Electrical Safety First

The UK's electrical safety experts

*RE*CHARGE

RENEWING ELECTRICAL SAFETY FOR NORTHERN IRELAND'S HOMES

With a focus on the most vulnerable

WHO WE ARE

Electrical Safety First is the UK consumer charity dedicated to preventing deaths, injuries and fires caused by electricity. We are recognised by Government and industry as the leading campaigning charity and technical authority on home electrical safety. Our activities include:

- Collaborating with UK and Devolved governments to develop effective policy and legislation relating to electrical safety and consumer protection.
- Campaigning on behalf of consumers, raising awareness of electrical risk and encouraging behavioural change.
- Supporting electro-technical professionals by disseminating best practice and ensuring consumer safety is always a priority.
- Working with tenants, landlords and homeowners to reduce fires, deaths and accidents in the home. We do this by offering a range of tools, expert information and advice to help people protect themselves from electrical risk - including those arising from counterfeit, sub-standard and recalled products.

ACKNOWLEDGEMENTS

Electrical Safety First are grateful to all those who helped develop this report. This includes representatives from the electrical industry, age and disability related organisations, housing associations and other, related, professional groups. All of them – as well as the members of the focus groups we used to inform our research - kindly gave of their time and expertise. We would also like to extend particular thanks to Housing Rights, for their contribution and support.

Recharge: Renewing Electrical Safety for Northern Ireland's Homes, was produced by Wayne Mackay and Angela Murphy, of Electrical Safety First. Initial research provided by Peter O'Neill Consulting.

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INTRODUCTION

Lesley Rudd, Chief Executive, Electrical Safety First

In November 2020, Communities Minister Carál Ní Chuilín set out the Department for Communities' programme to address Northern Ireland's critical housing issues and support those in greatest need. Much of the programme's contents are addressed in this report, from improving the Private Rented Sector (PRS) and housing for the most vulnerable, to making 'best use' of existing housing stock – for which electrical safety is fundamental.

We estimate that electricity causes nearly 60% of all accidental fires in Northern Ireland's homes.[1] Our research in Scotland and England reveals they affect older and vulnerable people more severely.[2] It also suggests that those in the PRS are more at risk.[3] Whilst a domestic fire can cause hundreds of thousands of pounds of property damage, the human cost is generally incalculable. And it can be particularly traumatic for those in higher risk groups, through age or disability.

Electrical Safety First undertook this report to investigate the level of electrical risk in Northern Ireland's homes, with a particular focus on the PRS and vulnerable groups, especially older and disabled people. This emphasis arises from the growth of the PRS and its changing composition, with an increasing number of low-paid families and disabled and vulnerable people now private renters. This point has also been highlighted by Housing Rights in their forward to this report.

Over the last five years, Electrical Safety First has led the charge for a legal requirement for five-yearly electrical safety checks in the PRS across the UK. These have been required in Scotland since 2015 and in England from July 2020 and are due to be implemented in Wales soon. We strongly recommend that Government legislates for such checks in Northern Ireland's PRS – a view shared by most respondents to the Department for Communities' 2015 review of the sector. This was echoed in the Department's 2017 Proposals for Change consultation document which indicated the Government's intention to legislate for five-yearly electrical checks in all privately rented homes.

So, we are delighted that the Communities Minister has announced she will build on these reviews and work to improve the safety, security and quality, of the PRS.

While this report has a focus on the PRS, we believe regular electrical checks should be extended to all social rented housing – this is already undertaken as best practice by some of the sector and should be implemented by the whole sector to provide consistency. We also propose specific protective measures for homeowners, particularly the most vulnerable living in mixed-tenure residential blocks. In this way, inequality of electrical safety in different tenures can begin to be addressed – ensuring that everyone, no matter what kind of housing they live in, can feel safe in their home.

Another key recommendation in this report is the development of a 'joined-up', collaborative approach to electrical safety. We want to see Government establish an expert panel or working group –

1 Throughout this document, when we refer to domestic fires, we are only including accidental one. Figures do not include those deliberately caused. Electrical Safety First methodology of fire data provided by the Northern Ireland Fire and Rescue Service in 2019.
2 https://www.electricalsafetyfirst.org.uk/media/1260/a-shock-to-the-system.pdf
3 Home Improvement: Tackling poor electrical safety in the private rented sector' – a 2014 report by Shelter and Electrical Safety First

including various Government organisations and consumer protection and safety bodies - to co-ordinate a long-term strategy for electrical safety in Northern Ireland's homes. We believe the creation of an All Party Group on home electrical safety would also provide a forum for Members of the Legislative Assembly (MLAs) and stakeholders to discuss – and help address key electrical safety concerns.

Effective policy development needs accurate data and we are therefore recommending Government support for more research and more detailed recording of electrical safety incidents, to better inform future public safety policy.

The Northern Ireland Assembly was restored in January 2020 and this report has been published during the ongoing COVID-19 pandemic, when Government has rightly been required to focus on more immediate policy matters. However, given the Ministerial statement regarding addressing critical housing issues in November 2020, we consider this report to be particularly timely. The recommendations will help support the commitment to improve Northern Ireland's housing landscape, by offering cost-effective and practical solutions that will benefit all.

FOREWORD

Kate McCauley, Policy and Practice Manger, Housing Rights

Housing Rights has worked alongside Electrical Safety First for several years in calling for improvements to the housing conditions of people in Northern Ireland. Therefore, we welcome this report into electrical safety and vulnerability. Electricity, and the use of electrical appliances, is something that we all take for granted. However, as this report highlights, it accounts for almost 60% of all accidental fires in Northern Ireland's homes. This risk increases for those who are vulnerable due to age and health and those who are living in unsafe accommodation.

This report rightly focuses attention on the Private Rented Sector (PRS) in Northern Ireland. There are now more people living in the PRS than in social housing and the sector is increasingly relied upon to meet the housing needs of low-income families and older households.[4] A new feature of the PRS is that it is increasingly occupied by older people and those with disabilities who may previously have found their home in the social housing sector.

