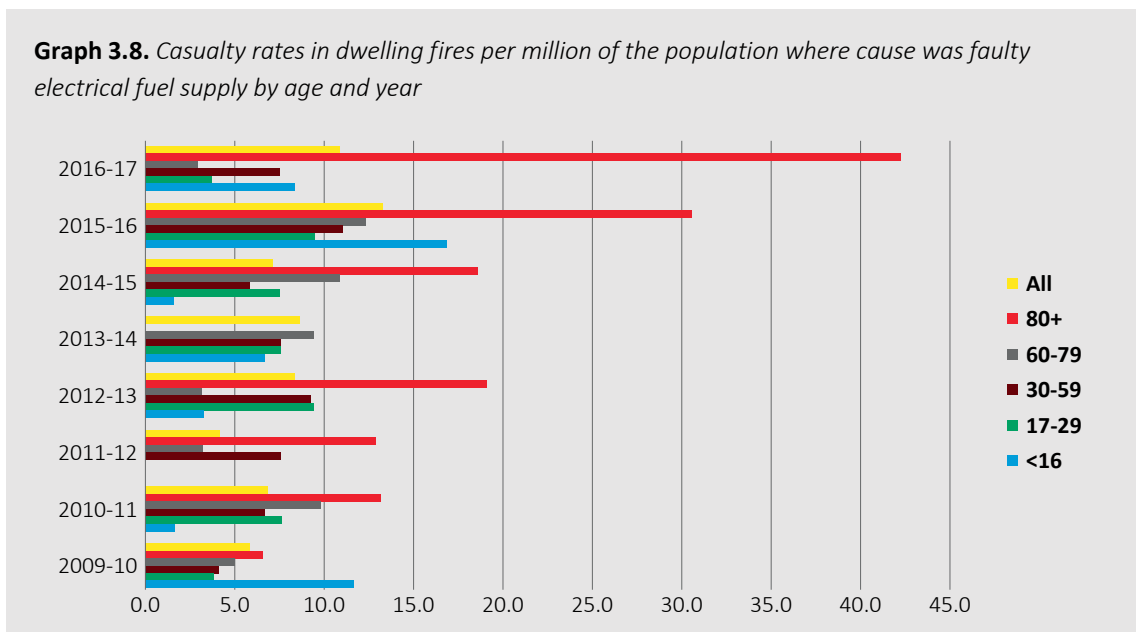
Looking at the different causes of casualties in accidental dwelling fires very few were caused by a faulty electrical fuel supply (between 13 and 41 from 2009-10 to 2016-17). In 2016-17 for example, Graph 3.7 shows that they accounted for 6.1% of all casualties, and in 2011-12, only 2.5%.

Graph 3.7. % of casualties in accidental dwelling fires by cause and year



However, although numbers of fatalities are low and so quite volatile, as Graph 3.8 shows, in terms of rates per million of the population and when an electrical fuel supply was the cause, that it is the “very old” who had the highest fatality rates compared to other age groups for 6 out of the 8 years between 2009-10 to 2016-17.

Graph 3.8. Casualty rates in dwelling fires per million of the population where cause was faulty electrical fuel supply by age and year



By breaking down statistics into two groups of “old” (60-79) and “very old” (80+) people, we can see more clearly that entering later life increases the risk of experiencing a dwelling fire per se, and that this increases even more when people reach 80 and beyond. This is important to recognise as the population of those with dementia is likely to increase amongst this age group in particular.

At present, statistics about fires and casualties by tenure are not regularly available in Wales, but some of the feedback from stakeholders in the fire and safety sector suggests that tenure and age are important factors to take into account for fire prevention and safety, along with the relative deprivation of the areas in which people live.

Interviewer: “Do you think that tenure is important when it comes to managing electrical safety risks for older people?”

Respondent: *When we started our project initially we were doing everybody over the age of 65 and they were broken down into two groups, which is basically depending on benefits and social housing, and then independent living ... there was a defining split down the middle (in terms of risks) ... we have seen an increase in the over 65's; they're vulnerable in social housing rather than independent living. I think it's down to areas of deprivation, as well. There are links between deprivation and fire risk.”*

Statistics which distinguish dwellings fire incidents and casualties by type of tenure could be made available for monitoring purposes.

④ Electrical Safety in Wales' Housing Stock

4. Electrical Safety in Wales' Housing Stock

Following the recent events in London with the Grenfell Tower disaster, the Welsh Government set up a *Fire Safety Advisory Group* in July 2017, with the purpose of focusing on the safety of high-rise buildings and other forms of housing, and advising Government on appropriate actions and advice for the public, as well as long term implications for the Welsh context²⁴.

Not only has this incident provoked reaction from the public sector, but as one of our focus group respondents noted, has also raised awareness amongst the general public about the risks which can arise if electrical safety is neglected:

"I think since the Grenfell tower happened, we have all sort of been looking at it (electrical safety)".

Legislative and Policy Frameworks

Electrical safety in Wales is regulated and legislated in various ways, particularly for the social and private rented sectors.

Welsh Housing Quality Standard – WHQS

*The Housing (Wales) Act 2014*²⁵ has introduced standards²⁶ for local authorities which place them under a duty of care to ensure that these standards are implemented. The standards, which include the quality of accommodation, are underpinned for the social sector, by the *Welsh Housing Quality Standard-WHQS* (introduced in 2002²⁷) which reflects the idea that households should have the chance to live in good quality dwellings, which are safe, secure and in a good state of repair. The *WHQS* specifies 'minimum requirements' and it is used by the Welsh Government to monitor how well local authorities and social landlords are progressing in complying with the standards. Data to measure and monitor compliance with the *WHQS* are also collected at the national level for all tenures through the *Living in Wales Property Surveys* and the forthcoming *Welsh Housing Conditions Survey 2017-18*.

Housing, Health and Safety Rating System – HHSRS

There is also the *Housing, Health and Safety Rating System*^{28,29} which was introduced through the *Housing Act 2004* and replaced the *Fitness Standard* for the social housing sector³⁰. This system is used by landlords in their inspection processes and stock conditions surveys to assess the standards of their residential premises and whether they are safe or hazardous to live in^{31,32,33}; it also gives local authorities enforcement options if hazards are identified.

The sections of the rating system which apply to electrical hazards are mentioned in relation to protection against accidents, including "... hazards from shock and burns resulting from exposure to electricity but NOT risks associated with fire caused by deficiencies to the electrical installations, e.g. ignition caused by a short circuit" (p. 49).

From the guidelines indicated below, assessing electrical system and fixed appliance hazards is initially based on a visual inspection completed by the landlord rather than by a qualified electrician/electrical engineer.

Hazard assessment

- *“A visual inspection of the electrical system and fixed appliances to identify obvious hazards;*
- *Where there appear to be deficiencies that increase risk above average, then a full inspection and test report by a qualified electrician/electrical engineer may be necessary – in any event this may be desirable anyway at least every couple of years; and*
- *The condition of associated leads and plugs of portable appliances should also be taken into account in the assessment if they are provided as part of a rented dwelling” (DCLG, May 2006: 49).*

Parts P and M of the Building Regulations

In addition, *Parts P* and *M* of the *Building Regulations (2006 and 2010 amendments)* which provide standards for all types of building work, have certain specifications about electrical safety and installations. These are controlled by local authorities.

*Part P*³⁴ deals specifically with the design and installation of electrical installations in dwellings and applies to new builds or to changes to existing installations, with the purpose of preventing fire and injury, including electric shocks. Whether the work has been carried out by professionals or as a DIY job, landlords and homeowners are required to prove by law that any electrical installation work meets *Part P* requirements, and local authorities are authorised to have installations removed or altered if they do not comply³⁵.

According to *Part P* of the *Building Regulations 2010*³⁶, all electrical installation work undertaken in a home in England or Wales must ensure:

“... reasonable provision... in the design and installation of electrical installations ...to protect persons operating, maintaining or altering the installations from fire or injury” and that “electrical installations should be inspected and tested as necessary and appropriate during and at the end of installation, before they are taken into service, to verify that they are safe to use, maintain, and alter and comply with Part P of the Building Regulations and with any other relevant Parts of the Building Regulations”. Source: The Building Regulations 2010, Electrical Safety – Dwellings Part P³⁷ (p. 10)

Part M is important because it specifies things about electrical safety in terms of the height of socket outlets, switches and consumer units³⁸. Some of our focus group participants acknowledged how important it was to have electric sockets at the appropriate height:

Interviewer: *“Have you noticed any issues in relation to electrical safety? Are you worried about anything?”*

Participant 2: *“Well currently no, because I’m able to bend down but presumably at some point when you can’t then it’ll be different. As long as you get that accessible socket, you got to keep using that socket” (Focus group participant).*

Social rented housing

For social landlords, the *WHQS* sets out the mandatory requirements that they need to meet to ensure tenants are afforded the opportunity to live in good quality dwellings³⁹. Table 3.1 shows the sections relating to electricity.

Table 3.1. *Welsh Housing Quality Standards – Electrical installations, heating installations and appliances (Source: WG, July 2008)*

<p><i>“Safe and secure electrical systems – minimum requirements of the WHQS” for electrical installations, heating installations and appliances”</i></p>	<p><i>“Interpretation” section for each element of the Standard to clarify the purpose of the minimum requirements (good practice elements are not mandatory⁴⁰)</i></p>
<p><i>“2(l) The gas, solid fuel or oil service and safety inspection certificate must be current. All heating installations and appliances must be checked and certified safe by an appropriately qualified person at least annually and as required by law (Primary element⁴¹)”.</i></p>	<p><i>“2(l) Is the gas, solid fuel or oil service and safety certificate up to date and have all heating installations and appliances been checked and certified safe by an appropriately qualified person as required by law (Primary)? Gas, solid fuel, oil heating installations and appliances must have a current safety certificate which has been issued by an appropriately qualified person. Additionally current regulations require landlords to ensure landlord supplied electric appliances are certified safe ... The regulations cover all mains voltage household electric goods including cookers, kettles, toasters, electric blankets, washing machines, immersion heaters, etc. It is generally accepted good practice that landlords will inspect appliances: • when first supplied; • annually; • at the beginning of each new tenancy”.</i></p>
<p><i>“2(m) Electrical lighting and power installations must be checked and certified safe by an appropriately qualified person at least every 10 years as a minimum (Primary element)”.</i></p>	<p><i>“2(m) Have electrical lighting and power installations been checked and certified safe by an appropriately qualified person (Primary)? Electrical lighting, wiring and power installations should be checked and certified safe by an appropriately qualified person as required by law”.</i></p>

There are some problems with the application of the *WHQS*. For example, the certification standard for electrical lighting and power installations is required on a 10 yearly basis but annually for the other fuel sources. Also, the inspection of electrical appliances can be carried out by landlords; this means the standards do not require an appropriately qualified person to complete these inspections⁴².

The Welsh Government recently completed a consultation about mandatory standards for improving existing social housing based on the *WHQS* (Part A⁴³), and now provides social landlords with guidelines to ensure they correctly interpret, plan and monitor the *WHQS*.

