

Age Safe Scotland:

*Electrical Safety
in an Ageing Society*



#agesafescotland

Age Safe Scotland: *Electrical Safety in an Ageing Society*

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Introduction

About the authors



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Margaret Moore has worked in the housing sector for over 30 years in a range of different settings including local authority, community controlled housing associations and in the Scottish Government's housing and regeneration team.

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Margaret is currently an action group member with the JIT.



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Simon Carr has worked in the social housing and care sector for over 30 years.

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Director General's Forward



Phil Buckle, Director General,
Electrical Safety First

This study, commissioned by Electrical Safety First, was established to better understand the impact of poor electrical safety on an ageing society in Scotland.

We are grateful for the support of the Scottish Fire and Rescue Service who provided the fire statistical data and technical assistance for this report, and hosted a focus group of older people to better understand their personal experiences with electrical safety. We are also grateful to the stakeholders and attendees, who gave up their time to attend the event and assist with this study.

In addition, we would like to thank the Scottish Government, Care and Repair Scotland and the Scottish Association of Landlords for their valuable input.

Executive Summary

“...an increasing number of older people living with dementia, present a heightened risk of electrical accidents”

- The number of people living with dementia in Scotland will double over the next 25 years to almost 180,000.¹
- Proportionately, older people suffer more fatal and non-fatal injuries from electrically-related house fires than the rest of the population. There are concerns that casualty figures will increase with an ageing society.
- During 2014-15, there were 3,642 accidental fires in the home caused by electricity.² Older people can be particularly at risk because they often live in old and/or poor-quality housing that contains faulty electrics or old appliances.

Keeping older people safe at home is essential to maintaining wellbeing. It also helps to achieve government policy and reduce public expenditure. Increasingly, the majority of older people in Scotland live at home and want to remain there.

This report examines the impact of poor electrical safety on older people and those living with dementia in Scotland. The fact that people are living longer at home should be celebrated. However, Scotland's ageing population, coupled with an increasing number of older people living with dementia, presents a heightened risk of electrical accidents.

- Almost 20% of these fires were caused by faulty electrical appliances or through misuse of appliances. This figure included 193 casualties involving people who were over 60.²
- The Scottish Government has taken steps to ensure electrical safety standards in both social housing and the private rented sector are enhanced - there is no such requirement in the owner occupied sector, which accounts for 58% of Scotland's total housing stock.³
- The majority of older people live at home and are owner occupiers who tend to live in properties built before 1982, which contain older electrical installations that do not have the five recommended safety features.⁴
- Approximately 78% of older people's homes are in disrepair, with 58% having a critical disrepair, 35% with extensive and 8% urgent.⁵
- Injuries caused by electrical fires in the home cost the public purse around £8.9 million per annum in Scotland, which includes over £3 million involving older people.⁶
- To put this in perspective, the average cost of a hospital admission for someone over 65 is comparable to the weekly cost of 28 people living in a care home.⁷
- Care homes in Scotland are not legally required to carry out mandatory electrical safety checks to ensure the safety of their residents, despite there being requirements for Houses in Multiple Occupancy (HMOs).

There is also much to be done to help raise awareness of electrical safety with older people, their families and carers. At a recent focus group with older people it was clear that very few participants were aware of the importance of electrical safety in the home. There is a great deal of web based information in respect of electrical safety but many older people are not comfortable using digital technology to access information. A survey published by the ONS in 2014 suggested that less than 50% of older people have access or regular access to information via the web.⁸

Recommendations

1. The option of a free five-yearly electrical safety check for all households with one person of pensionable age.
2. In addition, the Scottish Government should make five-yearly electrical safety checks mandatory in the social rented and care sectors.
3. The Scottish Government should provide additional funding to Scottish Care and Repair Agencies to rectify any electrical hazards found in the homes of older people who are unable to fund the work themselves.
4. An electrical safety checklist should be distributed by local authorities to individuals and organisations frequently entering the homes of older people. This group includes GPs, carers, handyperson services and gas and electrical engineers, and all health, housing and social care staff.
5. Local authorities and stakeholders should develop awareness raising schemes targeted towards the groups and areas most at risk of poor electrical safety – for example low income older home owners and those living in rural areas. Stakeholders should also work together to produce new written safety guidance for older people.
6. Assistive technology offers a range of opportunities to help older people live safely at home and protect them from the risk of fire. Government grants should be made available to allow organisations to develop new products which help older people to use electricity safely at home.
7. A national framework should be established to allow public agencies working with older clients to make referrals concerning electrical hazards found in the home.
8. The Scottish Government should ensure that older people in the private rented sector are legally protected so that they are able to report electrical hazards to landlords without fear of eviction. Residual Current Devices should also be fitted in all privately rented homes.
9. The Scottish Government should make a commitment to reduce the number of accidental dwelling fires involving over 65s.
10. The Scottish Government should consider producing more detailed reporting of accidental house fires to better inform the direction of future public safety policy. Specifically, the details of the type of housing tenure and the age of those involved in such accidents.