People regularly contact the Housing Rights' advice line with concerns about their housing conditions and the safety of their homes. Clients in the PRS can be frustrated with the current fitness standard meeting such a low threshold. They can also be wary of reporting electrical faults for fear that their landlord will give them notice to quit or increase their rent to fund any repairs. Housing Rights and Electrical Safety First have urged the Department for Communities to replace the current fitness standard with the Housing Health and Safety Rating System, which considers the safety of a dwelling by looking at the characteristics of members of the household. We believe that this would improve housing standards, especially in the PRS. We also agree with the call for five-yearly electrical checks to be carried out in all PRS dwellings; not just Houses in Multiple Occupation.

We encourage the relevant public bodies to give due consideration to the recommendations made in this report and to engage with the report findings in any upcoming work on fitness standards and the PRS.

Housing Rights is the leading specialist provider of independent housing advice in Northern Ireland.

ELECTRICITY CAUSES NEARLY

60%

OF HOUSE FIRES IN NORTHERN IRELAND EACH YEAR.

4 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx

EXECUTIVE SUMMARY

We live in an increasingly electric world, so electrical safety is extremely important. In 2019, 58% of all accidental house fires in Northern Ireland were caused by electricity. These fires accounted for 435 incidents resulting in one death and 129 casualties.[5] These numbers however are a significant underestimate. They do not, for example, include deaths from electric shock (i.e. electrocution), nor other types of electrical injuries.

Assessing the full impact of such fires – or the deaths, damage, and injuries they cause – is problematic as required data sets are not available. However, we do know that more people die from electrical accidents than gas poisoning across the UK.[6] For over 20 years, there has been a requirement for Northern Ireland's landlords to undertake an annual gas check of their rental premises, but there is no similar requirement for electrical risk.

Electrical fires or accidents can be fatal or life-changing and the personal costs incalculable, but the following estimates offer some indication of the material expense. It has been suggested that there would be a saving to society of nearly £9 million per annum if electrical hazards were mitigated in Northern Ireland's housing stock.[7] More generally, the average cost of a fire to domestic premises in the UK in 2008 was estimated at £44,000 per property.[8] Research in 2013 estimated home and leisure accidents cost society £2.7 billion every year in Northern Ireland.[9] A serious injury in the home is thought to cost the health service over £45,600 and even a slight injury around £8,300. These figures exclude ongoing GP and long-term care costs.[10]

This report takes a strategic and people-centred review of the evidence around enhancing electrical standards. While the Charity campaigns for a uniform approach to electrical safety in all housing tenures, a key focus in this report has been on the PRS and the electrical safety issues impacting on older and disabled people. The rapid growth of the sector - and the fact that it now increasingly houses those who might formerly have been housed in the social housing sector - made it a logical starting point for enhancing home electrical safety in Northern Ireland.

SAVINGS OF

£9m

PER ANNUM IF ELECTRICAL HAZARDS WERE MITIGATED IN NORTHERN IRELAND'S HOUSING STOCK.

The PRS is now the second largest housing tenure, after the owner-occupied sector, accounting for 17% of the total housing stock.[11]

5 Electrical Safety First methodology of fire data provided by Northern Ireland Fire and Rescue Service in April 2020.
6 According to the Gas Safety Trust Downstream Incident Data Report statistics for 2015-16, there were 5 fatalities between 2015/16 due to CO poisoning across the UK. Research by Electrical Safety First shows that every year more than 50 people lose their lives due to home electrical accidents.
7 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-2016-Infographic-Summary.aspx
8 Data derived and updated from the UK Government estimate from 2008 – The Economic cost of fires: https://webarchive.nationalarchives.gov.uk/20120919203945/http://www.communities.gov.uk/documents/corporate/pdf/1838338.pdf
9 https://www.rospa.com/rospaweb/docs/campaigns-fundraising/big-book-ni.pdf#:~:text=%E2%80%9Cl%20welcome%20RoSPA%E2%80%99s%20Big%20Book%20of%20Accident%20Prevention,product%20design%2C%20environment%2C%20and
10 Re-valuation of home accidents, TRL: https://www.rospa.com/rospaweb/docs/advice-services/home-safety/re-valuation-of-home-accidents.pdf
11 Northern Ireland House Condition Survey 2016: https://www.nihe.gov.uk/Documents/Research/HCS-Main-Reports-2016/HCS-Main-Report-2016.aspx

Research for this report reviewed relevant housing and home safety legislation and policies, as well as fire statistics and available data on the safety of domestic electrical installations. We also undertook a series of interviews and focus groups with stakeholders and key user groups, to obtain their views and experiences around electrical safety in Northern Ireland's homes.

In the following pages we offer several recommendations and preventative measures to help reduce electrical risk in the home. Among these is the call for more research around electrical safety - such as information from A&E admissions- to ensure the development of effective safety policies. We need better data gathering processes generally, including detailed causes of fires, so we can create robust, evidence-based and effective safety solutions.

A key recommendation is the creation by Government of an expert panel or working group to co-ordinate a long-term, multi-faceted approach to electrical safety in Northern Ireland. Such a panel must reflect the complex web of relationships existing between fire and safety regimes, housing and health sectors in Northern Ireland. It should also incorporate consumer protection and safety organisations.

During our research, we found significant support for the Department for Communities (DfC) to introduce legislation for regular electrical checks in Northern Ireland's PRS. However, the collapse of the devolved institutions in January 2017 led to several policy initiatives (including the DfC Review of the PRS and Housing Fitness Standard) being stymied.

All research indicates that older, disabled and other vulnerable groups are at higher risk from electrical fire or accident. Anyone over pension age who receives pension credit, council tax benefit or housing benefit can receive a free gas safety check from their energy supplier. To help reduce the number of electrical fires in the homes of the vulnerable, Government should consider ways of providing a free, five-yearly electrical safety check to these households. Research suggests that repairs to housing provide significant ongoing savings to the health service and result in much broader benefits for both individuals and society as a whole.[12] Therefore, funding for home improvement agencies should also be considered, to help rectify any electrical hazards found in the homes of disabled and older people, who are unable to fund the work themselves.