The consultation (Part B⁴⁴) also set out mandatory minimum functional standards for social housing for new and rehabilitated general needs homes including new *Development Quality Requirements* (DQR). The DQR standards (as laid down in Part 4 of *The Housing (Wales) Act 2014*) specify that homes “*should be safe*”, and should provide “*sufficient, well located, convenient, electrical socket outlets*”. This is important because previously the *WHQS* only specified the number of power sockets in kitchens, and this was as a secondary, rather than primary requirement, in other words, related to the comfort of the residents rather than their safety⁴⁵. Furthermore, the standards now include a minimum number of electrical sockets in other rooms, not just the kitchen.

Levels of compliance with the WHQS

The *WHQS* was introduced in 2002 but the Welsh Government recognises that it will be challenging for some local authorities to achieve⁴⁶ so the target has been extended to 2020. By March 2016⁴⁷, 79% had met with the *WHQS*, compared to 72% the previous year, an improvement of 7 percentage points. These figures only include acceptable fails.

There were a total of 222,962 local authority and registered social landlord dwellings recorded in Wales in 2015-16. Compared to local authorities, registered social landlords are achieving higher compliance levels (See Table 3.2: about 96% and 54% respectively), although in 2015-16 about a quarter of social housing dwellings (23.4%) had been granted compliance under *acceptable fail conditions* (e.g. cost of remedy, timing of remedy, resident’s choice and physical constraint; a tenant may refuse works and must sign waiver forms⁴⁸).

Statistics also show that across Wales, by March 2016, about 7% of local authority and registered social landlord dwellings (15,212) were not compliant with the *WHQS* requirements for electrical systems (see Table 3.2), again with social landlords achieving higher compliance levels (99.4% compared to 83.5%⁴⁹). Only a small proportion had been granted *acceptable fails compliance* for electrical systems.

Table 3.2. % of Local Authority and Registered Social Landlord dwellings compliant with WHQS (fully or subject to acceptable fails), Wales 2015-16

	Overall measure			Electrical systems element		
	% non-compliant	% compliant	% acceptable fails	% non-compliant	% compliant	% acceptable fails
Total Wales	20.5	79.5	18.6	6.8	93.2	1.5
Total Local Authorities	45.9	54.1	10.6	16.5	83.5	1.6
Total Registered Social Landlords	4.2	95.8	23.8	0.6	99.4	1.5

Source: Table compiled by authors using data from Stats Wales (5th Oct 2016⁵⁰).

The 2008 *Living in Wales Property Survey* did not measure two primary electrical safety elements of the *WHQS*⁵¹ in relation to valid gas and electricity certificates.

Private rental housing

Currently, the *HHSRS* is the main regulatory instrument for property standards in Wales, as the *WHQS* does not apply to the private rented sector. In addition, the *Renting Homes (Wales) Act 2016* (section 91) defines what is fit for human habitation by introducing prescribed minimum property standards which landlords will have to maintain⁵².

In addition, as part of its *Rent Smart Wales* scheme⁵³ which was developed to implement Part 1 of the *Housing (Wales) Act 2014*, and which aims to improve practices in the private rented sector, the Welsh Government has issued a *Code of Practice* (“the Code” Oct 2015) for licensed landlords and agents about standards for letting and managing rental properties. Anyone issued with a licence must comply with the *Code*⁵⁴. Table 3.3 shows the elements in the *Code* which refer specifically to electrical safety.

Table 3.3. *Code of Practice for Landlords and Agents*

Before start of tenancy:	There is requirement that the tenant must be given, in writing and before they begin tenancy, a “Landlords Gas Safety Certificate, dated within the last 12 months, if the property has any gas appliances” (p. 9)
During tenancy:	4.10 “A property must be kept in a safe condition, and with no unacceptable risk to the health of the tenants. If demands for improvements under the Housing Health and Safety Rating System (“HHSRS”) are made by a local authority, then these must be acted upon” (p. 13) ⁵⁵
	4.11 Electricity related installations “must be kept in proper working order” (p. 13) ⁵⁶
	4.12 “Electrical wiring must be in a safe, working condition. All electrical fixtures and fittings must be free from breakages, cracking or defects, and be properly and securely fitted. Electrical work must be carried out in accordance with part P of the Building Regulations” (p. 13) ⁵⁷
	4.13 “All electrical appliances provided must be in a safe condition” (p. 13) ⁵⁸

In Wales, overall, the standards outlined in the *Code of Practice* for licensed landlords and agents in the private rented sector about standards for letting and managing rental properties mean that unlike gas appliances, they do not have to provide tenants with an up to date electrical safety certificate before they move in. However, at the time of writing the Welsh Government is due to bring forward measures through the *Renting Homes (Wales) Act (2016)* which could bring into law mandatory electrical safety checks in Wales for people living in the private rented and social rented sectors respectively.

With regard to property conditions and electrical installations, the *Code of Practice* refers to: “a check on the electrical installation...carried out at least once every five years by a competent electrician, and the results...recorded in the form of an *Electrical Installation Condition Report*”; however, it is included as “*Best practice*” rather than law-enforced practice⁵⁹.

Furthermore, there is no legal requirement for private landlords to do a PAT test on portable appliances in Wales⁶⁰, although this is the case in Scotland for example⁶¹.

A recent online survey completed by *Shelter Cymru* (2015)⁶² amongst 602 private sector tenants (including people aged 55 or more) highlighted some issues of home safety, with some tenants experiencing serious problems that could be prevented if safety measures were in place. Of these participants, 17% said they had experienced a problem with an electrical hazard in their accommodation. Less than one in three said they had a fire extinguisher or fire blanket. These findings support recommendations for further legislation and compliance requirements for private landlords to ensure improved electrical safety.

During an interview with one stakeholder working in fire and rescue services, they noted that risks can be higher amongst the more transient housing populations such as those in the private rental sector (e.g. students, young families):

“It’s the transient nature of it (private rental sector), basically. The more transient an individual is what we see is that there’s more risk involved; student population, for instance, and young families moving from property to property”.

Owner occupied housing

The majority of older people in Wales live in their own homes as owner-occupiers. This means that their properties will not benefit from monitoring or application of the *WHQS* or the *HHSRS*, although the *2008 Living in Wales Property Survey* and the forthcoming *Welsh Housing Quality Survey 2017-18* will enable assessment for comparative purposes for all tenures.

We know from the *2008 Living in Wales Property Survey* which measured the *HHSRS*, that owner occupier dwellings were more likely than other tenures to have the most dangerous Category 1 hazard, and these include an electrical hazard⁶³.

Qualitative evidence from our interviews with stakeholders pointed to several factors which are important when it comes to trying to address the risks of electrical incidents amongst older home owners, including the costs of repair and maintenance work, and attitudes and behaviour towards electrical safety.

One technical officer noted that the cost of electrical work can be prohibitive, and can often lead to identifying more complex electrical circuit problems:

“... but it’s the cost of them problems and that’s what comes with old properties, you identify the problems, that’s the easy bit, the biggest thing is actually getting it done ... it’s like opening a can of worms, particularly in the homes of older people, because in their lifetime it’s been put down the priority order and understandably. There have been many things more pressing in their time limits and wiring has been put way down the list of priorities, so you can find a lot of issues there.”

An interview with a fire and safety stakeholder also highlighted the same sort of challenge when they are faced with implementing services on the ground:

“... we can intervene only in electrical issues for specific bits of equipment and if it’s a wider issue, perhaps around rewiring and the actual structure of the house, we have no means of getting that changed if the owner or occupier hasn’t got the funds to do it. So, it’s whether the Welsh Government would support that, but that’s been difficult for us”.

Faced with prohibitive costs, stakeholders note that some older clients will either undertake the work themselves or have the work done by unqualified electricians.

“Sometimes they do it themselves.... they’ll have some bloke in the pub for a fiver or maybe throw 20 quid and they don’t really know what they’re doing. You’ve got that type of thing where it’s been altered by someone who hasn’t been credited.”

Attitudes towards the safety of electrical appliances also suggest that there is scope to raise awareness amongst older home owners about the dangers of holding on to old appliances:

“... we live in a very throw-away society, whereas an older person will have held on to electrical goods because they expect them to last longer, so it’s helping with awareness of the maintenance of those items. Things like fridge-freezers, tumble dryers, to make sure that there’s awareness of how to maintain them safely. But it also looking at the mind-set of the older generation of things like overloading sockets; just from personal experience, my family is quite happy to rewire a plug or cut a sealed plug at the end of an electrical wire and put a new plug onto it, because that’s a generational thing. It’s the DIY stuff that comes as well”.

Public awareness campaigns issued through major media channels could help promote awareness about the dangers of DIY electrical works and reliance on out dated electrical appliances in the home.

Care homes

In 2015, there were 613,478 people aged 65 or older in Wales and about 11,052 were living in care homes^{64,65}.

The Regulation and Inspection of the Social Care (Wales) Act 2016 ensures the regulation and registration of those providing care home services such as accommodation for vulnerable groups, including older people (p. 120)⁶⁶. This means that care home owners and managers are responsible for ensuring that the homes they operate are safe and secure.

The *Regulations and National Minimum Standards* for adult services in Wales⁶⁷ help determine whether care homes are providing adequate care and meeting residents' basic needs. Standards are monitored by *The Care and Social Services Inspectorate – CSSIW* and include safety. In 2004, to meet national minimum standards for care homes for older people,⁶⁸ individual accommodation, furniture and fittings needed to provide each resident with at least two accessible double electric sockets. These standards also include specifications about ensuring the safety of electrical systems and equipment for residents and staff in the care home setting:

Standard 18: Safe Working Practices *“all reasonable steps to protect and promote the health, safety and welfare of service users and staff” (18.1, p. 17), including “maintenance of electrical systems and electrical equipment” (18.3, p. 17), and “compliance with relevant legislation, including Electricity at Work Regulations 1989” (18.4, p. 18).*

Safety of electrical equipment in care homes

The *CSSIW*⁶⁹ also refers to guidance provided by the *Health and Safety Executive – HSE* about the legal requirements for electrical equipment in environments such as care homes⁷⁰. The sections in the guidance relating specifically to electrical equipment are included in Annex 1.

Currently care home managers or owners must ensure that they meet the legal requirement for fixed electrical installations to be inspected and tested by a specialist every five years or less depending on the risk assessment carried out by the professional. If care home staff participate in visual checks of electrical installations, they need training to do so.

For portable electrical equipment (e.g. kettles, toasters), there is no legal requirement for testing on a yearly basis so care home managers or owners can decide on the frequency and level of maintenance, and a visual inspection by staff is generally considered sufficient, with some exceptions for PAT testing.

Fire safety and electricity

The *Health and Safety Executive Guidance* also provides guidelines about fire prevention for those responsible for care home premises (e.g. fire safety risk assessments; identifying potential causes and sources of fire such as sources of ignition or flammable materials; identifying at risk people). The relevant sections are shown in Annex 2.