Introduction

Electrical Safety First is a campaigning consumer charity dedicated to preventing deaths, injuries and damage caused by electricity. It works with tenants, landlords, homeowners and government to reduce deaths and accidents in the home.

Since 2009, the Charity has made over £90k available to Care and Repair Agencies in Scotland to improve electrical safety in the homes of older people. To date, its Home Improvement Grants Scheme has provided nearly 400 clients with grants for minor works essential for electrical safety in the home.

But there is much more to be done to help Scotland's ageing population. Electrical Safety First is particularly concerned with how dementia or similar degenerative illnesses affect older people's ability to stay safe in their own homes or in care.

This report considers:

- What we know about our ageing population
- Electrical safety in the home amongst older people
- What we have done about electrical safety in our homes
- What are the specific issues for an ageing society, with people becoming more frail and the increase in people living with dementia
- What's still to be done and how we get there

Two.

Scotland's Ageing Society



2. Scotland's Ageing Society

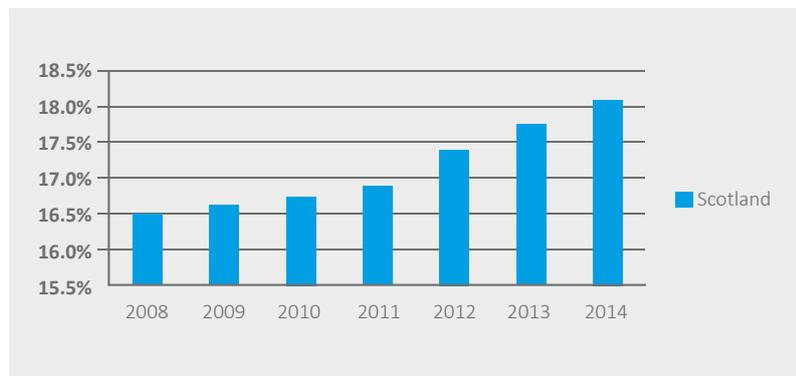
Population

People across Western Europe are living longer. There are approximately 970,000 people aged over 65 living in Scotland out of a total population of 5.3 million. The bar chart below shows how Scotland's over 65s have been growing as a proportion of the total population from 2008 to 2014.

National Records Scotland

The number of over 65s as a proportion of the total population is projected to increase to 25% by 2037.

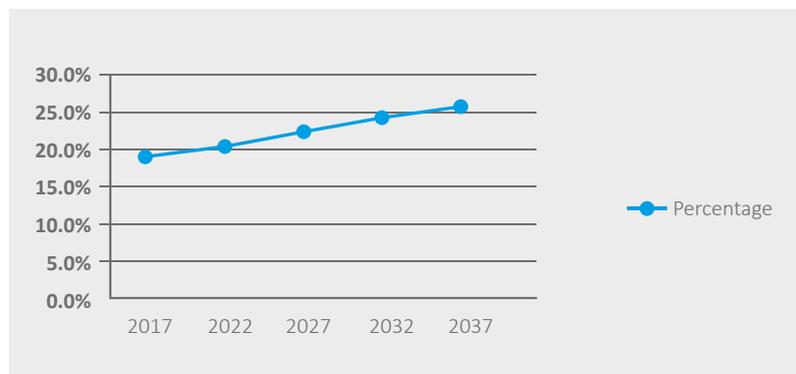
Percentage of Scottish Population Aged over 65



National Records Scotland

Over the next 25 years it is estimated that the number of people aged between 65-74 will increase by 37% while the numbers aged 75 and over will increase by 86%.⁹

Projected Population Aged over 65 in Scotland



Living with Dementia

In 2014, there were 89,879 people in Scotland living with dementia. Forward projections suggest that over the next 25 years the number of people living with dementia is expected to double to almost 180,000 people.¹⁰

Published figures show that 1.5% of those aged 65-69 are affected by dementia. This increases to one person in three for those aged over 90. As Scotland's population ages we can expect the number of people living with dementia to increase disproportionately to the ageing population.¹⁰

Where do older people live?

The majority of older people live at home. In 2011, over 95% of older people lived at home including around 5% of older people living in sheltered or very sheltered housing.¹¹ Current Scottish Government policy is clearly directed at supporting older people to live at home independently for as long as possible. The Public Bodies (Scotland) Act 2014 which aims to create integrated health and social care partnerships has as one of its key outcomes:

“People, including those with disabilities, long-term conditions, or who are frail, are able to live, as far as reasonably practicable, independently and at home or in a homely setting in their community.”

Remaining in their own home is also highly valued by both people living with dementia and their carers. In a recent study by The Alzheimer’s Society, 83% of carers and people living with dementia said being able to live in their own homes was “very important”.¹²

What is the housing tenure of older people?