The policy context for this report was located within a period of austerity. It should be noted that the New Policy Institute found that, on almost all indicators, the economic recession in 2008-9 had a greater impact on people in Northern Ireland than in Britain. It is logical to presume that this disparity would also arise in response to the economic impact of COVID-19, and that this will impact on vulnerable groups most severely. However, it does not cost a fortune to reduce electrical risk in the home. The cost to a PRS landlord for undertaking a regular electrical check of their property every five years is estimated at £150-£200. In other words, as little as £30 per year.

Soon after the Northern Ireland Assembly was restored in January 2020, it published a revised government programme, *New Decade, New Approach*. In November 2020, the Minster for the DfC announced the Government's commitment to put housing at the centre of this programme – including improving the PRS and housing for the most vulnerable. We believe that implementing the recommendations in this report will help that commitment to become a reality.

12 https://www.constructionmanagermagazine.com/housing-repairs-spend-saves-nhs-millions-says-bre-/

RECOMMENDATIONS

For All Housing

1. The Executive should establish a working group comprised of key government departments, bodies and other relevant organisations to develop an effective strategy for electrical safety.
2. The Housing Fitness Standard should be updated to enhance electrical safety across all housing tenures. We recommend the DfC adopts the Healthy Home Rating System (HHRS) model, which examines a property for various safety hazards, including electrical faults.

For the Private Rented Sector

3. Legislation establishing a mandatory requirement for private landlords to undertake electrical inspections on a minimum five-yearly cycle is needed. Given the overwhelming support this measure has gained in previous public reviews, it should not require further consultation by Government.
4. The DfC should amend the Landlord Registration Regulations to include a 'fitness for habitation declaration' at the point of registration. (This is also a proposal in the DfC's own PRS consultation document). However, District Councils will need additional resources to enforce these new requirements.
5. Government must ensure that people in the PRS can report electrical hazards to landlords without fear of eviction.

For Social Housing

6. We recommend that mandatory, five-yearly electrical checks, should be introduced in the social housing sector. We believe all renters – regardless of tenure – should be provided with the same safety protections.

To Protect Older and Disabled People

7. Anyone over pension age who receives pension credit, council tax benefit or housing benefit can receive a free gas safety check from their energy supplier. To help reduce the number of fires in the homes of the vulnerable, Government should consider ways of providing a free, five-yearly electrical safety check to these households. The Future Homes Standard, effective from 2025, will see low carbon heating systems becoming an integral part of the specification of future homes. As our homes are increasingly heated by electricity, the importance of electrical checks will increase.

8. The Department of Health (DoH) should work with stakeholders to update its Home Accident Prevention Strategy, with particular focus on measures to reduce electrical risks.

9. The Regulation and Quality Improvement Authority (RQIA), which monitors health and social care services in Northern Ireland, and the Health and Safety Executive Northern Ireland (HSENI) should increase the frequency of electrical checks in care homes to at least every five years. Training for staff to undertake visual electric checks must also be considered.

10. The DoH should introduce regulations under Article 30 of the Fire and Rescue Services (Northern Ireland) Order, to improve domestic fire safety measures. This could include specific responsibilities regarding electrical safety during home fire safety checks.

11. Given the immediate safety benefits they offer, we recommend Government and relevant agencies support the installation of Residual Current Devices (RCDs).[13] A Department of Industry and Trade (DTI) report estimates that 20% of electrical fires could be prevented by the presence of an RCD.[14]

12. To increase awareness of electrical risk in the home, particularly among older and vulnerable groups, a range of activities – including the provision of literature and media campaigns- should be undertaken by Government and key stakeholders. To address the sustained number of house fires caused by cooking appliances, there should be a specific focus on kitchen and product safety.

13 An RCD, or Residual Current Device, switches off electricity automatically if there is a fault and protects against the risks of electrocution and fire.
14 DTI Report. Consumer Safety Research. Residual Current Devices- added value for home. 1997 safety. http://webarchive.nationalarchives.gov.uk/+/http:/www.dti.gov.uk/homesafetynetwork/pdf/rcd.pdf

For Elected Representatives

13. An All Party Group on home electrical safety should be established in the Assembly. This would offer a forum for MLAs and stakeholders to discuss – and help address – key electrical safety concerns.

14. The Executive must ensure there is no reduction in product safety standards following the UK's withdrawal from the European Union.

Further Research

15. To ensure effective electrical safety policies, it is important a more detailed reporting of electrical accidents is established – to include hospital admissions, cases of electrocution and electrical fires. The protocol or processes for the improved data recording suggested above could also be undertaken by the 'expert working group' outlined in these recommendations.

A DEPARTMENT OF INDUSTRY AND TRADE (DTI) REPORT ESTIMATES THAT

20%

OF ELECTRICAL FIRES COULD BE PREVENTED BY THE PRESENCE OF AN RCD.

KEY STATISTICS

There is limited data regarding electrical safety in Northern Ireland's homes, which means that the statistical data available is likely to be an underestimate. We do not, for example, have data on the number of electrocutions (i.e. deaths by electric shock) that occur each year. Nor is there detailed data from the fire and rescue service or electrical-related accidents recorded at A&E departments.

It should also be noted that the collapse of the Executive in January 2017 has led to a number of policy initiatives (including the DfC Review of the PRS and Housing Fitness Standard) being curbed. This has had a knock-on effect on availability of statistics with some data collection postponed. While the Assembly returned in January 2020, the COVID-19 pandemic has inevitably and understandably added to delays in policy development and implementation.