The guidance provides advice about '*simple control measures*' to reduce fire hazards, but these do not include suggestions related specifically to electrical safety.

Since August 2009, there has been a protocol between *CSSIW* and *Welsh Fire and Rescue Authorities*⁷¹, which clarifies their respective responsibilities (e.g. about information sharing, fire safety inspections and compliance with safety regulations, reporting to *CSSIW*), and ways of collaborating on fire safety in care homes. An important aspect of this protocol is that it gives staff and residents the right to ask for a review if they are not happy with the fire safety measures of the care home in question.

More recently, additional guidance about fire safety in care homes⁷² provides clarification about fire risk assessments in care homes (e.g. evacuation during a fire). The registered care home manager is responsible for ensuring that staff receive appropriate training, that a risk assessment is carried out and that the care home meets the standards of fire and smoke protection (e.g. installing and maintaining fire and smoke detectors) and safe evacuation of home care residents.

Neither the protocol nor additional guidance refer specifically to issues relating to electrical safety.

In summary, the responsibility lies with the care home owner and manager to ensure that the care home environment in which residents and staff live and work is compliant with current regulations; for instance, private rooms with sufficient electrical sockets for reasons of resident safety and comfort; compliance with local fire service requirements, being aware of electricity at work regulations; ensuring the inspection and maintenance of fixed electrical installations and portable appliances. Compliance can be monitored by the *CSSIW*.

© Home Safety in Wales

5. Home Safety in Wales

Electrical Hazards in the Home

Focus group participant: *“I did a mad thing the other day. I had a chopping board that had a bit of wood worm, so I thought ‘I know what I’d do. I’ll stick it in the microwave’. So, I put it in the microwave, went outside and forgot all about it. Next thing I knew, the kitchen was full of smoke, the microwave was on fire... It did kill the woodworm though!”*

Interviewer: *“Did the fire service come?”*

Focus group participant: *“No, they didn’t”.*

Interviewer: *“You didn’t ring them?”*

Focus group participant: *“No, I just pulled the plug out and got a big towel and out it went outside ... I just laughed. I do things occasionally and forget all about them”.*

The majority of older people in Wales are less likely to move as they age, although some are willing to do this with the right support⁷³. Home maintenance issues are often a key reason why older people are willing to consider relocating. For those living at home with dementia, remaining in a familiar environment will be important as the experience of a move may prove disorientating for them, and evidence suggests that living at home is valued by carers and those with dementia alike⁷⁴ (Alzheimer’s Society, 2011⁷⁵).

Supporting older people to live in a safe and secure home environment may also be less financially costly for society than the alternatives of residential or nursing settings. According to the Alzheimer’s Society’s (2014)⁷⁶ estimates which include costs for health, social and unpaid care, it could be more cost effective to help people with dementia to remain in their community (average cost per person with dementia of £29,298 per year) than to be in a residential setting (£36,738) (2014: table D, p. xvi).

Regardless of their cognitive or physical abilities, living at home in later life is therefore becoming the norm for today’s old and very old people, so it is important to recognise that these environments must be made as safe and secure as possible.

Increasing risks as we get older

Although we should celebrate the fact that more of us are living longer than ever before in Wales, for older people in particular, there are certain factors which have the potential to contribute to an increased likelihood of serious electrical hazards in the home.

- **More older people and frailty**

Our population is ageing⁷⁷ so we know there will be more “old” and “very old” people living in Wales in the future. Some evidence shows that people over the age of 60 are increasingly likely to experience serious injury or major trauma⁷⁸, and have higher mortality rates. For example, they are more vulnerable than other age groups to excess winter deaths; in England and Wales in 2015, over half (56%) of cold related deaths happened to people aged 85 or more and just over a quarter (27%) occurred for those aged between 75-84⁷⁹.

- **The financial costs of electrical hazards**

The 2004 and 2008 *Living in Wales Property Surveys* which provided data to measure the *HHSRS*⁸⁰ assesses 29 types of housing hazards regrouped into four hazard categories, one of which is *Protection against Accidents* including falls, electric shock, burns and scalds and building related collisions. However, the *Living in Wales Surveys* are likely to have underestimated the number of hazards in the Welsh housing stock, as it only assessed 16 of the *HHSRS* hazards.

The 2008 *Living in Wales Household and Property Surveys* give some insights into the likelihood of household hazards, including those for fire and electrical safety, each of which are considered as part of the most dangerous (Category 1) hazards. Although 71% of all dwellings had no Category 1 hazards, amongst those that did, older properties were the most affected (Stats Wales, Dec 2010; Table 2⁸¹), as were dwellings in rural areas (45% compared to 24% in urban areas). The number of Category 1 hazards in a dwelling did not vary by age of the household reference person.

Of all dwellings identified as having a Category 1 hazard, about 7,000 had a fire hazard (0.5%), compared to about 168,000 (13.3%) for falling on stairs. Under 1 per cent (0.2%) had an electrical safety hazard compared to just over one in ten (11%) with an excess cold hazard (StatsWales, 2010: Table 4).

These data suggest that the greatest hazard in dwellings is the risk of falling rather than experiencing a fire, and that the hazards relating to electrical safety affect less than 1% of all dwellings. However, in terms of financial costs, both types of hazards are the most costly to remedy when estimated on a per dwelling basis – £10,400 for fire hazards and £22,500 for electrical hazards (StatsWales, 2010: Tables 6 and 7).

- **Fire safety provisions, tenure and age of properties**

As we age, the more likely we are to be living in owner-occupied households. For Wales, recent survey estimates (2012-15), show that over 80% of people aged 60-84 were in owner-occupier households compared to about 55-65% of those aged 30-39⁸².

Although recent data about the average date of construction by tenure for older people in Wales is not readily available, we do know that about a quarter of domestic properties were built before 1900, compared to about one sixth in England⁸³ (GovUK, 2016). These properties will be less likely to have

features which protect against electrical hazards. A previous study which used data from the 2004 *Living in Wales Property Survey* and focused on a representative sample of older people aged 65+ living in Wales found that about 40% lived in dwellings built before the end 1945; of these, 25% had been built before 1918 so would not have benefitted from improvements to housing stock which followed⁸⁴.

Properties in rural areas tend to be older, and Wales' rural population is ageing more rapidly than in urban areas⁸⁵; although we do not currently have any statistical data to confirm this, this does suggest that older people in rural populations are less likely to be living in properties which have been modernised.

- **Fire safety at home**

The most recent data on housing conditions in Wales which provides information about tenure, age and fire safety comes from the 2008 *Living in Wales Household Survey*⁸⁶ and support the concerns about lack of adequate fire safety measures in the homes of older people⁸⁷. The survey asked about fire prevention measures, and found that the most commonly used types of fire safety equipment were smoke alarms, wide-opening windows, fire extinguishers and fire blankets (2009: Chart 15.8, p. 113), but that households with older people (60+) (2009: Chart 15.9, p. 113), and those in all-pensioner households (Chart 15.10), were the least likely to have any one of these preventative installations at home.

It also showed that people aged 60 and over were less likely to have a mains powered fire alarm (24% compared to 33% in the 16-39 age group for example) (Stats Wales, 2009: Chart 15.3, p.115) and, compared to other tenures, only 20% of owner occupiers (regardless of age) had a mains powered smoke alarm with proportions much higher in the social housing and private rented sectors. In summary: “... households with older respondents were less likely to possess fire safety equipment” (StatsWales, 2008: 114).

More recent data from the *National Survey for Wales* suggests that progress has however been made in ensuring fire safety equipment with regard to smoke alarms. For example, in 2013-14⁸⁸ for households with people aged 60 or more, 7% did not have a smoke alarm in their home or had one but it did not work (5% with none and 2% with at least one but not working). The figures are higher when looking at household types: 11% of households where the occupier is a single pensioner without children have no smoke alarms or none that work.

These figures suggest that households with older people are less likely to be living in accommodation with adequate fire safety measures compared to other age groups⁸⁹.

More up-to-date information about electrical safety in existing housing stock will be available when the *Welsh Housing Conditions Survey 2017-18* is completed over the next few months as part of the Welsh Government's *Housing Conditions Evidence Programme*⁹⁰. These surveys will include physical inspection of around 2,500 homes in Wales and will provide details in relation to the state of electrical systems at home.

In summary: Although the prevalence of hazards in dwellings in Wales does not seem to be linked to the household respondent's age, and the prevalence of electrical safety and fire hazards are all lower than other types of hazards, they are by far, the most costly to remedy on an average per dwelling basis. Furthermore, there is evidence to suggest that it is older people who are the least well equipped with fire safety measures in their homes.

- **Life style, resources and circumstance**

Our homes are often the focus of social activities and contact with others, but if financial resources become more limited in later life, it can become more difficult to maintain a warm home, and this may act as a deterrent to inviting people round⁹¹; if social isolation or loneliness ensue, this may increase the risks of electrical hazards which could otherwise have been spotted by family, friends or other service providers.

With age, financial circumstances will change, particularly for those in more socio-economically vulnerable groups, or whose family circumstances change, say through widowhood. This means that the cost of home maintenance, including maintaining electrical appliances can become more challenging, and can lead to older people relying on unsafe and out dated electrical appliances which they consider to be reliable, doing “DIY” to save on costs, or not being in a position to deal with electrical safety needs.

Key stakeholders from the *South Wales Fire & Rescue Service* acknowledge these issues and their implications for service delivery:

“... we live in a very throw-away society, whereas an older person will have held on to electrical goods because they expect them to last longer. So it’s about helping with awareness of the maintenance of those items, things like fridge-freezers, tumble dryers, to make sure that there’s awareness of how to maintain them safely, but it’s also looking at the mind-set of the older generation of things like overloading sockets being quite happy to rewire a plug or cut a sealed plug at the end of an electrical wire and put a new plug onto it ... that’s a generational thing”.

“..... perhaps the older people are living in older housing stock and we’ve seen a lot of people who are in fuel poverty, so there’s obviously an issue with them not being able to pay the bills. So that leads to them not being able to keep the maintenance of their homes maybe, so maybe they’re using older equipment, the house may require a rewire. It’s something that perhaps older people don’t want to spend their hard-earned money on.”

Qualitative evidence from a conversation between members of one of our focus groups suggests that older people may well still harbour the idea that older electrical appliances are more reliable:

Participant 1: *“I don’t have as much faith in the modern appliances, as with the old ones”.*

Participant 3: *“Yes, but the new kettles are much more efficient. You’re not using as much electricity”.*

Participant 1: *“I don’t use much electricity with my old kettle, because I use as much water as I need”.*

Participant 2: *“I don’t think that the modern appliances are built to last”.*

Interviewer: *“So, you’re more likely to keep something for longer?”*

Participant 1: *“Oh, yes”.*

Interviewer to all focus group members: *“Do you agree?”*

All participants : *“Yes”.*

Participant 4: *“Keep using it until it stops!”*

Participant 2: *“That’s right, exactly”.*

Some of our service providers who work “on the ground” and confront the realities of electrical appliances and installations in older people’s homes said that identifying the need for improvements to electrical installations is only part of the work that needs to be done; the challenge is then to find the funding to carry out what are often quite complex modifications or installations:

“Some of us, we’re actually putting in showers, electrical type works and they’re just add-ons to what is not the correct wiring, you haven’t got any sort of triple switches and the funders don’t cover that. The grant is specific to doing certain things and obviously the add-on you need to make that safe and secure, is an extra cost and extra work and the grant money is not there to do it”.