Of the total number of older person households in Scotland, 72% are owner occupiers, 23% live in the social rented sector (i.e. managed by local authorities or housing associations) and 3% reside in private rented accommodation. Health statistics would suggest that older people living in the social rented sector are more likely to suffer from a range of health and social care needs.¹³ In addition, 45% of households occupied by pensioners live in houses built between 1919 and 1982 with only 11% living in a house built post 1982.¹⁴

In 2013, the Scottish House Condition Survey found that approximately 78% of older people’s homes were in disrepair, with 58% having a critical disrepair, 35% with extensive and 8% urgent.¹⁴

The available statistics do not tell us the extent of disrepair of the electrical installation. However, only 39% of households with a couple over 60 in England and Wales have all the five recommended electrical safety features which are shown below:¹⁵

Electrical Safety Features

- All PVC wiring
- A residual current device
- A modern consumer unit
- All modern earthing
- Miniature circuit breakers

It is not thought that the figures in Scotland would be significantly different.

“...78% of older people’s homes were in disrepair”

2. Scotland's Ageing Society

What we know about electrically-related fires in older people's homes?

It is not currently possible to tell from the statistics how many incidents, including actual dwelling fires, were in older people's homes since the Scottish Fire and Rescue Service (SFRS) is not required to record data by age group or housing tenure.

However, we do know that older people proportionately suffer more fatal and non-fatal injuries than other age groups. For instance, during 2014-15 there were 528 recorded casualties from accidental fires caused by electricity, of which 193 involved people aged 60 years of age or over.¹⁶ Older people account for 18% of the Scottish population, yet they suffer 37% of the casualties and fatalities involving electricity.

During this same period there were 3,642 fires in domestic dwellings caused by electricity. This figure has not varied significantly over the past five years: in 2009-10 there were 3,637 fires and later in 2012-13 there were 3,642. Of the 3,642 recorded incidents during 2014-15 almost 20% were caused by faulty electrical appliances, faulty leads to appliances and misuse of electrical appliances.¹⁶

The number of people injured from an electrical accident in the home has also remained relatively constant: 445 incidents in 2014-15 and 453 in 2009-10. The number of individual casualties was 528 in 2014-5 and 536 in 2009-10.¹⁶

It is also worth noting that included in these figures are 306 incidents where the injury was caused by a fault with the electrical supply compared with 232 incidents in 2009-10.¹⁶

Statistics in respect of injury and incident caused by electrical faults other than those that result in a fire are not recorded and therefore it is not possible to report on this matter in any detail.

In 2007, however, throughout the UK there were 19 deaths and 2,788 injuries caused by electric shocks in homes. Given that Scotland makes up 8.3% of the UK population we can assume that a similar proportion of these injuries were in Scotland.¹⁷

Death and injury caused by electrical fault is a costly issue in Scotland. According to Home Safety Scotland, the average cost of a non-fatal injury resulting in hospital admission is around £16,900.¹⁸ We can therefore assume that the total cost of injuries caused by electrical faults in Scotland is around £8.9 million every year, with over £3 million of this figure relating to older people.

Key Points

Scotland's older population, particularly, in the 75+ age range, is projected to increase to 25% by 2037.

Most older people live at home – 2011 figures show that 95% of older people live at home and that looks likely to continue.

The majority of older people live in the owner occupied sector.

In 2014-15, 193 of the recorded casualties from accidental fires caused by electricity involved people aged 60 or over.

Dementia and frailty are projected to increase, presenting a range of challenges to support people to live at home safely and independently.

Older people are proportionately more likely to experience injury caused by fires with an electrical source.

Injuries and death from house fires caused by electricity are costly, potentially costing the country around £8.9m per annum, with over £3m relating to older people.

Three.

Electrical Safety in Scotland's Housing Stock



3. Electrical Safety in Scotland’s Housing Stock

The legislative framework

The Scottish Government has always taken the issue of electrical safety seriously. This is reflected in legislation and the regulatory framework, which has predominately been put in place for the social and private rented sectors. The legislative framework in the rest of the UK is different, with the Lifetime Homes Standard providing principles and design guidance with little or no formal requirements placed on the private rented or owner occupied sectors.

A recent enquiry by Electrical Safety First noted that:

“Implementation of the Standard remains patchy across England, due to regional differences in regulation...”¹⁹

Social rented housing

The Scottish Housing Quality Standard (SHQS) was introduced in 2004 and Local Authority Landlords and Registered Social Landlords were given a target date of 2015 for all their properties to meet this standard. The SHQS now forms part of the Social Housing Charter, which came into force in April 2012.

Element 45 of the SHQS, which is provided below, states that homes must have safe electrical systems:

Safe Electrical Systems

The electrical system in the property must not be dangerous to the inhabitant as indicated by: broken casings; damaged power socket boxes; exposed wiring; other obvious signs of damage, disrepair or unauthorised alterations, especially to the consumer/meter units.