Despite data limitations, the figures below demonstrate why the issue of electrical risk in Northern Ireland's homes is important, particularly in relation to vulnerable groups and the growth of the PRS, which expanded from 80,900 (12%) in 2006, to 136,000 (17%) in 2016.[15]

During 2019, 58% of all accidental fires in homes were caused by an electrical source. These fires resulted in one death and 128 people being injured.[16]

The main sources of electric fires were:

- Cooking appliances (251 fires or 58% of the total)
- Electrical supply (125 fires or 29%)
- Other domestic appliances (23 fires or 5%)

Between 2016-2019, 19 people died in domestic fires in Northern Ireland. Of these, 90% were aged over 50. As a result, Northern Ireland Fire and Rescue Service (NIFRS) has lowered its 'People at Risk' age definition by 10 years to those aged 50 and older. Almost 90% of this group also live alone.[17]

Independent research suggests that there would be nearly £9M of savings to society annually if electrical hazards in Northern Ireland's housing stock were mitigated.[18]

Like other parts of the UK, Northern Ireland has an ageing population. Over the next 20 years, the proportion of people aged 65 or over is projected to rise from 16% to 25%.[19]

The majority (78%) of older people live in the owner-occupied sector and many live in homes built before 1945.[20] These homes are most likely to contain category 1 hazards – those which are deemed to pose a potential safety threat to a person or property.[21] Older homes also tend to have older electrical installations, thereby raising electrical risk.[22]

Northern Ireland has higher levels of disability than the rest of the UK. 71% of people aged 75 or over have a life-limiting illness and more than one in five of the population (21%), have a long-term health problem or disability which limits their day-to-day activities.[23]

15 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
16 Electrical Safety First methodology of data received through an FOI request to NIFRS in April 2020.
17 https://www.nifrs.org/nifrs-lowers-people-risk-age-50-older/
18 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-2016-Infographic-Summary.aspx
19 NISRA: http://www.ninis2.nisra.gov.uk/public/Theme.aspx?themeNumber=74&themeName=Population
20 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
21 Ibid
22 https://www.electricalsafetyfirst.org.uk/media/1260/a-shock-to-the-system.pdf
23 Northern Ireland Census 2011: https://www.nisra.gov.uk/statistics/census/2011-census

69,900

DWELLINGS HAD CATEGORY 1 HAZARDS IN 2016

Overall, 9% (69,900) of all dwellings in Northern Ireland had Category 1 hazards in 2016. These types of hazards are deemed as posing a potential safety threat to people or property. 9% (43,400) of owner-occupied and 8% (11,100) of PRS dwellings had Category 1 hazards. The proportion in the social housing sector was lower (4%; 5,300). This pattern was similar to the findings in 2011.[24]

73% of all homes in Northern Ireland were built before 1945 and need repair.[25]

In 2016 there were an estimated 16,000 unfit dwellings in Northern Ireland. This increases in more rural areas, particularly in the south-west.[26]

More generally, it is estimated that home and leisure accidents in Northern Ireland cost society more than £2.7 billion each year.[27] A serious injury in the home has been estimated to cost the health service over £45,600 and even a slight injury is costed at £8,300. These figures exclude ongoing GP and long-term care costs.[28]

Death by electric shock is difficult to isolate in published statistics. However, a review of autopsy reports in cases of electrocution revealed that there were 50 accidental electrocutions and 9 suicidal electrocutions in Northern Ireland over a 22-year period (1982 – 2003).[29]

The PRS is rapidly expanding which gives rise to increasing safety concerns. Due to the substantial waiting list for social housing and the difficulties facing first time buyers, the PRS will play a key role in meeting housing needs in Northern Ireland in the longer term.[30] The sector is now the second largest housing tenure after the owner-occupied sector, accounting for around 17% of the total housing stock.[31]

According to the latest House Condition Survey (HCS) 2016, which was published in 2018, of the estimated 780,000 homes in Northern Ireland, 63% are owner-occupied, 17% are in the PRS and 16% are social housing. Vacant premises accounted for the remaining 4%.[32] There is a link between tenure and age, with younger people more likely to live in PRS accommodation or social housing, and older people being owner-occupiers.[33]

24 Northern Ireland House Condition Survey 2016: https://www.nihe.gov.uk/Documents/Research/HCS-Main-Reports-2016/HCS-Main-Report-2016.aspx
25 Ibid
26 Ibid
27 RoSPA Northern Ireland Big Book of Accidents: https://www.rospa.com/rospaweb/docs/campaigns-fundraising/big-book-ni.pdf#:~:text=%E2%80%9CI%20welcome%20RoSPA%E2%80%99s%20Big%20Book%20of%20Accident%20Prevention,product%20design%2C%20environment%2C%20and%20social%20and%20economic%20circumstances.
28 Re-valuation of home accidents, TRL: https://www.rospa.com/rospaweb/docs/advice-services/home-safety/re-valuation-of-home-accidents.pdf
29 Ulster Med J. 2009 Jan; 78(1): 37–42. Electrical Fatalities in Northern Ireland. James Lucas. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC26290/
30 Northern Ireland Housing Market Review & Perspectives 2015- 2018
31 Northern Ireland House Condition Survey 2016: https://www.nihe.gov.uk/Documents/Research/HCS-Main-Reports-2016/HCS-Main-Report-2016.aspx
32 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
33 Ibid

1. ELECTRICAL HOUSE FIRES

In 2019, 58% of domestic fires in Northern Ireland were caused by electricity. Between 2016-2019, 19 people died in house fires and 90% of these were aged over 50.[34] However, given the dearth of detailed data, there is little doubt that improved incident reporting would improve both investigations and preventative work.

The tragedy at Grenfell Tower has highlighted the importance of electrical safety, particularly in high rises, where the density of accommodation is a risk factor. Whilst other factors accelerated the fire, the primary source of ignition of the Grenfell Tower fire was electrical,[35] subsequently confirmed by the Grenfell Inquiry: Phase One documentation.[36]

1.1. How Electricity Causes Fire

In 2019 there were 746 accidental house fires in Northern Ireland, with 435 arising from electricity.[37] The table below shows the main electrical causes.