- **Keeping warm at home**

Fuel poverty may lead to the use of cheaper methods of heating such as electrical space heaters which have a poor safety record, and are known to be one of the five most common causes of electrical fires in UK homes⁹².

Fuel poverty and its risks for health, social and economic well-being have been on the Welsh Government agenda for nearly a decade⁹³ and it is supporting households under the “Warm Homes” initiative, including the *Nest* and *Arbed* schemes⁹⁴. The 2008 *Living in Wales Property Survey* showed that amongst fuel poor households, excepting the very young (16-24), being fuel poor increases with age; for example, “Those aged over 85 years are particularly prone to being fuel poor with 50% of this group being fuel poor, closely followed by households in which the HRP is aged between 75-84 or 16-24 years” (BRE, 2010: 13).

Although only 19% of households in Wales⁹⁵ are not connected to a main supply of gas (they are “off-grid”) and are less reliant on electricity than other rural or urban areas in Great Britain, we know that across the board, older people and those living alone are less likely to be “on-grid” for a gas supply⁹⁶. Similarly, although only a small proportion of people in Wales are still living in households without central heating (1.8%)⁹⁷, it is the older age groups who are the most affected; for example, 3.3% of those aged 85 or more live with no central heating, compared to just under 2% for people aged between 45-49 and less than 1% of young children between the ages of 5-9. This suggests that the oldest old will be reliant on other forms of heating which may pose more safety risks.

- **Home safety and living with dementia**

The prevalence of dementia will rise as our population ages. The likelihood of experiencing dementia increases the older we become, and women will be more affected once they reach ninety or more⁹⁸. The changes such as memory loss, confusion and visual difficulties which can accompany dementia can bring potential risks when it comes to doing daily tasks such as cooking, particularly if people are living alone with the condition. As has been demonstrated already in this Report, people in their 80s and beyond are more likely to become casualties in fires and electrical incidents at home.

The lived experience of how memory loss can change previously safe home environments to ones where there is increasing likelihood of danger, was well demonstrated during one of our focus group discussions:

Participant 1: *“Memory is the problem as people get older..... My husband had dementia and one day I came back home and he said ‘I put the iron back on top’. And there was a thing that goes on top, but he put the iron straight on top of the machine”.*

Participant 2: *“My Mum would forget to switch the cooker off and leave the rings... or she would go to the other extreme. She would switch everything in the house off and then she would ring up and ask why the telly is not working or why the heating is off. So, that is a worry”.*

We asked some of our service providers whether from their experience, living at home with dementia might put people more at risk of having accidents:

“... there is a different set of risks that comes with people with dementia, definitely, and leaving electrical appliances on for longer than perhaps they would normally we obviously go in and try and educate, but they may not be able to recall that information later, so we have to leave more leaflets and information, install more preventative measures”.

The Welsh Government has developed a ‘*National Dementia Vision for Wales*’ (2011) and has recently completed a consultation exercise to inform its “*Together for a Dementia Friendly Wales 2017-2022*”⁹⁹ strategy; keeping people with dementia safe and secure in the community is recognised as key¹⁰⁰, along with practical initiatives such as assessing for hazards in the physical home environment and using technology (telecare, telehealth and assistive technology) to help people live independently. However, these statements do not as yet, contain direct reference to issues of electrical safety for those living with dementia in Wales.

The National Dementia Vision for Wales could reflect the issues of electrical safety at home, and explore possible solutions, for example by extending its agenda on smart technologies.

Supporting Older People to Stay at Home Safely

In Wales, there are three *Fire and Rescue Authorities* (FRA)¹⁰¹ which serve North, Mid-West and South Wales. Their work is guided by a policy and legal framework set by the Welsh Government¹⁰², and also aligns with the UK’s *Fire & Rescue Services’ Strategy*¹⁰³ for meeting “*the challenge of protecting an ageing population*”.

The Welsh framework recognises that older people potentially face fire safety risks when living in the community¹⁰⁴, as they will be more vulnerable to accidents because of mental health conditions and general frailty, particularly amongst very old people; the experience of a fire incident at home may also shake their confidence about being able to continue living independently.

The *F&RAs* work therefore focuses on prevention initiatives and cross-partnership collaboration, including activities such as providing professional carers with free training in the community, so that they can make referrals for home safety checks for their clients; and organising yearly events to promote awareness about electrical safety, along with distributing promotional materials aimed at providing advice for older people about staying safe at home. *Fire & Rescue Service* staff also receive falls prevention and dementia awareness training.

As part of their prevention strategy, the *Fire & Rescue Services* offer visits to domestic properties to provide home fire safety advice and checks, and supply and install smoke alarms free of charge. For example, Mid & West Wales have carried out 105,000 home safety checks over the past 10 years¹⁰⁵, have a dedicated section on their website for older people's fire safety, and offer other advice on safe cooking, use of electric blankets, etc. *South Wales Fire and Rescue Authority*¹⁰⁶ undertook over 23,000 home fire safety checks in 2014-15 and just over 21,000 the following year¹⁰⁷, with their North Wales counterparts¹⁰⁸ undertaking just over 20,000 from April 2016-March 2017¹⁰⁹. These services have recently been reporting a high number of accidental fires in homes which have been caused by cooking, so raising awareness in this particular area is crucial.

Case study: South Wales Fire & Rescue Services working in partnership

Cross-partnership working is also key in prevention. One of our stakeholders from *South Wales Fire & Rescue Services* talked about this during an interview, and stressed how important this collaboration is to help ensure they prioritise and target older people and their families to raise awareness and provide practical support, including electrical safety:

“What we’re doing a lot of work with is raising awareness with caring agencies, whether it’s through social services or local authority or through private companies, we’re finding that a lot of the accidental dwellings fires we have, which involve older people, there’s generally carers going in there sometimes three or four times a day and they are not spotting the fire hazards. So, for instance, if they are overloading the plug sockets or if they are smoking and they can see evidence of burns on their clothes or their furniture. You know, we’re trying to raise awareness through the carers to spot these vulnerable people.”

The *SWF&RS* are working strategically with partners to ensure effective information sharing, cross-referrals, and providing and receiving training about reducing risks for older people. This means they have joined up processes with local authorities for commissioning and delivering services to older people and their families and work in partnership with Adult and Community Services and Health and Social Care Services (including General Practitioners), along with other stakeholders such as the *Alzheimer’s Society*, *Care & Repair Cymru*, *Age Cymru*, *Age Concern*, etc. (See Annex 3).

Innovative practice for partnership working example:

To promote partnership working for risk prevention from a more holistic perspective, *South Wales Fire & Rescue Service* is running a pilot study which takes into account several factors affecting someone's quality of life including their health (e.g. smoking, falls, and domestic violence), as well as the physical context in which they live (e.g. checks for home security):-

“Our ‘safe and well’ project is an ideal example ... we’ve brought four additional streams for our visits, so rather than concentrating on fire, we’re now doing falls assessments for occupational therapy, we’re doing smoking cessation, we’re doing sort of general health and safety, health and fitness, we’re actually doing domestic violence as part of that and carbon monoxide awareness and a bit of home security, as well. So, for smoking cessation we’re not the experts. “Ash” for Wales decided to work in partnership with us, which is brilliant. Carbon monoxide awareness we’re not the experts; so, we’ve asked Western Wales Utilities for information with leaflets and flyers that we can give on their behalf. So, it’s working in partnership with individuals and drawing on their expertise and we work on referral pathways as well.”

Assistive and “Smart” Technologies

Assistive technology (AT) has been recognised by the *Alzheimer’s Society* as an important element in improving electrical safety at home for older people, especially those who are more vulnerable, like people with dementia¹¹⁰, as it can help reduce the risks involved in daily routines such as preparing and cooking food. These technologies have often been designed to meet health needs rather than ensuring the safety of the home environment.

Smart technologies (STs) electronic devices or systems which can be connected to the internet and used interactively¹¹¹ provide another way forward in ensuring safety in the home environment by preventing or detecting electrical hazards which might otherwise lead to fire incidents. One of their advantages is that they operate remotely, acting as a warning system. For example, traditional smoke or fire detectors (mains or battery operated) will work inside the home, but a “smart fire or smoke detector” can be monitored from a mobile phone or by the fire service¹¹². These will be particularly useful in households where older people need assistance with daily living, so friends, family or service providers can act as “monitoring hubs”. Other STs can enable remote monitoring of small electrical devices, and can play an important safety and preventative role for older people through things like smart cookers where the electrical supply can be switched off to prevent overheating¹¹³.

The Welsh Government has noted the importance of expanding the use of assistive technologies for people with dementia, particularly for those living in more remote, rural areas¹¹⁴, and has recently set up a “*Smart Living*” Technical Group¹¹⁵. *The Care Council Wales* has recognised the need to improve staff training and awareness about electronic assistive technologies as a way forward in ensuring wellbeing and independence¹¹⁶. However, these national-level initiatives do not as yet, focus on the role that assistive and smart technologies could play in promoting electrical safety and preventing risks for older people. For the moment, the focus is more on health outcomes or energy efficiency measures, rather than personal and household safety.

The Welsh Government could consider introducing the topic of electrical safety at home on their “smart technologies” agenda.

From a service provider perspective, the *South West Wales Fire & Rescue Service* for example, can provide a number of preventative installations, of which some draw on assistive and smart technologies, notably in households where there are older people with dementia:-

“There is a range of things that we could do to assist (people with dementia) ... stove alarms, ... portable sprinklers ... shutter valves for cookers that the carers can use when they come in..... the ‘bump system’ where on an extension lead you can put one bump, two bumps, so that people can actually feel which one is for which item remote control extension leads, so you can isolate different parts of the extension lead if you’ve got limited supply in your kitchen and you want to keep the fridge freezer, you can switch the toaster off or the kettle. In the past, we also had the remote control ones as well”.

They are also looking at some smart technology to help monitor electrical devices:

“... part of our strategy is looking at technological advancements to see how these can aid us in risk reduction, so the project includes day to day tablets, looking at informing people if the temperature in their home is too high or too low... “ and also “every household gets a heat detector in the kitchen, so we’ve expanded our smoke alarm to heat detection we do provide linked alarms for people with hearing impairment they’re actually wifi capable, so if we’ve got a good neighbour or family and friends living next door, we can link alarms”.

Raising Awareness about Electrical Safety

Raising older people’s awareness about electrical safety can be a challenge, not only because they may not have access to information and advice, but because they may have been living at home and unaware of some of the dangers their daily routines or behaviour pose for electrical safety.