1. This should not be interpreted as meaning that an electrical system that is ‘not dangerous’ is actually ‘safe’. This is because it is widely recognised that it is much easier to identify a dangerous system than it is to be sure that a system is safe (which requires specialist electrical knowledge).
2. The overloading of power sockets by the occupants of the dwelling is not relevant to passing/failing this criteria as this does not indicate a dangerous electrical system as such (although could indicate a dangerous situation brought about by the inhabitant’s behaviour).
3. Safe electrical systems now form part of the Tolerable Standard though they did not form part of it when SHQS was introduced in 2004 (see element 11 in the Must meet Tolerable Standard criteria (A)). This means a property can now fail SHQS in terms of the Tolerable Standard (A) and the Healthy, Safe and Secure criteria (E) whereas in 2004 it could only fail on the Healthy, Safe and Secure criteria.

The SHQS is monitored by the Scottish Housing Regulator, and in its most recent annual progress report covering 2012-13 it stated that:

“Over the last year social landlords brought more of their tenants’ homes up to the Scottish Housing Quality Standard... Social landlords’ aggregate level of compliance with the Standard rose from 71% in 2011-12 to 82% in 2012-13.”

They also add that around 94% of social landlords anticipated meeting the standard by April 2015. This covers the vast majority of homes in the social rented sector with only 0.4% or 2,408 homes projected to have not met the standard in 2015. Most landlords are or will have met the electrical safety element of the SHQS. This is defined as “the electrical system in the property must not be dangerous to the inhabitant as indicated by: broken casings; damaged power socket boxes; exposed wiring; other obvious signs of damage, disrepair or unauthorised alterations, especially to the consumer/meter units.”²⁰

Landlords have to report on compliance to the Scottish Housing Regulator but their data can be based on surveys rather than formal inspection of every house. Therefore, no formal regular electrical safety check is required. It will be interesting to see whether the projected compliance rate of 94% is achieved in the Regulator’s next report which is due sometime in 2016-17.

However, after speaking to many social housing landlords during this inquiry, the majority take electrical safety seriously by ensuring that:

- **Most tenants’ homes meet the electrical safety standard in SHQS**
- **Most landlords carry out electrical safety checks before each new let**
- **Most landlords test the safety appliances post rewiring**
- **Landlords check appliances where they make a furnished let**

3. Electrical Safety in Scotland's Housing Stock

The private rented sector

The SHQS does not apply to the private rented sector (PRS), although it is sometimes used as a test of the fitness of a property. This has been seen as a serious defect in ensuring that tenants in privately rented homes are safe, particularly in the context of the growth of the sector. However, it should be noted that only a small percentage (approximately 3%) of older people reside in the PRS.²¹

There has been a successful campaign by Electrical Safety First and stakeholders, including the Scottish Association of Landlords, to persuade the Scottish Government to legislate to protect private tenants from faulty electrical systems and unsafe appliances.

The Housing (Scotland) Act 2014 puts a duty on private landlords to ensure electrical installations and any appliances provided are safe. These regulations came into effect on 1st December 2015 as follows:

Housing (Scotland) Act 2014

Have fixed wiring (Electrical Installation Condition Report or EICR) checks carried out at least every five years. This applies from the following dates: -

- 1st December 2015 - for any new tenancies entered into on or after this date (This includes current tenants signing a new lease)

From 1st December 2016 – for existing tenancies

- Ensure that regular electrical safety inspections are carried out by a competent person, and
- Have regard to this guidance issued by Scottish Ministers on electrical safety standards and competent persons. The electrical safety inspection has two separate elements:
 - *An Electrical Installation Condition Report (EICR) on the safety of the electrical installations, fixtures and fittings, and*
 - *A Portable Appliance Test (PAT) on portable appliances that have been supplied by the landlord*
 - *Tenants can request a copy of the EICR*

Importantly, new tenants will be entitled to ask for a copy of the EICR as part of the Tenant Information Pack that they must legally receive. However, this depends on the tenant being aware of their right to ask for the Pack. The production of the EICR does not form part of the mandatory landlord registration process with Local Authorities.

Owner occupied housing

Approximately 72% of people aged over 65 live in their own home in Scotland.²² However, none of the various standards mentioned for the social and private rented sector apply to the owner occupied sector. The Scottish Government is currently exploring whether it should introduce a Common Housing Quality Standard (CHQS) for all housing, which would include electrical safety.

The Scottish House Condition Survey found in 2013 that approximately 78% of older people's homes were in disrepair, with 58% having a critical disrepair; 35% with extensive and 8% urgent.²³

Unfortunately it is not possible to tell from the available statistics the extent of disrepair of the electrical installation. However, we know in England and Wales that only 40% of households with a couple over 60 have all five recommended electrical safety features.²⁴ This compares to a national average of 42% (figures based on the English House Survey 2010). It is not thought that the figures in Scotland would be significantly different.