MAIN ELECTRICAL CAUSES	TOTAL
Cooking appliances	251
Electrical Supply	125
Other Domestic Style Appliances	23
Heating Equipment	23
Electric Lighting	12
Other	1
Total	435

It is interesting to consider these statistics in relation to the rest of the UK. In Scotland in 2019, electricity caused around 75% of all accidental house fires - accounting for more than 3,227 incidents.[38] Products caused many of these fires, 80% - around 2,580 - in total. During a similar period in England (2018/19), there were 14,184 electrical fires (53% of the total number of fires), with the misuse of equipment or appliances cited as the largest cause of these fires.[39] In Wales, there were 895 – or 62% – fires caused by electricity. Appliance or supply faults were once again cited as the primary cause.[40] In summary, this highlights that electricity is the number one cause of house fires across all four nations of the UK.

1.2. Product Safety

While the UK has in general a good safety record in relation to electrical products, recent years have seen several significant product recalls and major fires arising from electricity. Product safety and wider consumer protection powers are reserved – that is, it is one of the areas where the UK parliament has retained the power to legislate in the devolved parliaments. In January 2018, the UK Government announced the establishment of an Office for Product Safety and Standards (OPSS). This new body was created following the tragic fires at Grenfell Tower and Lakanal House – which also saw significant media interest in potentially unsafe white goods. The OPSS has been tasked with improving consumer safety standards across the UK, through the identification of risks and management of large-scale product recalls and repairs.

A key initiative from the OPSS is a code of practice (PAS 7100), to help businesses recall and remove unsafe products in UK homes. A PAS – or publicly available specification – aims to speed up the standardisation process by providing initial guidelines for a process, product or service. In other words, the new code is the first step in the standardisation of the recall process. It might also assist in relation to obtaining further key data. The All Party Group we have recommended be established could engage beneficially with the OPSS to enhance electrical safety in Northern Ireland.

34 https://www.nifrs.org/nifrs-lowers-people-risk-age-50-older/
35 https://www.bbc.co.uk/news/uk-46363830
36 Grenfell Tower Inquiry: Phase 1 Report Overview, p4 https://assets.grenfelltowerinquiry.org.uk/GTI%20-%20Phase%201%20report%20Executive%20Summary.pdf
37 All fire data mentioned has been derived with Electrical Safety First methodology applied from data supplied by NIFRS in April 2020.
38 https://www.electricalsafetyfirst.org.uk/about-us/policies-and-research/statistics-scotland/
39 https://www.electricalsafetyfirst.org.uk/what-we-do/our-policies/westminster/statistics-england/
40 https://www.electricalsafetyfirst.org.uk/about-us/policies-and-research/statistics-wales/

Faulty and sub-standard electrical appliances can not only cause fires but also produce severe injuries and even fatalities. There is no recent data on electrocutions (death by electric shock). However, a study by Lucas in 2009, which reviewed autopsy reports in cases of electrocution in Northern Ireland, is available. It found 50 accidental electrocutions over a 22-year period (1982 – 2003).[41] Faulty electrical appliances – from DIY equipment to washing machines- accounted for 32% of these electrocution cases. Lucas state that: "Many of the accidental electrocutions occurring during the study period were readily preventable."[42]

An area of increasing concern throughout the UK is the rising tide of counterfeit items entering the country. Many counterfeit goods are purchased using the internet and sold without warranty or safety guidelines. Sub-standard materials are often used in the manufacture of these goods, with essential safety features not present or not adequate. Electrical Safety First, in its 2015 report *A Shocking Rip Off – The true cost of counterfeit electrical products*, found that faulty electrical appliances are responsible for over 7,000 domestic fires a year in the UK.[43]

A number of electrical products have been associated with potential fire risks. These include hoverboards, tumble-dryers, fridge-freezers, chargers used for mobile phones, electronic tablets, and e-cigarettes; as well as gardening and other outdoor equipment, such as lighting and CCTV installations. Our data also shows that there have been 564 recalls of electrical products from July 2007 to April 2020.[44] Given that recalls have a low success rate – with our research showing this is usually only 10 - 20% - this means a significant number of recalled and potentially dangerous products are still in Northern Ireland's homes.[45] Concerns regarding the impact of Brexit on the monitoring and regulation of goods should also be noted. In particular, counterfeit and sub-standard electrical products can pose a much greater risk to life than items such as clothing, including electrocution and fire. Any watering down or reduction of existing EU standards on electrical goods and consumer protection rights could make the UK a magnet for sub-standard or counterfeit products.

The use of electrical appliances will certainly increase, given the move to decarbonise our homes and transport. The emergence of the Internet of Things and the 'smart' home should include a focus on safety.

1.3. Fire Safety for Buildings

Current Building Regulations for Northern Ireland cover a range of areas – from fire safety to overall structure. The only requirement regarding electrical installations is in Part F. This simply states that sufficient controls need to be in place for occupants to be able to control the use of electricity and limit consumption. While several organisations that certify electricians in Britain also offer certification for electrical contractors in Northern Ireland, it is not a legal requirement. Registered electricians (i.e. a person who is registered with a third party certification scheme) are insured, so the customer is protected if anything goes wrong. Their work is also regularly assessed and they work to the BS 7671 safety standard, as well as being regulated by government, which provides consumers with further peace of mind.

Fire safety legislation in Northern Ireland is covered by the Fire and Rescue Services (Northern Ireland) Order 2006 and by regulations made under that

41 James Lucas. Ulster Med J. 2009 Jan; 78(1): 37–42. Electrical Fatalities in Northern Ireland. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2629019/
42 Ibid
43 www.electricalsafetyfirst.org.uk/news-and-campaigns/policies-and-research/reports/
44 https://www.electricalsafetyfirst.org.uk/product-recalls
45 Consumer Voices on Product Recall, Electrical Safety First, 2014: https://www.electricalsafetyfirst.org.uk/media/1259/product-recall-report-2014.pdf

Order.[46] Domestic premises do not generally fall within its scope but there are exceptions. These include premises requiring a licence under the Houses in Multiple Occupation (HMO) Licensing Scheme, and those which are used for business purposes (such as bed and breakfast establishments or care home premises).