Service providers are aware of this risk as one of the more important issues they face when dealing with electrical safety:

“For us, it is usage and behaviours. The most important (issue) basically is general use ... it’s looking at the behaviours in a property, looking at overloaded sockets and the general awareness of individuals a lot of people don’t know the 13 amp rule when it comes to extension leads or the proper use of extension leads and how to use electrical equipment. A lot of individuals don’t know about recall lists and how to check their white goods once they’ve purchased them, so it’s about personal responsibility for goods that you have under your roof.... when you become more vulnerable when you do get older, it’s about reminding them that those services are there to support them in the form of home visits from the local fire service or looking at the huge range of materials that Electrical Safety First provide as well to help”.

For those living in their own homes, there are a number of organisations offering home safety information, advice and/or assistance, and although they may cater to a broad age range, they will have a significant clientele of older people. Some of these include *Electrical Safety First*¹¹⁷; *Age Cymru*¹¹⁸ (e.g. information and advice on home fire safety and electric blankets); *The Royal Society for the Prevention of Accidents – Wales*¹¹⁹ (e.g. information on home safety – smoke alarms, slips, trips and falls). *Shelter Cymru*¹²⁰ (website information and advice to people, regardless of tenure, for example on electrical and fire safety precautions); *Healthy Challenge Wales*¹²¹ (dedicated page for older people on its website although does not refer directly to electrical safety issues in the home). The *Dewis Cymru*¹²² website, set up in response to the *Social Services and Wellbeing (Wales) Act 2014*, provides information and services which help support people’s wellbeing and has a dedicated site for electrical safety.

Raising awareness – local authority information through the web

If older people have access to the internet, they may be able to find information about home and electrical safety from their local authority website. Annex 4 illustrates the type of information and resources that local authorities in Wales have available on their website about electrical safety. However, recent survey figures for Wales¹²³ show that accessing information provided by government public services online is something that older people are not very likely to do: for example, 69% of younger people aged between 16-29 who said they had used the internet at least once a week, had visited a government or public service website for personal use over the past 12 months, compared to only 35% of those aged 75 or more. This suggests that family, friends or neighbours may be in a good position to share their knowledge of the internet to help raise awareness amongst older people in their social and community networks.

Raising Awareness Through the Internet

We are now living in the age of the internet as an important platform for sharing information. Whilst this means that older people may be able to benefit from the convenience of finding information about electrical safety without leaving home, it is important to note recent figures showing that although nearly eight out of ten (78%) households in Wales had access to the internet, only about four out of 10 households (41%) with a single pensioner had access at home¹²⁴.

The National Survey for Wales also shows that it is older people who are the least likely to be current users of the internet ... in other words, most at risk of *digital exclusion*: “...age was the key indicator for digital exclusion: 52% of those aged 65 and over were not currently using the internet, compared with 1% of those aged 18-24. The results show a continued reduction in the numbers of people aged 65 and over who are digitally excluded: from 61% in 2012-13 to 56% in 2013-14, and 52% in this latest survey” (Welsh Government, Oct. 2015: 12).

Some of the service providers we interviewed were aware of this challenge, and have adapted their outreach activities to try and combat the risk of excluding older people from information and advice about home safety:

"I wouldn't say that there's less awareness (amongst older people). I would say that getting information to those individuals is a little bit more difficult because of communication channels; social media is absolutely brilliant, but the vulnerable individuals that we're dealing with prefer face-to-face interaction and engagement. So, what we try to do is when we look at the statistics, we profile the person involved and look at what that person would be open to, forms of communication. We try to be a bit more intelligent about how to converse with people, how we communicate, and not assume that everybody is on social media...."

Other focus group participants said that if there was one message they would like to send to the government about electrical safety and older people, for home owners it would be:

Participant 1: *"To have somebody come around and check".*

Participant 2: *"Exactly. And it would be nice if you could have a reminder and you could call them yourself and say 'there's a reminder. Can you come around?' Every two years maybe? But it would be a peace of mind, I don't know".*

For the Welsh context, raising awareness about electrical safety for older people would benefit from: dedicated sections on webpages which flag "electrical safety" as a distinct category of concern, materials available in large print and in Welsh, other points of access for information other than internet based sources, as internet access and use in Wales is still less likely the older we become, despite recent improvements; targeting family, friends and neighbours so that they use their knowledge of the internet to support older people's access to this source of information and advice.

Care & Repair Cymru

Care & Repair Cymru¹²⁵ and its affiliated agencies offers advice and practical services across Wales which help older people to live independently at home in safe, warm and accessible environments. They work in partnership with the Welsh Government, local authorities, health providers and some fire services to offer a range of services including repairs, improvements and adaptations to homes, as well as new and innovative services such as facilitating hospital discharge or decluttering. Their case workers fulfil an important role in linking with other service providers or charities to secure additional support for their clients. In 2015-16 for example, they supported nearly 29,000¹²⁶ older people, and a significant number of very old citizens – about 1 out of 10 were aged 90+. Of the help they have provided, about 1,700 people benefitted from solutions to heating and affordable warmth and over 15,500 people received help in avoiding trips and falls. Nearly 16,500 were helped with quick adaptations through their rapid response adaptations programme.

In 2015-16, as part of their core electrical safety work and rapid response adaptations services, older clients across Wales benefitted from a range of electrical safety improvements at home including electrical safety checks/reviews (103 completed), full or partial rewiring of their electrical installations (181) and improvements to electrical socket installations (141¹²⁷).

In addition, *Care & Repair Cymru* administers a small fund on behalf of *Electrical Safety First* as part of their hardship fund. In 2016 for example, this fund enabled C&RC to help 39 clients with an average spend of £256 per client¹²⁸.

Care & Repair case studies:

- Miss Peterson is a 60 year old lady who lives alone in North Wales. Due to a car accident Miss Peterson suffers with poor mobility and some brain damage. At the time of visiting Miss Peterson already had a wet room installed, however the electric shower was not working and she was therefore finding it very difficult to wash herself. The grant of £267 from Electrical Safety First paid for the cost of repairing the shower and has helped to restore Miss Peterson's independence.
- Mr and Mrs Walker have recently moved house. They discovered that the new house needs a complete electrical rewire and the house was therefore unsafe for them to continue to live in. This grant from Electrical Safety First enabled Care & Repair to arrange for a prompt replacement of the consumer unit in the property, which has eliminated the immediate danger. Their Care & Repair caseworker also applied for further benevolent funding in order to fund the complete electrical rewire of their home and for funding from the Welsh Government scheme Nest to provide central heating for their home. Electrical Safety First has supported Care & Repair in improving the safety of these vulnerable older people.
- Mrs Davies is 66 and lives alone. Her property was without heating and Care & Repair therefore made an application to the Welsh Government Nest scheme to install central heating to the property. It was discovered however that Mrs Davies needs a full electrical rewire to the property which prevented any further works from being completed. Mrs Davies could not afford to fund the cost of this rewire; however the Electrical Safety First grant of £500 helped toward the cost of this rewiring. With further benevolent funding Care & Repair were able to support Mrs Davies with the rewiring of her property, enabling her to also have central heating fitted. Thanks to the partnership between Care & Repair and Electrical Safety First Mrs Davies is able to live in a warm and safe home.

Regardless of service provider, in Wales, older people need to comply with certain criteria to be eligible for grant support, and there are differences in grant provision depending on which local authority they belong to¹²⁹, which means that accessing help with electrical safety modifications will vary depending upon where you live in Wales. This is highlighted in the following extract from the interview with two C&R technical officers from different, but adjacent local authorities in South Wales.

Interviewer: *“What sort of grants are there available? Are there specific grants for electrical safety?”*

C&R Technical Officer 1: *“... provided the clients fits the eligibility criteria with regards to age, saving, income or benefits received...provided we can support and prove that need through either a visual inspection report or a full periodic test report, then XXXX Local Authority will see that as the criteria in support of rewire. What the very least upgrade is full rewire actually.”*

C&R Technical Officer 2: *“But in XXX Local Authority, unfortunately, the council haven't got that money and we do a lot of private quotations for individuals and obviously we go to electrical contractors, but the cost comes back to the individual”.*

Qualitative evidence from one of our focus group conversations in West Wales highlights that cost can be a prohibitive factor if older people have problems to do with electrical safety, and the DIY option will then be the only practicable solution for them:

Interviewer: “Where would you get any information or advice making sure that your home is safe when it comes to electricity? You mentioned the fire service and the local electrician who is semi-retired...”

Participant 1: “He’s good”.

Participant 2: “A lot of people wouldn’t do that because of the cost; asking a qualified electrician to come and check”.

Participant 3: “We ask a friend instead”.

Interviewer: “If cost is an issue, what would you do if you needed an electrician?”

Participants 2: “Nine times out of ten I would do it myself”.

Participant 4: “I would ask my sons Family”

Participant 1: “My son”.

Interviewer: “Does he know about electrics?”

Participant 1: “No (laughing)”.

The prohibitive cost for some older home owners will mean that electrical preventative and safety work is not undertaken; and for local authorities and social landlords who are working towards the targets set for compliance with the *WHQS*, significant proportions will be granted compliance under *acceptable fail conditions* if for example, the cost of the remedy is prohibitive or tenants refuse works. We also know that remedying fire and electrical safety hazards in Welsh dwellings is estimated as very costly (StatsWales, 2010: Tables 6 and 7).

To address these challenges, new ways of assessing eligibility for accessing grants to improve electrical safety, including factors such as an applicant’s age and other home environmental risk factors (e.g. compliance of existing electrical system with current standards) could be developed.

A common standard for electrical safety in Welsh housing – targeting the most vulnerable

The legislation, regulations and guidelines in Wales governing the safety of living environments for older people and staff in care homes are quite complex when it comes to electrical safety, and despite more recent regulatory changes aimed at a more coherent and streamlined approach, there is still some variation depending upon tenure. In some instances, requirements are also less stringent for electricity compared to other fuel sources such as gas. When we look at statistics about fire casualties and those caused by an electrical source, it is important to distinguish at least two age groups of older people – those aged between 65-79 and those aged 80 or over as the risks of experiencing these often life changing events increases significantly with age, making them a potentially more vulnerable group than those in other phases of the life course. Although Welsh housing stock is rapidly moving towards high levels of compliance with *HHSRS* and *WHQS* requirements for reducing hazards and ensuring safe and comfortable living environments, variations in the availability of public funding at the local authority level means that the necessary steps required for even higher levels of compliance may be compromised for

private landlords and home owners, especially when it comes to paying for the more costly repairs or retrofit for electrical systems in existing housing stock.

On this basis, it would be useful to work towards developing a more refined way of identifying those at risk of experiencing problems with electrical safety, for example by developing a *vulnerability index* (e.g. older person living alone, rewiring not done, poor economic resources, geographic location), which can be used in the assessment of the need for support in ensuring electrical safety. If there is proven vulnerability, the Welsh Government will be in a stronger position to ensure this “electrical safety equality” by targeting limited resources to those most at risk (e.g. free PAT testing, electrical inspections, fire safety checks, financial incentives).