Five Electrical Safety Features

- all PVC wiring,
- a residual current device,
- a modern consumer unit,
- all modern earthing and
- miniature circuit breakers in their homes

We also know there were 306 incidents involving older people where the SFRS attended to a fire caused by a faulty electrical installation. The statistics in respect of this type of incident, however, are not broken down by housing tenure, so it is difficult to assess how many of these incidents were in the owner occupied sector.

Given that the majority of older people live in houses or flats built before 1982, it is not unreasonable to have some concerns over the quality and safety of the electrical installations. Recent anecdotal evidence from a focus group suggests that home owners are not fully aware of the quality of their electrical wiring, with some owners who acquired their property under the 'Right to Buy' scheme admitting that their homes had never been rewired since they moved in.

While there is no evidence to suggest that this is prevalent, it is not unreasonable to assume that for the majority of 'Right to Buy' owners homes have not been rewired. Rewiring can be disruptive work and older homeowners we spoke to expressed concern at the cost and their ability to organise the work for themselves. This highlights the need for greater awareness amongst older owner occupiers, and at a minimum for the development of advice, information and support for older people on this subject.

At our recent focus group with older persons from Renfrewshire and Glasgow, it was clear that very few of the participants were aware of the importance of electrical safety and those that were did not feel confident in getting help to resolve any of their concerns. One participant said:

“My house has never been rewired and I have lived in it for over 40 years. I wouldn't know where to start.”

Focus group member

3. Electrical Safety in Scotland's Housing Stock

Care homes

“...fixed electrical installations in residential premises (including care homes) should be inspected and tested by a competent person every five years...”

With such a vulnerable population living in Care homes and the experience at the Rosepark Home in 2004, checking electrical safety should become a mandatory duty rather than just recommended as best practice.

Care home owners and managers are responsible for ensuring that the homes they operate are safe and secure for what are often very vulnerable residents.

The Scottish Government issues advice to care home owners in respect of the maintenance of any fixed electrical installation and ensuring that any portable electrical appliances are safe to use.²⁵

The Government's current advice is that fixed electrical installations be checked regularly but no more than every five years. In respect of portable appliances, including items brought into the premises by staff or residents, they should be tested at suitable intervals. It is not a legal requirement to test all portable electrical appliances.

Electricity at Work Regulations 1989 do not specify a frequency of 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 UK Wiring Regulations 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 a risk assessment.²⁶

The Care Inspectorate regulates the care sector in Scotland, with the Health and Safety Executive (HSE). They will jointly assess the electrical safety of premises and appliances and the SFRS will enforce any failings in relation to fire safety.

During 2014-15, there were 81 fires caused by an electrical source in care homes in Scotland. The number of fires has been increasing over the last five years:

Fires caused by an electrical source in Scotland

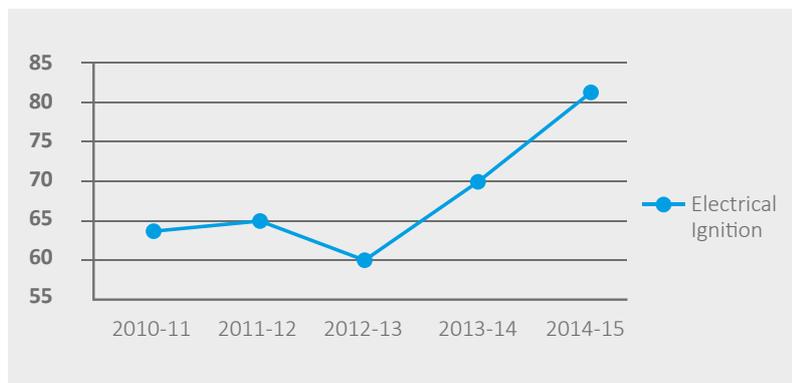


Table supplied by
the Scottish Fire and
Rescue Service

Period	2010-11	2011- 12	2012-13	2013-14	2014-15
Electrical source	64	65	60	70	81

Case Study



“...if we are serious
about electrical safety,
then creating care
home environments
that minimise electrical
hazards is vital”

Rosepark Care Home Fire

On 31 January 2004, 14 people died in a fire at Rosepark Care Home in Uddingston. The fire was caused by an earth fault in a fuse box, located in a storage cupboard.* The fire spread through the care home, with the frailty of many of the older residents a factor in the high fatality count. The fatal accident inquiry stated that contributing factors to the deaths were maintenance of the electrical installations at the care home, the management of the fire safety and the interaction between Rosepark staff and Lanarkshire Health Board.

Whilst there is a responsibility for care homes to maintain electrical appliances, there is no obligation to test at set intervals. However, setting a fixed timescale is difficult due to the relatively regular turnover of residents within a care home, as well as a tendency amongst people with dementia to tamper with electrical appliances. Therefore, it is more sensible to raise awareness of the dangers posed by electrical appliances, and to encourage care home providers to regularly monitor the use of electrical appliances in their buildings.