1.4. Installations

British Standard BS 7671 Requirements for Electrical Installations, is the national standard in the UK for electrical installation and the safety of electrical wiring in domestic, commercial, industrial, and other buildings. It also applies in special installations and locations, such as bathrooms, marinas or caravan parks.[47]

1.5. Residual Current Devices

RCDs, or Residual Current Devices, which rapidly switch off the current to prevent fatal electric shock - are a simple and immediate method of reducing electrical risk.

A Department of Industry and Trade report estimated that 20% of electrical fires could be prevented by the presence of an RCD.[48]

Electrical Safety First recommends that the DfC should consider the installation of RCDs in all privately rented homes, as part of any future review of the PRS. The Scottish Government has committed to introduce a requirement for mandatory RCDs in all PRS homes in Scotland from 2024; and they are already required in new builds.[49] The Charity has also recommended that the Executive should consult on the need for all hired electrical equipment to be supplied with an RCD. This has become increasingly important, given the growth in home DIY and access to increasingly sophisticated electrical equipment to help protect against the risks of electrocution and fire.

46 The Fire Safety Regulations (Northern Ireland) 2010: https://www.legislation.gov.uk/nisr/2010/325/contents/made
47 See http://electrical.theiet.org/wiring-regulations/index.cfm?referrer=/wiring-regulations/index.cfm (Accessed 14 June 2017)
48 DTI Report. Consumer Safety Research. Residual Current Devices- added value for home. 1997 safety. http://webarchive.nationalarchives.gov.uk/+/http:/www.dti.gov.uk/homesafetynetwork/pdf/rcd.pdf
49 https://www.gov.scot/publications/regulations-to-modify-repairing-standard-summary/

2. ELECTRICAL SAFETY IN THE HOME:

2.1. The Impact on the Most Vulnerable

Some groups are more at risk from accidents in the home and suffer disproportionately because of them. These include: babies and young children, particularly those under five; people over 65; individuals with drug and alcohol addictions; and those with greater social, economic and health disadvantages.[50] Research has found that of all fatal dwelling fires in Northern Ireland over a 15-year period, 47% involved people over the age of 60.[51]

It is difficult to evaluate the personal cost of an electrical accident or fire. We do know there is a significant impact on both the private and public purse. It has been estimated that the cost of a serious accident in the home creates property damage of around £45,600 and a slightly injured casualty that attends hospital is around £8,300[52], a cost to the NHS. These figures exclude ongoing GP and long-term care costs. It is estimated that home and leisure accidents in Northern Ireland cost society more than £2.7 billion each year.[53]

The last DoH's Home Accident Prevention Strategy from 2015 included data relating to injuries suffered by older people because of fires in the home. It found that 20% did not switch off or unplug appliances and heaters; and 20% of electric blankets used were more than 10 years old.[54] Electrical Safety First strongly recommends that electric blankets should be replaced at least once every ten years, as old or faulty blankets can cause serious burns and fire.

In October 2016 NIFRS launched a 'People at Risk Strategy' which aims to target those most at risk from fire in their homes. A key element of the strategy is a new approach to Home Fire Safety Checks (HFSCs), which launched on 1 April 2016. Through online referral forms on its website, NIFRS can identify those most at risk and prioritise their home fire safety checks

During these visits, local fire fighters review (and if necessary, fit) smoke alarms, as well as providing practical fire safety advice, including evacuation plans. The strategy has also developed a wide range of partnerships to ensure that those needing more support – particularly the old and vulnerable – can obtain it. This illustrates the potential of effective collaborations, which Electrical Safety First would like to see encouraged to encompass all relevant agencies.

RESEARCH HAS FOUND THAT OF ALL FATAL DWELLING FIRES IN NORTHERN IRELAND OVER A 15 YEAR PERIOD,

47%

INVOLVED PEOPLE OVER THE AGE OF 60

Between 2016-2019, 19 people tragically lost their lives in accidental house fires in Northern Ireland and 90% of these were aged over 50. As a result, NIFRS has lowered its 'People at Risk' age definition by 10 years to 50 and older. Almost 90% of these were also people living alone.[55] The majority of domestic fires involving these victims were related to the misuse of equipment or appliances. A separate paper found that due to the increasing elderly population, the number of fatalities for those aged 70 and over is likely to increase.[56]

50 DHSSPS Home Accident Prevention Strategy 2015, p1. https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/home-accident-prevention-strategy-2015.pdf
51 NIFRS People at Risk Strategy 2016-2021 https://www.nifrs.org/wp-content/uploads/2016/03/NIFRS-People-at-Risk-Strategy-2016-2021.pdf
52 https://www.rospa.com/rospaweb/docs/advice-services/home-safety/re-valuation-of-home-accidents.pdf
53 RoSPA Northern Ireland Big Book of Accidents: https://www.rospa.com/rospaweb/docs/campaigns-fundraising/big-book-ni.pdf#:~:text=%E2%80%9CI%20welcome%20RoSPA%E2%80%99s%20Big%20Book%20of%20Accident%20Prevention,product%20design%2C%20environment%2C%20and%20social%20and%20economic%20circumstances.
54 DHSSPS Home Accident Prevention Strategy 2015, p1. https://www.health-ni.gov.uk/sites/default/files/publications/dhssps/home-accident-prevention-strategy-2015.pdf
55 https://www.nifrs.org/nifrs-lowers-people-risk-age-50-older/
56 NIFRS People at Risk Strategy 2016-2021: https://www.nifrs.org/wp-content/uploads/2016/03/NIFRS-People-at-Risk-Strategy-2016-2021.pdf

Research conducted by Harpur in 2014 involved an in-depth study of the circumstances, including key risk factors and demographics, surrounding fatal domestic fires in Northern Ireland over a 10-year period. The research considered elderly fatalities and found the primary issue for this group was age-related mental and physical deterioration, often leading to limited mobility.