This Report has made several recommendations, based on the evidence reviewed about the electrical safety of older people’s living environments as it stands in Wales today. More sophisticated statistical analysis, for example using the *Secure Anonymised Information Linkage Databank – SAIL*, and integration of data from the various *Welsh Fire and Rescue Services* could help develop a more precise picture of the people, places and policies which still need to be targeted if we are to ensure equality of opportunity amongst older Welsh people for electrical safety in later life.

 Annexes

6. Annexes

Annex 1. *Health and Safety Executive (2014): Health and safety in care homes. Equipment Safety (pp.24-25). Accessed 07-08-17 at <http://www.hse.gov.uk/pUbns/priced/hsg220.pdf>*

Electrical safety

“4.19 Electrical equipment and installations must be maintained to prevent danger. Poorly maintained electrical systems can cause electric shocks and fires.

Fixed electrical installations

4.20 The fixed electrical installation includes the incoming supply cables, switchgear, distribution boards, socket outlets etc. To reduce risks from the electrical installation, it is essential that it is properly installed and maintained.

4.21 The most widely used standard in the UK covering installation and maintenance is **BS 7671:2008 (2013) Requirements for electrical installations (also known as the 17th Edition of the IET Wiring Regulations)**. BS 7671 is a code of practice that is widely recognised and accepted in the UK and compliance with it is likely to satisfy relevant requirements of the Electricity at Work Regulations 1989.

4.22 **The Electricity at Work Regulations 1989 (EAWR) do not specify a frequency for maintenance. The legal requirement is simply to maintain the installation in a safe condition.** Decisions on the frequency should be based on a **risk assessment**. However, the guidance notes supporting BS 7671 suggest that the fixed electrical installations in residential premises (including care homes) should be inspected and tested by a competent person **every five years** – although the interval can be varied on the advice of a competent person and the results of your risk assessment.

4.23 If visual checks are carried out, **staff should be trained** in what to look for (eg broken socket covers) but should be instructed not to dismantle or attempt to repair equipment unless they are competent to do so.

Portable electrical equipment

4.24 Portable equipment that can cause danger (including equipment owned by a resident) must be maintained. However, **it is not a legal requirement to test all portable electrical appliances every year. You** should decide the level and frequency of maintenance needed according to the risk of the item becoming faulty. The more often a piece of equipment is moved, the more likely it is to become damaged.

4.25 In deciding how often to maintain portable equipment you should consider: whether it is earthed or double insulated; if it is hand-held; its age; how often it is used; where it will be used.

4.26 In many cases a **simple visual inspection** by a member of staff **who knows what to look for is enough** (eg checking for loose cables, bare wires or signs of fire damage). However, in some cases, a portable appliance test may be required, e.g. in Class 1 earthed equipment such as floor cleaners and some kitchen/laundry equipment”.

Annex 2. *Health and Safety Executive (2014). Health and safety in care homes. Fire Safety: (p. 61). Accessed 07-08-17 at <http://www.hse.gov.uk/pUbns/priced/hsg220.pdf>*

Fire safety

“13.15 Those responsible for the premises must carry out a fire safety risk assessment, keep it up to date, and use it to ensure that necessary fire safety measures are in place. It should identify what could cause a fire to start, including: sources of ignition (e.g. heat or sparks); materials that burn; people who may be at risk.

13.16 Simple control measures include: keeping sources of ignition and flammable substances apart; ensuring good housekeeping (e.g. avoid build-up of rubbish); considering how to detect fires and how to warn people quickly if they start – special arrangements may be required where residents have mobility issues; having the correct fire-fighting equipment, ensuring these are correctly maintained; keeping fire exits and escape routes clearly marked and unobstructed; ensuring your workers receive appropriate training”.

Annex 3. *Partnership working: South Wales Fire & Rescue Service and others – promoting safety of older people in the community.*

Organisation		Type of collaboration
Age Concern Gwent – Choices Ltd	SLA	Delivery
Age Cymru – Handyvan	MOU	Referral
Care & Repair Blaenau Gwent	MOU	Referral
Care & Repair Bridgend	SLA	Delivery
Care & Repair Caerphilly	MOU	Referral
Care & Repair Cardiff and the Vale	MOU	Referral
Cwm Taff Care and Repair	MOU	Referral
Care & Repair Monmouthshire & Torfaen	MOU	Referral
Care & Repair Newport	SLA	Delivery
Carers Trust SE	MOU	Referral
Mind Monmouth	MOU	Referral
Royal British Legion – Poppycalls	SLA	Delivery
Sight Cymru	MOU	Referral
Wales Council for Deaf People	MOU	Referral
Reach – Supported Living (Caerphilly)	SLA	Delivery
Western Power Distribution	MOU	Referral

Delivery: Delivering Home Safety Checks on behalf of WF&RS to the organisation’s existing client base

Referral: Referring clients to WF&RS to conduct Home Safety Checks

Source: information provided by SWF&RS and current as of June 2017. SLA = Service level agreement; MOU = memorandum of understanding

Annex 4. Local Authority Website Information and Advice Provided to the General Public about Electrical Safety and Older People.

Current as of June 2017

The purpose of this table is to provide an overview of the information available to the general public through the website portals of the 22 local authorities in Wales, in relation to electrical safety at home and to highlight whether information and advice is particularly targeted to older people living at home. The information outlined in the table was valid as of June 2017. The search strategy used to consult each local authority website is at the end of the table.

Local Authority	Home/Fire/Electrical Safety Information	Electrical Safety First Link	Fire & Rescue Service Link/ Information about Home Fire Safety Check
<p>1. Carmarthenshire http://www.carmarthenshire.gov.wales/ Search term: home safety (and then follow the link to “check electrical and gas appliances”)</p>	<p>Yes <i>Home Safety:</i> general advice about home maintenance and adaptations with section on maintenance of gas and electrical appliances; recommend use of registered tradesman http://www.carmarthenshire.gov.wales/home/residents/housing/home-maintenanceadaptations/home-safety.aspx#.WTaqYuyyuUk</p>	<p>Yes</p>	<p>Yes <i>Here is the path:</i> Social Care & Health/Support at home/home repairs and adaptations They provide information about getting a free fire safety check and fitting smoke alarms. http://www.carmarthenshire.gov.wales/home/residents/social-care-health/support-at-home/home-repairsadaptations.aspx#.WTqqiOvyuUk</p>
<p>2. Swansea http://www.swansea.gov.uk/residents Search term: “electrical safety” leads to “fire safety”</p>	<p>Yes <i>Fire Safety:</i> Social Care and wellbeing/Older People/Living Independently at home/safety in the home/fire safety Free fire safety check, free smoke alarms phone number and link to the fire service website. Information and advice about electric blankets.</p>	<p>Yes In relation to the safe use of electrical blankets.</p>	<p>Yes They provide information about getting a free safety check and advice, and a free smoke alarm. They provide the 0800 number and a link to the Fire Service website. http://www.swansea.gov.uk/article/6474/Fire-Safety</p>
<p>3. Neath Port Talbot https://www.npt.gov.uk/ Search term: electrical safety only produces a link to a news article about seizing fake goods: https://www.npt.gov.uk/default.aspx?page=2482&pr_id=5624</p>	<p>If you search “home safety”, the website transfers you to the Mid and West Wales Fire and Rescue Service: http://www.mawwfire.gov.uk/English/Safety/At-Home/Pages/default.aspx In this page, there are links for home fire safety checks and other useful information.</p>	<p>No</p>	<p>They link you with the Mid and West Wales Fire and Rescue Service, which provides this information</p>
<p>4. Isle of Anglesey http://www.anglesey.gov.uk/ Search terms: “electrical safety” leads to links in relation to: “warning- don’t purchase fake electrical items”, “home safety fairs”, “fire safety risk assessment” and “gas safety in the home” Search term: “fire safety”: leads to link “fire safety in the home” among others</p>	<p><i>Fire Safety:</i> Housing/Private Housing/Fire safety risk assessment/fire safety in the home <i>Housing Enforcement Team</i> (01248) 752836 / 752835 <i>Information:</i> Statistics about fires in UK, free home safety check, links to fire service, advice about bedtime safety routine, in the event of fire, and smoke alarms</p>	<p>Yes In relation to a warning about purchasing fake electrical items http://www.anglesey.gov.uk/empty-nav/news/press-releases-2016/february-2016/warning-dont-purchase-fake-electrical-items/128186.article</p>	<p>Yes http://www.anglesey.gov.uk/fire-safety-in-the-home/102084.article Other than fire safety advice, the website informs us that there are ‘home safety fairs’– North Wales Fire and Rescue Service takes part. They are organised by the “Anglesey Health Alliance” http://www.anglesey.gov.uk/anglesey-health-alliance/102058.article</p>

Is “older people” a target group for electrical safety?	Good practice opportunities or examples about electrical safety and older people	Summing up by local authority
<p>Yes</p> <p>There is a dedicated section for homeowners 60+ with links to Care & Repair. They mention that they offer a free “Healthy Home Check” and perform “small repair or adaptation works”.</p> <p>http://www.carmarthenshire.gov.wales/home/residents/social-care-health/support-at-home/home-repairsadaptations.aspx#.WTkoK5LyvIV</p>		<p>No dedicated page for electrical safety but some advice about checking electrical and gas appliances, including useful links to Electrical Safety First, Care & Repair and advice targeted at homeowners 60+</p>
<p>Yes</p> <p>Fire safety is listed along with falls prevention, home security, gas safety and telecare.</p> <p>There is also a link to Western Bay Care & Repair</p> <p>http://www.swansea.gov.uk/article/6474/Fire-Safety</p>		<p>Not dedicated page for electrical safety, but there is a page for “fire safety” and one for “electrical works”.</p> <p>Useful links to the Mid and West Wales Fire Service and the “Electric Blanket Safety from Electrical Safety First”</p>
<p>No</p>		<p>The main page acts as a search engine referring you to mainly outside links. Hence, there is no dedicated page to electrical safety or older people.</p>
<p>No</p> <p>But “some electrical works” are mentioned as part of the minor adaptations that can be conducted by Anglesey Care & Repair</p> <p>http://www.anglesey.gov.uk/housing/home-improvements-and-repairs/home-adaptations/</p>	<p>The “home safety fairs”. Last evaluation report was from 2009 – the report mentions that during the fair they tested electric blankets: “The Environmental Section of the Anglesey Council was used as a point of contact for making appointments”. They tested 189 blankets and the Fire Service offered think fleeces free of charge and vouchers to buy new electric blankets</p> <p>http://www.anglesey.gov.uk/download/9690</p>	<p>The website is out-dated in places (e.g. evaluation of home safety fairs is from 2009).</p> <p>There is no specific link between older people and Electrical Safety.</p> <p>There is information about Care & Repair and getting funding about ‘some electrical works’</p>