It is true that a certain degree of risk can never be fully eradicated. However, if we are serious about electrical safety, then creating care home environments that minimise electrical hazards is vital.

* www.ifsecglobal.com/rosepark-care-fire-deaths-avoidable-says-inquiry-report/

3. Electrical Safety in Scotland’s Housing Stock

A common standard for housing

“Electrical Safety First welcomes the idea of a new common standard which has a clear focus on safety...”

The Scottish Government’s ‘Sustainable Housing Strategy’ contained a commitment to publish proposals for a common cross-tenure housing standard beyond the existing Tolerable Standard for housing.²⁷ This has become known as the CHQS. As highlighted earlier in this report, there are currently different standards which apply to houses in different tenures. The proposals for CHQS are still being considered.

Electrical Safety First welcomes the idea of a new common housing standard which has a clear focus on safety. However, we have concerns as to how such a standard would be enforced in the owner-occupied sector in particular.

Key Points

Much progress has been made in the social rented sector to make sure that electrical installations and appliances are safe. However, mandatory electrical safety checks would streamline and formalise practice across all social housing.

Progress has also been made in relation to making sure that the electrical installations and appliances in private tenants’ homes are safe through the duties put on private landlords in the Housing (Scotland) Act 2014.

The inclusion of electrical safety as part of the Tolerable Standard is a positive move; however, requirements are basic and require no formal inspection.

Most older people live in homes built before 1982.

The majority of older people live in the owner occupied sector yet little has yet been done to make sure that the electrical installations in those homes are safe.

Four.

Home Safety in Scotland



4. Home Safety in Scotland

Electrical hazards in the home

Of the 3,642 recorded incidents involving electricity during 2014-15 almost 20% were caused by faulty appliances, faulty leads and their misuse. The incidents recorded were spread fairly evenly across the country, with no major distinction between urban and rural areas.²⁸ For example:

- In Glasgow, there were 60 incidents resulting in casualties for a population of 599,000: one incident per 9,983 people;
- In Highlands, there were 26 incidents resulting in casualties for a population of 233,000: one incident per 8,961 people;
- In Aberdeenshire, there were 16 incidents resulting in casualties for a population of 260,000 population: one incident per 16,250 people;
- In Aberdeen City, there were 29 incidents per 229,000 people: one incident per 7896 people.

The majority of older people want to stay at home safely and independently. In a study by The Alzheimer's Society, 83% of carers and people living with dementia said being able to live in their own homes was "very important".²⁹ This research also found that a leading cause of older people going into care is concerns over home safety, including electrical safety.

Keeping older people safe and independent at home can save society significant resources. For example, for each month that 50,000 people with dementia can be supported to live at home rather than in residential care, society as a whole could save £121 million.³⁰ Reducing the risk of injury from fires caused by an electrical source involving older people could save the public purse in excess of £3 million per year.³¹

Increasing risks as we get older

Over the next 25 years it is estimated that the number of people aged between 65-74 will increase by 37% while the numbers aged 75 and over will increase by 86%.³² This will result in an increase in frailty across the older population.

The majority of older people live in the owner occupied sector and in houses built before 1982. These dwellings are less likely to contain features which protect against electrical hazards. Those living in the social rented and private rented sector have, or will have, the benefits of an enhanced regulatory framework around electrical safety. The same cannot be said for the owner-occupied sector.

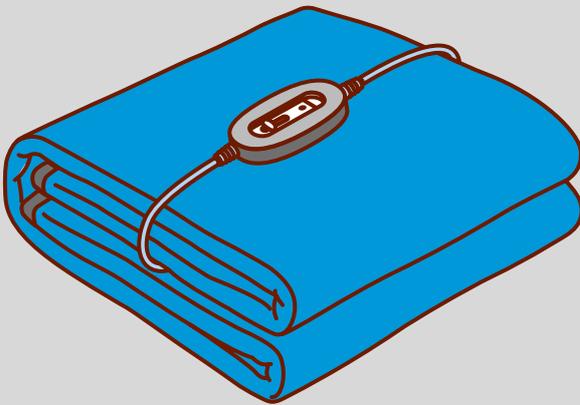
Social isolation amongst older people can result in electrical hazards being unidentified. Members of our focus group articulated their fears of letting strangers into the home and being overcharged. These fears can hinder older people's ability to get essential electrical repairs and maintenance completed which increases the likelihood of a serious electrical hazard in the home.

Increased levels of fuel poverty can also result in the use of portable electric heaters and electric blankets – two appliances with poor safety records. Homes in rural areas tend to be older and rural areas have populations that are ageing faster than urban ones, creating future challenges.³³

Electric Blankets

1 An 85 year old woman who was rescued from her home died as a result of extensive burns and severe smoke inhalation. The cause of the fire was due to a failure of her old and unsafe electric blanket which had not been tested for years. She lived alone in sheltered housing with a smoke alarm linked to a community alarm centre. She was known not to smoke or drink alcohol.