Harpur also noted that deaths and injuries from domestic fires will rise with the increase in an older demographic.[57]

2.2. Socio-demographic and behavioural factors

A number of other socio-demographic and behavioural factors are known to increase the risk of experiencing a domestic fire, and of being killed once a fire has started. These include alcohol abuse, the absence of smoke alarms, the careless use of smokers' materials and the age and mobility of the victim.[58] In the course of this research, we have found that:

- People with a disability face unique challenges in a fire, as it will impact on their ability to escape. However, other vulnerable groups are also at increased risk from fire-related accidents
- NIFRS has been taking steps to specifically target those groups in society it considers to be at greatest risk - those aged 50 or older, anyone with impaired mobility, or those referred by a partnership agency.
- There is a recognised need to develop more awareness raising programmes targeting those most at risk of poor electrical safety. For example: those on a low income or disabled, older homeowners and those living in isolated rural areas.

57 Harpur, A, 2014. A Detailed Investigation into Occupant Behaviours and Influencing Factors Surrounding Fatal Dwelling Fire Incidents in Northern Ireland.
58 Ibid

3. HOUSING POLICY AND ELECTRICAL SAFETY

The housing policy and regulatory environment in Northern Ireland offers different levels of electrical safety for different tenures. An outline is provided below.

3.1. The Private Rented Sector

The PRS is now the second largest housing tenure in Northern Ireland, accounting for around 17% of total housing.[59] Current legislation relating to electrical safety in the PRS includes the Consumer Protection (NI) Order1987, The Electrical Equipment (Safety) Regulations 2016 and The Plugs and Sockets (Safety) Regulations 1994. However, compared to other UK jurisdictions there is limited protection for private tenants in Northern Ireland. Since December 2015, the Scottish Government has required PRS properties to have five-yearly, mandatory electrical checks – for both the installation and appliances provided by a landlord.[60] A similar requirement was established in England in June 2020; and Wales is expected to follow suit as soon as possible.

In Northern Ireland, while PRS landlords must undertake an annual safety check of gas boilers, there is no equivalent requirement for electrical checks. Currently, the landlord must simply ensure the electrical installations (fixed wiring etc.) and electrical appliances are safe to use.

The Department of Social Development (now the Department for Communities) issued a discussion paper reviewing the role and regulation of the PRS in November 2015.[61] A further consultation document, Private Rented Sector in Northern Ireland - Proposals for Change, was issued in January 2017.[62] In it, the Department proposed introducing legislation requiring landlords to carry out periodic electrical checks in their properties. This proposal was unanimously supported by respondents to the discussion document, including landlord groups. The DfC also proposed amending the Landlord Registration Regulations to incorporate a fitness for habitation declaration at the point of registration. Extra resources, to allow for simple checks to be carried out by District Councils, have also been considered.

THE PRIVATE RENTED SECTOR IS NOW THE SECOND LARGEST HOUSING TENURE IN NORTHERN IRELAND, ACCOUNTING FOR AROUND

17%

OF TOTAL HOUSING

Electrical Safety First has campaigned strongly for a uniform level of protection for private tenants throughout the UK. We are calling on the Government to introduce a mandatory requirement for Northern Ireland's private landlords to have periodic electrical inspections undertaken, at least on a five-yearly cycle, by a suitably competent and qualified person.[63] This proposal would also bring

59 https://www.communities-ni.gov.uk/consultations/review-role-and-regulation-private-rented-sector
60 See this link for further information on the Scottish protections in the PRS: https://www.gov.scot/publications/electrical-installations-and-appliances-private-rented-properties/
61 https://www.communities-ni.gov.uk/consultations/review-role-and-regulation-private-rented-sector
62 Department for Communities consultation on the 'Private Rented Sector in Northern Ireland- Proposals for Change https://www.communities-ni.gov.uk/sites/default/files/consultations/communities/private-rented-sector-proposals-for-change-consultation.pdf
63 Department for Communities. Private Rented Sector in Northern Ireland- Proposals for Change. Consultation Document. P45 January 2017 https://www.communities-ni.gov.uk/sites/default/files/consultations/communities/private-rented-sector-proposals-for-change-consultation.pdf

regulation into line with laws for Houses in Multiple Occupancy (HMOs) in Northern Ireland[64], where landlords are already required to carry out regular five-yearly checks.[65] The cost of these proposals would fall on the landlord, but we do not believe they would introduce an unreasonable financial pressure. The average cost of an electrical safety inspection is around £150-£200 every five years – so as little as £30 per year – which would protect both tenants and property from electrical risk.

3.2. Social Housing

Social housing in Northern Ireland is provided by the NIHE (the Housing Executive) and 23 registered housing associations (HAs). The latter are the main developers of new social housing for rent.[66] The DfC is responsible for HAs' funding, monitoring and regulation and the Northern Ireland Federation of Housing Associations is the representative body. In 2016, it was estimated that there were approximately 121,000 homes available through social housing. Clanmill Housing Association – one of the stakeholders interviewed for this research – is one of the largest HAs, with over 5,000 accommodation units. These range from family homes to supported housing for both the elderly and vulnerable, as well as hostels providing temporary accommodation.[67]

There are no specific regulations regarding regular electrical checks in social housing but the Housing Executive follows relevant British Standards and internal compliance standards. These include five-yearly electrical installation and appliance checks, as well as on change of tenant. While such testing is currently undertaken as best practice by the Housing Executive, it is not a legal requirement.

IN 2016, IT WAS ESTIMATED THAT THERE WERE APPROXIMATELY

121,000

HOMES AVAILABLE THROUGH SOCIAL HOUSING.

3.3. Houses in Multiple Occupation (HMOs)

Licensing of HMOs in Northern Ireland was established under the Houses in Multiple Occupation Act (NI) 2016), with a revised scheme introduced on 1st April 2019[68]. Local councils in Northern Ireland are now responsible for the scheme's enforcement, with Belfast City Council taking on the lead role. Under the new licensing system, HMO tenants must be provided with an information pack, including a copy of the current electrical safety report. A Code of Practice has also been produced, with some specific references to electrical safety. These include a satisfactory test certificate being provided to the manager of the building and the manager ensuring PAT (portable appliance testing) of electrical equipment and appliances is undertaken at least every five years.