Local Authority	Home/Fire/Electrical Safety Information	Electrical Safety First Link	Fire & Rescue Service Link/ Information about Home Fire Safety Check
<p>5. Gwynedd https://www.gwynedd.llyw.cymru/en/Residents/Residents.aspx</p> <p><i>Search terms: “electrical safety”, “fire safety”, “safety”, “older people”, “elderly”, did not produce any results.</i></p>	No	No	No
<p>6. Conwy http://www.conwy.gov.uk/en/Resident/Resident.aspx</p>	No	No	There is a link to the North Wales Fire and Rescue Service, in their page about ‘general advice during an emergency’ http://www.conwy.gov.uk/en/Resident/Crime-and-emergencies/Preparing-for-Emergencies/During-an-emergency-%E2%80%93-general-advice.aspx
<p>7. Denbighshire https://www.denbighshire.gov.uk/en/resident/home.aspx</p>	Minimal information about ‘ fire safety checks ’: Home/Benefits, grants & advice/adapting or improving your home/fire safety checks It is mentioned that they offer free smoke alarms and a free fire safety check, but there are no links or contact information. https://www.denbighshire.gov.uk/en/resident/benefits-grants-and-advice/adapting-or-improving-your-home/fire-safety-checks.aspx	There is a section about fake electrical items purchase: https://www.denbighshire.gov.uk/en/resident/news/February-2016/Warning-dont-purchase-fake-electrical-items.aspx	There is advice about smoke alarms, fire prevention, what to do during a fire and a link to the North Wales fire service website: https://www.denbighshire.gov.uk/en/resident/crime-prevention-and-emergencies/emergency-advice/fire.aspx The advice is provided under the ‘crime prevention and emergencies’ part of the website
<p>8. Flintshire http://www.flintshire.gov.uk/en/Home.aspx</p>	No There is a “community safety” page but nothing on fire/electrical safety etc	No	No
<p>9. Wrexham http://www.wrexham.gov.uk/english/index.cfm</p>	<i>Safety – Electrical Safety:</i> http://www.wrexham.gov.uk/english/council/Housing/repairs/safety.htm Electrical safety is under ‘ housing repairs ’ – there are some tips related to electrical safety, eg. never wire more than one appliance into one plug.	Yes , there is a link to the Electrical Safety Website – but only under the heading of ‘Private Rented Housing’ to improve safety in rented homes	Yes They also provide information about getting a free fire safety check with the 0800 number of the Fire Service. http://www.wrexham.gov.uk/English/life_events/retirement/accident_prevention/index.htm
<p>10. Powys http://www.powys.gov.uk/</p>	There is a general section on safety: http://www.powys.gov.uk/en/licensing-trading-standards/trading-standards-business-advice/safety/?tsbc%5Baction%5D=details&tsbc%5Bdocid%5D=122652 which includes information about electrical equipment and existing regulations	No	Only in relation to people with hearing loss problems – there is mention of getting flashing smoke alarms free of charge by the Fire Service, including their number (0800). For privately rented accommodation, there is a statement about ‘faulty electrics’ and phoning the ‘relevant emergency number of those services’ http://www.powys.gov.uk/en/housing/privately-rented-accommodation/

Is “older people” a target group for electrical safety?	Good practice opportunities or examples about electrical safety and older people	Summing up by local authority
<p>No,</p> <p>there is an “older people commissioning plan” BUT there is nothing about fire/electrical safety</p> <p>https://www.gwynedd.llyw.cymru/en/Council/Documents---Council/Strategies-and-policies/Older-People-Commissioning-Plan-2011-2016.pdf</p>		There is no information about electrical safety.
<p>No</p>		Residents can get ‘advice and support’ on the website about various issues, including ‘problems with landlord’ and ‘housing conditions’. Gas and electrical installations are mentioned in terms of residents voicing their concerns to the council. There is no information about electrical safety.
<p>No</p>		There is no information that links older people and electrical safety. There is ample information about fire prevention and a link to the fire service website.
<p>No</p>		There is no information about electrical safety.
<p>Yes:</p> <p>Life Events/retirement /accident prevention</p> <p>There is advice about “cooking” in the accident prevention section: http://www.wrexham.gov.uk/English/life_events/retirement/accident_prevention/index.htm</p> <p>and Home Fire Safety</p>	<p>There is a private rented sector team, which provides advice and inspection services, including fire, gas and electrical safety.</p> <p>http://www.wrexham.gov.uk/english/council/Housing/private_rented_sector.htm</p>	There is advice targeted for older people – including during cooking, smoking, use of portable heaters, and electric blankets.
<p>Not directly</p>	<p>There is a section called “ask for a council housing repair or adaptation” http://www.powys.gov.uk/en/housing/ask-for-a-council-housing-repair-or-adaptation/ whereby “unsafe power or lighting sockets or electrical fittings” are included as “qualifying repairs” because they affect the “health, safety or security”.</p>	There is no information in relation to older people – apart from the fact that they offer small grants for electrical safety-related issues (through Gwalia)

Local Authority	Home/Fire/Electrical Safety Information	Electrical Safety First Link	Fire & Rescue Service Link/ Information about Home Fire Safety Check
11. Monmouthshire http://www.monmouthshire.gov.uk/	No dedicated section to electrical or fire safety but there is a section on 'safety and efficiency in housing' http://www.monmouthshire.gov.uk/safety-and-efficiency-in-housing "If you live in rented accommodation and are concerned about property health and safety, the Council's Environmental Health Team can help"	No	No
12. Ceredigion	No dedicated section on electrical safety, but there is a section on "feeling safe" under which there are links to pages about 'home repairs and adaptations' and 'home fire safety checks' among others. http://www.ceredigion.gov.uk/English/Resident/socialcare/feelingsafe/Pages/default.aspx	No	Yes There is a page about "home fire safety checks" whereby citizens are informed about the Fire and Rescue services ' free home fire safety check and installation of free smoke alarms. There is a link to the F&R Service website and the 0800 number. http://www.ceredigion.gov.uk/English/resident/socialcare/feelingsafe/home-fire-safety-checks/Pages/default.aspx
13. Bridgend http://www.bridgend.gov.uk/	There is no dedicated section to electrical safety, but under the headline of 'safety', there is a link to "fire-home safety check", which leads you to the South Wales Fire Service website. http://www.bridgend.gov.uk/lgnl-level-2/safety.aspx	No	Yes There are contact details for the South Wales Fire Service, but no information about safety checks etc. https://democratic.bridgend.gov.uk/mgOutsideBodyDetails.aspx?ID=197
14. Merthyr Tydfil https://www.merthyr.gov.uk/	There is a section on 'community safety' with a link to the 'Merthyr Tydfil Community Safety Partnership', but the link is inactive. https://www.merthyr.gov.uk/resident/crime-safety-and-emergencies/community-safety/	No	"Fire safety education" is mentioned in terms of 'schools and learning', but there are no links to relevant services. https://www.merthyr.gov.uk/resident/schools-and-learning/fire-safety-education/

Is “older people” a target group for electrical safety?	Good practice opportunities or examples about electrical safety and older people	Summing up by local authority
<p>No</p>		<p>Some links are inactive (e.g. sensor installations for vulnerable people, safety at home grants link on page:</p> <p>http://www.monmouthshire.gov.uk/safety-and-efficiency-in-housing</p> <p>No information on electrical safety.</p>
<p>Yes</p> <p>Under the headline of ‘home repairs and adaptations’, there is advice for people aged 60 and over about having ‘necessary repairs and adaptations’ carrying out by Care & Repair. They inform that Care & Repair can carry out a home safety check, including installing smoke alarms. They provide contact details.</p> <p>There is also a section about the Fire Service, informing about installation of a free smoke alarm, link to the F&R Service website and details on how to request a ‘home fire safety assessment’ for ‘either yourself or a dependent relative’. They also provide the 0800 number.</p> <p>http://www.ceredigion.gov.uk/English/Resident/socialcare/home/repairs/Pages/default.aspx</p>	<p>Since 1998, there is been an initiative called “the Ceredigion Community Safety Partnership” with representatives from various authorities, including the Mid & West Wales F&R Service.</p> <p>http://www.ceredigion.gov.uk/English/CeredigionForAll/Community%20Safety/Pages/default.aspx</p> <p>The minutes mention the F&R initiative of “making every contact count” during home safety checks “detailing a more holistic approach to home safety, working with key agencies to develop suite of supported interventions, promote key messages and raise awareness around issues including smoking cessation, and health and wellbeing”</p> <p>http://www.ceredigion.gov.uk/cpd/CeredigionStrategicPartnerships_Public/Community%20Safety%20DandAENG06.10.16.pdf</p>	<p>Very informative website and useful links; there is no dedicated section on electrical safety, but there are initiatives to promote ‘feeling safe’, collaboration among services and plenty of information about home safety checks by relevant services.</p>
<p>The Council informs residents about available grants, but there is no link to electrical safety.</p> <p>http://www.bridgend.gov.uk/services/housing/housing-adaptations-and-repairs.aspx</p>		<p>Apart from the link to the ‘fire-home safety check’ prompting you to the South Wales Fire Service website, there is no information about electrical safety.</p>
<p>Yes</p> <p>They advertise their free of charge ‘Supporting People (SP) Programme’, which ‘helps improve people’s health, give vulnerable people better access to services and helps people achieve genuine independence, choice and control over their lives’. They offer housing related support, including ‘assistance to arrange for servicing and repair of appliances’, ‘maintenance and minor repairs to the property’, and ‘assistance to use household appliances safely’. Older people are part of the target groups. There is a link to a referral form.</p> <p>https://www.merthyr.gov.uk/resident/social-services-and-well-being/adults-older-people/help-to-live-at-home-independently/supporting-people/</p>	<p>There is a “Merthyr Tydfil Community Safety Partnership” committed to making the borough ‘a safer place’ and the South Wales Fire Authority is part of it.</p> <p>https://www.merthyr.gov.uk/resident/crime-safety-and-emergencies/community-safety/ The link is inactive and there was no readily available information about it online. There are contact details in the right hand side of the page.</p>	<p>Limited information with no links to available services. No mention of electrical safety.</p>