2 An elderly man was killed when his dual control under blanket caught fire. He had a care package in place. It appears that the blanket had not been serviced as per manufacturers' recommendations.



A simple check of the electric blanket and liaison with family and carers could have prevented these two deaths.

It is commonly recognised that growing older also brings about changes in our sight, reactions, a decline in motor skills and strength which of themselves make us more vulnerable to electrical hazards, amongst others.

This suggests that we need to make sure that the level of awareness and the quality of advice and support are right to help older people live safely at home with electricity.

Case studies provided by the Scottish Fire and Rescue Service

Home safety and living with dementia

Our ageing population will also result in a significant increase in the number of people living with dementia. In Scotland, we expect this figure to double over the next 25 years.³⁴

Certain symptoms of dementia can increase the risk of injury or fatality from electricity. Electrical safety has been found to be one of the greatest concerns of carers and family members when leaving a person living with dementia on their own.³⁵ Many of the issues faced by older people are also those faced by older people living with dementia, although those issues can be made more acute by some of the specific symptoms, such as cognitive impairment, which can sometimes mean that electrical appliances deemed safe suddenly become unsafe.

4. Home Safety in Scotland

“...the HFSV SFRS can improve awareness of hazards that can lead to injury in the home.”

Supporting older people to stay at home safely

The SFRS is the leading agency on home safety in Scotland and offers everyone a free Home Fire Safety Visit (HFSV). During 2014-15, they carried out over 65,000 visits to households in Scotland. Around 50% of these visits were to households which included someone over 60.³⁶ The service will primarily focus on higher risk households in coming years, including older people.

They also fit smoke alarms free of charge if required. Although the risk of fire and fire injury increases as you get older, there are simple measures that can be taken to keep people safe. SFRS has also produced leaflets covering a range of topics including a series of online video clips providing advice and assistance to help people remain safe at home.

The role of assistive technology

The role of assistive technology can help older people, and those older people living with early to moderate dementia, maintain important daily routines such as preparing food and cooking it, with reduced risk. Small scale, low tech assistive devices can also be effective, with minimal cost, providing the devices are selected appropriately to meet individual need, maintained and reviewed regularly to meet changing needs.

Innovation in assistive technology can protect older people and those living with dementia against electrical hazards. An electrical appliance may have been tested and deemed safe, but incorrect use brought about by cognitive difficulties in a person living with dementia may cause a serious hazard.

“An electrical appliance may have been tested and deemed safe, but incorrect use brought about by cognitive difficulties in a person living with dementia may cause a serious hazard”

Assistive technology has the ability to manage and reduce hazards posed by electricity in the homes of older people and older people living with dementia.

Examples include:

- Safety cut off devices for water, gas and electricity.
- Automatic switch off for electric cookers to prevent overheating.
- Electrical appliances with simplified controls, designed to be dementia friendly.
- Lockable plug covers which ensure designated home appliances cannot be turned on when a carer is not present, for example microwaves, fan heaters and electric fires.
- Smart technology can monitor the use of electrical devices in the homes of older people and those living with dementia, helping detect deviations from daily routines.
- To combat the threat of electrical fires, heat detectors can send an alert to a family member or carer’s phone if triggered. This could be particularly helpful in keeping frailer older people and older people living with dementia safe.

4. Home Safety in Scotland

Raising awareness

There are a number of organisations that offer home safety advice and assistance for older people in Scotland. These include RoSPA Scotland, Age Scotland, SFRS, Shelter Scotland, Home Safety Scotland and Citizens Advice Scotland.

Key Points

- Keeping older people safe at home is essential to maintaining wellbeing, helping achieve current government policy and reducing public expenditure.
- There are a range of high and low tech devices available to help older people live safely at home, from the simplicity of labelling appliances to the installation of heat detectors. These will only be effective if the older person has been involved in the decision to use them.
- Information and advice needs to be accessible for older people, their families and carers.
- Appropriate electrical appliance design is critical and should include a dementia friendly standard.

Care and repair

Care and Repair also offers advice and assistance to enable people to repair, improve or adapt their homes. The service aims to contribute to independent living and is available to owner occupiers, private tenants and crofters who are aged over 60 or who have a disability. During 2014-15, Care and Repair agencies carried out 28 major electrical projects and 4,296 minor electrical repairs throughout Scotland.³⁷

Care and Repair also administers a small Home Improvement Grants Scheme on behalf of Electrical Safety First which offers householders grants of up to £500 to carry out repairs to effect electrical hazards. Since its inception in 2009, it has helped nearly 400 people in Scotland.

Increasing older people's awareness of the importance of electrical safety is not something that can be legislated for. It involves a combination of increasing public awareness of the dangers electricity can present and the development and use of products and aids which can help older people live safely at home with electricity. There is already a great deal of information available regarding the safe use of electrical appliances.

Increasingly, information is web based and there is some concern that older people do not consistently look to the internet for support. Recent figures from the Office of National Statistics (ONS) suggest that only 44% of over 65s access the internet to find information. The report also suggests that internet usage will increase over time though not necessarily for all sections of the over 65 age group.³⁸

Five.

References



5. References

References

1. Scottish Government (2010) **Scotland's National Dementia Strategy**
www.gov.scot/Publications/2010/09/10151751/6
2. Data supplied by the Scottish Fire and Rescue Service
3. Scottish Government (2015) **Housing Statistics for Scotland**
www.gov.scot/Topics/Statistics/Browse/Housing-Regeneration/HSfS
4. www.electricalsafetyfirst.org.uk/news-and-campaigns/policies-and-research/statistics/
5. Scottish Government (2013) **Scottish House Condition Survey 2013**
www.gov.scot/Topics/Statistics/SHCS
6. Home Safety Scotland (2010) **Home Safe Home - Report on Home Accidents in Scotland**
www.instituteofhomesafety.com/articles/HomeAccidentsScotland.pdf
7. Scottish Care (2015) **Home Delivery - A Profile of the Care at Home Sector 2015**
8. Office for National Statistics (2014)
www.ons.gov.uk/ons/publications/re-reference-tableshtml?edition=tcm%3A77-322080
9. National Records of Scotland (2014)
www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates
10. Scottish Government (2010) **Scotland's National Dementia Strategy**
www.gov.scot/Publications/2010/09/10151751/6
11. Scottish Government (2015) **Housing Statistics for Scotland**
www.gov.scot/Topics/Statistics/Browse/Housing-Regeneration/HSfS
12. Electrical Safety First (2014) **A Shock to the System**
www.electricalsafetyfirst.org.uk/news-and-campaigns/campaigns/electrical-safety-in-an-ageing-society/
13. Census 2011
www.scotlandcensus.gov.uk

-
14. Scottish Government (2013) **Scottish House Condition Survey 2013**
www.gov.scot/Topics/Statistics/SHCS
 15. www.electricalsafetyfirst.org.uk/news-and-campaigns/policies-and-research/statistics/
 16. Data supplied by the Scottish Fire and Rescue
 17. Electrical Safety First's Core Data Set:
www.electricalsafetyfirst.org.uk/news-and-campaigns/policies-and-research/statistics/
 18. Home Safety Scotland (2010) **Home Safe Home - Report on Home Accidents in Scotland:**
www.instituteofhomesafety.com/articles/HomeAccidentsScotland.pdf
 19. www.electricalsafetyfirst.org.uk/news-and-campaigns/policies-and-research/statistics/
 20. Scottish Housing Regulator (2012) **SHQS Progress Update 2012-13**
 21. Scottish Government (2013) **Scottish House Condition Survey 2013**
www.gov.scot/Topics/Statistics/SHCS
 22. Ibid
 23. Ibid
 24. www.electricalsafetyfirst.org.uk/news-and-campaigns/policies-and-research/statistics/
 25. Scottish Government (2014) **Practical Fire Safety Guidance for Care Homes**
www.gov.scot/Publications/2014/03/1383
 26. Health and Safety Executive (2014) **Health and Safety in Care Homes**
www.hse.gov.uk/pubns/price/hsg220.pdf
 27. Scottish Government (2013) **Scotland's Sustainable Housing Strategy**
www.scotland.gov.uk/publications/2013/06/63224/5
 28. Data supplied by the Scottish Fire and Rescue

5. References

29. www.alzheimersresearchuk.org/our-research/research-projects/
30. Electrical Safety First, **A Shock to the System**
www.electricalsafetyfirst.org.uk/news-and-campaigns/campaigns/electrical-safety-in-an-ageing-society/
31. Home Safety Scotland (2010) **Home Safe Home - Report on Home Accidents in Scotland**
www.instituteofhomesafety.com/articles/HomeAccidentsScotland.pdf
32. National Records of Scotland (2014):
www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/population/population-estimates/mid-year-population-estimates
33. Scottish Government (2013) **Scottish House Condition Survey 2013**
www.gov.scot/Topics/Statistics/SHCS
34. Scottish Government (2010) **Scotland's National Dementia Strategy**
www.gov.scot/Publications/2010/09/10151751/6
35. Electrical Safety First (2014) **A Shock to the System**
www.electricalsafetyfirst.org.uk/news-and-campaigns/campaigns/electrical-safety-in-an-ageing-society
36. Scottish Government (2014) **Scottish Fire and Rescue Service data**
www.gov.scot/publications/2014/12/2384
37. Care and Repair Scotland (2015)
www.careandrepairscotland-public.sharepoint.com
38. Office for National Statistics (2014)
www.ons.gov.uk/ons/publications/re-reference-tableshtml?edition=tcm%3A77-322080

Your notes



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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

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