Local Authority	Home/Fire/Electrical Safety Information	Electrical Safety First Link	Fire & Rescue Service Link/ Information about Home Fire Safety Check
15. Rhondda Cynon Taf http://www.rctcbc.gov.uk/	No	No	<p>There is a page about emergency services contacts, but fire service is not listed; there is a link to the Western Power website for electricity-related concerns.</p> <p>http://www.rctcbc.gov.uk/EN/Resident/EmergenciesSafetyandCrime/EmergencyServicesContacts.aspx</p>
16. Caerphilly http://www.caerphilly.gov.uk/	YES Under 'community safety', there is a link for ' fire safety at home '. There is a dedicated page about fire safety at home. Part of the page is dedicated to electrical safety with detailed advice on safe use of plugs, sockets, leads, electrical appliances, electric blankets, portable heaters and lights and bulbs. http://your.caerphilly.gov.uk/saferccb/fire-safety/fire-safety-home	No	Yes Excellent information provision with advice on smoke alarms (free provision) 0800 number and contact details, advice on cooking safely, smoking, deep frying, electrical safety, candles and what to do in the event of a fire. There is also information about getting a free home fire safety check. http://your.caerphilly.gov.uk/saferccb/fire-safety/fire-safety-home
17. Vale of Glamorgan http://www.valeofglamorgan.gov.uk/en/index.aspx	No There is a general section on 'health and wellbeing'. There is no information about electrical/fire safety at home. However, they provide a link to Dewis Wales – the National Citizen portal for Wellbeing information in Wales; which provides information about 'electricity safety', 'fire and arson', getting a fire safety check and contact details for the fire service. http://www.valeofglamorgan.gov.uk/en/living/social_care/Health-and-Wellbeing/Health-and-Wellbeing.aspx	No	No
18. Cardiff https://www.cardiff.gov.uk/ENG/Pages/default.aspx	No	Yes, but only in relation to building regulations https://www.cardiff.gov.uk/CYM/Busnes/Cynllunio-eiddo-a-rheoli-adeiladau/Rheoli-adeiladau/Cyngor-a-chanllawiau/Pages/Cyngor-a-chanllawiau.aspx	No

Is “older people” a target group for electrical safety?	Good practice opportunities or examples about electrical safety and older people	Summing up by local authority
<p>Yes</p> <p>Under the headings of adults and older people/emergency alarms-lifeline and telecare/telecare.</p> <p>There is information about the different types of alarm an older person may get, including a ‘carbon monoxide detector’ and a ‘smoke and heat detector’. There are contact details for the social services.</p> <p>http://www.rctcbc.gov.uk/EN/Resident/AdultsandOlderPeople/EmergencyAlarmsLifelineandTelecare/Telecare/Telecareequipmentforhomesafety.aspx</p>		<p>The site is difficult to navigate..</p>
<p>Yes</p> <p>There is a news bulletin about Care & Repair Provision from 2014: mentioning that Care & Repair covers a range of services including basic electrical works, fire safety checks and equipment. Contact details are provided.</p> <p>http://www.caerphilly.gov.uk/News/News-Bulletin/December-2014/Care-Repair-delivers-dependable-TLC-for-vulnerable</p>	<p>The ‘fire safety at home’ page is very thorough, even though it is not directly linked to older people.</p>	<p>One of the most informative sites about fire and electrical safety. However, apart from the news bulletin. No information related to electrical safety and older people.</p>
<p>No</p>		<p>Other than the link to Dewis Wales, the website does not provide any information about electrical safety. However, the Dewis Wales website has very concise information about ‘electricity safety’, including a link to Electrical Safety First and a link to Care and Repair Cymru, which they state “carries out electrical safety checks for older people who are considered to be at risk”.</p> <p>https://www.dewis.wales/electricity-safety</p>
<p>No</p>		<p>There is no concrete information about home/electrical/fire safety.</p>

Local Authority	Home/Fire/Electrical Safety Information	Electrical Safety First Link	Fire & Rescue Service Link/ Information about Home Fire Safety Check
<p>19. Toarfaen http://www.torfaen.gov.uk/intro-splash.aspx</p>	<p>No dedicated section on electrical safety, but there is a section named ‘keeping safe’ under the headline of ‘Ageing well’. They provide links to the South Wales F&R Service.</p> <p>http://www.torfaen.gov.uk/lgs/en/HealthSocialCareandWellbeing/Ageing-Well/Keeping-Safe.aspx</p>	<p>No</p>	<p>Yes</p> <p>There is information about getting a free Home Fire Safety Check, smoke alarms and planning a safe escape in your home. They provide an 0800 number and a link to an online registration form.</p> <p>http://www.torfaen.gov.uk/lgs/en/HealthSocialCareandWellbeing/Ageing-Well/Keeping-Safe.aspx</p>
<p>20. Newport http://www.newport.gov.uk/SplashScreen/splashPages/NCC-Splash-Home.aspx</p>	<p>No</p>	<p>No</p>	<p>No</p>
<p>21. Pembrokeshire https://www.pembrokeshire.gov.uk</p>	<p>Yes</p> <p>There is a section called ‘Home Safety Advice’ with safety tips about escaping fire, cooking safely, overloading sockets, smoke alarms etc</p> <p>https://www.pembrokeshire.gov.uk/content.asp?Language=&id=13257</p>	<p>No</p>	<p>Yes</p> <p>The same page provides information about getting a free fire safety check, getting your smoke alarm fixed or replaced and provide a link for the Mid and West Wales Fire & Rescue Service.</p> <p>https://www.pembrokeshire.gov.uk/content.asp?Language=&id=13257</p>
<p>22. Blaenau-Gwent http://www.blaenau-gwent.gov.uk/</p>	<p>No</p>	<p>No</p>	<p>No</p>

Is “older people” a target group for electrical safety?	Good practice opportunities or examples about electrical safety and older people	Summing up by local authority
<p>Yes</p> <p>The information provided is under the heading of ‘Ageing Well’.</p>		<p>There is a small section addressed to older people regarding ‘keeping safe’ and information about the fire service and the services they provide is listed there.</p> <p>However, there is no dedicated section on electrical safety.</p>
<p>No</p>		<p>There is no information about electrical/fire/home safety.</p> <p>There are no links to Electrical Safety First, the fire service etc.</p>
<p>Yes</p> <p>Website has downloadable PDF document called ‘Guide to Better Care and Support’. Mentions ‘fire safety’ with information about getting a free smoke alarm and electric blanket testing. Additionally, they provide home safety tips for older people with additional needs (hearing/sight/mobility difficulties)</p> <p>http://www.pembrokeshire.gov.uk/content.asp?nav=107,753,1630</p>	<p>The downloadable pdf document is an example of good practice, since it provides concise information for older people along with other information regarding getting out and about, maintaining independence, health, paying for care and support etc.</p>	<p>The website provides useful information about electrical safety with links to the F&R Service and specific information for older people conveniently organised in a pdf document along with other pertinent information for older people.</p>
<p>No</p>		<p>No information about electrical, fire or home safety.</p> <p>No links to ESF, the F&R Service or any other relevant service.</p>
<p>Summing up: From our search of the local authority websites, 13 out of 22 Councils provide some form of advice in relation to electrical safety. This is usually under the headline of home or fire safety. Only seven out of 22 provide useful tips and advice related to electrical safety and fire prevention (Carmarthenshire, Isle of Anglesey, Denbighshire, Wrexham, Powys, Caerphilly, and Pembrokeshire). Only six provide a link to ESF. 12 out of 22 provide a link to their local Fire & Rescue Service; while only seven out of them inform the public about the free Fire Safety Checks offered by the Fire Service. Only nine out of 22 provided information related to electrical safety, which were aimed specifically to older people.</p>		
<p>Website search strategy:</p> <p>The search engine provided by each website was used and searched with the following search terms singularly or in various combinations:</p> <ol style="list-style-type: none"> “electrical safety”, “fire safety”, “home safety”, “safety”, “electricity”, “fire”, “accident”, “emergency”, “prevention” “older people”, “elderly”, “50+”, “over 60”, “ageing” “Electrical Safety First” “Fire & Rescue Service”, “Fire Service”, “Fire and Rescue Service”, “Emergency Services” “Repairs”, “safety checks”, “alarms”, “smoke alarm”, “smoke detector”, “testing” <p>Inclusion/Exclusion criteria:</p> <p>Any information that was addressed to the general public (including older people) related to “electrical safety” AND “home” was included. Information related to business (e.g. building regulations) or professionals (e.g. courses provided to professionals in relation to electrical safety by the Council) was excluded.</p>		

References

7. References

- ¹ Findings refer to the period 2009-10 to 2016-17 unless otherwise stated.
- ² Phillips, J., Ajrouch, K., and Hillcoat-Nallétamby, S. (2010). *Key Concepts in Social Gerontology*, Sage Publications.
- ³ Office for National Statistics (2nd March 2012). *Population Ageing in the United Kingdom, its Constituent Countries and the European Union*. Accessed 28-09-17 at http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/dcp171776_258607.pdf
- ⁴ Data provided by Welsh Government.
- ⁵ Welsh Government (5th May 2017). *Future Trends, Health: 2017*. Accessed 28-09-17 at <http://gov.wales/statistics-and-research/future-trends/?tab=data&lang=en>
- ⁶ Office for National Statistics (2011) *Census Table LC3409EW – General Health by Tenure by Age*. Accessed 28-09-17 at https://www.nomisweb.co.uk/census/2011/LC3409EW/view/2092957700?rows=c_tenhuk11&cols=c_age
- ⁷ Welsh Government (9th August 2017). *StatsWales: Total Stock at social rent by accommodation type and dwelling type*. Accessed 28-09-17 at <https://statswales.gov.wales/Catalogue/Housing/Social-Housing-Stock-and-Rents/totalstockatsocialrent-by-accommodationtype-dwellingtype>
- ⁸ Office for National Statistics (2014). *Changes in the Older Resident Care Home Population between 2001 and 2011*. Accessed 28-09-17 at <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/ageing/articles/changesintheolderresidentcarehomepopulationbetween2001and2011/2014-08-01>
- ⁹ Welsh Government (1st March 2017). *Expert group on housing an ageing population*. Accessed 28-09-17 at: <http://gov.wales/topics/housing-and-regeneration/housing-supply/expert-group-on-housing-an-ageing-population/?lang=en>
- ¹⁰ Hillcoat-Nallétamby, S. & Sardani, A. (2015). *Qualitative Evaluation Report. The Moving On Service*. Report commissioned by Canllaw, Porthmadog, with funding from the Intermediate Care Fund. Centre for Innovative Ageing, Swansea University.
- ¹¹ Hillcoat-Nallétamby, S., & Ogg, J. (2013). Moving beyond “ageing in place”: older people’s dislikes about their home and neighbourhood environments as a motive for wishing to move. *Ageing and Society*, doi: 10.1017/S0144686X13000482.
- ¹² The most recent data come from the 2004 and 2008 *Living in Wales Household and Property Surveys*. More up-to-date information on housing conditions and energy efficiency will be available in Wales in late 2018, following completion of the *Welsh Housing Conditions Survey 2017-18*. Some housing topics have also been included in the *National Survey for Wales 2017-18*, data from which will be available in Summer 2018.
- ¹³ Hillcoat-Nallétamby, S., & Ogg, J. (2009). *To move or not to move? Residential relocation behaviour amongst older citizens in Wales*. Report Commissioned by The Office of the Chief Social Research Officer for the Welsh Assembly Government (available from authors).
- ¹⁴ National Statistics (17th December 2010). *Living in Wales 2008 – Housing Health and Safety Rating System* (Table 9). Accessed 28-09-17 at: <http://gov.wales/docs/statistics/2010/101217sdr2242010en.pdf>
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Your Notes

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