3.4. Owner-Occupied Homes

The Northern Ireland Building Regulations are the legal requirements made by the Department of

64 https://www.housingadviceni.org/advice-landlords/HMO/management-standards
65 Standard Licence Conditions for Houses in Multiple Occupation (HMOs) in Northern Ireland , http://www.belfastcity.gov.uk/buildingcontrol-environment/housing/NIHMO/NIHMO.aspx#apply-NI-HMO
66 https://www.communities-ni.gov.uk/topics/housing/registered-housing-associations
67 https://www.clanmil.org/about-us
68 http://www.belfastcity.gov.uk/buildingcontrol-environment/housing/NIHMO/NIHMO.aspx

Finance and administered by the 26 District Councils. Their objective is to ensure the safety, health, welfare and convenience of people in and around buildings. In England and Wales, Part P of the Building Regulations provides the only protection consumers have regarding the safety of new electrical installation work in the home.

Scotland has an equivalent with the Building Standards system, but Northern Ireland has no equivalent statutory requirement. More generally, there is no legislation requiring a homeowner anywhere in the UK to undertake regular electrical safety checks of their dwelling.

3.5. Care Homes

Northern Ireland's care sector is overseen by the Regulation and Quality Improvement Authority (RQIA), in conjunction with the Health and Safety Executive (HSENI).[69] No specific advice on electrical safety for care homes in Northern Ireland has been issued, but they are directed to guidance contained in the HSE document, *Health and Safety in Care Homes.* It notes that the Electricity at Work Regulations do not specify a frequency for maintenance but does refer to BS 7671, otherwise known as the IET Wiring Regulations, to which all electrical installations should conform. IET and other industry guidance to BS 7671 suggests fixed electrical installations in residential premises (including care homes) should typically be inspected and tested by a competent person every five years.

In 2014, the Scottish Government issued advice to the owners of care homes regarding the maintenance of electrical installations and safety of portable electrical appliances[70]. In a statement provided for this report, the Health and Safety Executive for Northern Ireland (HSENI) referred to the guidance document *Health and Safety in Care Homes HSG 220.*

We recommend that RQIA and HSENI examine the frequency of electrical inspections and consider training staff for visual safety checks. We also suggest they consider issuing specific guidance requiring mandatory electrical safety inspections at least on a five-yearly basis.

69 General information relating to workplace electrical safety is available on the HSE website: http://www.hse.gov.uk/electricity/faq-portable-appliance-testing.htm and HSENI website: https://www.hseni.gov.uk/articles/electrical-safety. The following link provides a wide range of information to the health sector in relation to electrical safety: http://www.hse.gov.uk/healthservices/equipment-safety.htm

70 Practical Fire Safety Guidance for Care Homes, Scottish Government, 2014.

4. THE HOUSING LANDSCAPE

In this section, we will examine the wider housing context in Northern Ireland, including an overview of housing stock, its profile, and other housing demographics. Our intention is to draw out key issues in relation to electrical safety in Northern Ireland's homes.

4.1. Tenure

The latest Northern Ireland House Condition Survey (HCS) 2016 states that, of the estimated 780,000 homes in Northern Ireland, 63% are owner-occupied, 17% are in the PRS and 16% are social housing.[71]

There have been several notable changes in the balance of household tenures between the period of the last two HCSs. The number of households in the PRS has increased from 80,900 (12%) in 2006 to 136,000 (17%) in 2016. These trends may have reflected the difficulties faced by many in attempting to buy their own home and the shortage of social housing. As we shall consider later in this report, there is a link between tenure and age, with younger people more likely to live in PRS accommodation or social housing, and older people being owner occupiers.[72] Approximately 86,000 (70%) dwellings in the social sector are owned and managed by the Housing Executive and the remaining 37,000 (30%) by housing associations.[73]

APPROXIMATELY 70% OR

86,000

DWELLINGS IN THE SOCIAL SECTOR ARE OWNED AND MANAGED BY THE HOUSING EXECUTIVE

The Housing Executive has noted that the surge in home ownership during the 1980s and 1990s is now being followed by growth in the proportion of older homeowners. The problem of access to home ownership - which limited the number of first time buyers from the late 1990s onwards - is also moving through the age groups. In July 2020, the Housing (Amendment) Bill passed its final stage in the Assembly. In addition to other changes to the regulation of housing associations, the Bill will end the compulsory house sales scheme for housing association tenants.

In a 2015 market review,[74] the Housing Executive outlined the main policy issues relating to the housing needs of older people as follows:

- The next generation of older people has a much higher proportion of individuals reaching retirement age as homeowners than in previous cohorts.
- There is unlikely to be a significant increase in demand for specialised social housing. But there is likely to be growing demand for specialised private provision.
- The mix of ages and personal circumstances of tenants living in sheltered housing is changing, with a slightly reduced entry age and increased numbers of people with mental health problems and alcohol or other addictions.
- The projected increase in older people indicates a growing need for an efficient Home Improvement Agency as they are most likely to live in older homes they own and that are in need of repair.

In combination, these factors imply that a larger proportion of older people, which is a growing demographic, may remain within private households rather than entering residential care or other forms of communal living.

71 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
72 Ibid
73 https://housingevidence.ac.uk/wp-content/uploads/2018/10/R2018_SHPWG_02_Social-housing-in-Northern-Ireland_webready.pdf
74 https://www.nihe.gov.uk/getattachment/Working-With-Us/Research/Housing-Market/Housing-Market-Review-2015-2018.pdf.aspx?lang=en-GB&ext=.pdf

4.2. Household Profile

The data from the 2016 HCS revealed several notable housing trends. The PRS continues to play a central role in meeting housing needs in Northern Ireland and is now the second largest sector, behind the owner-occupied sector. There seems to have been an increase in the number of households with children residing in the PRS since 2011 and a decrease in the proportion of households with children living in the owner-occupied sector. While most older people (78%) live in the owner-occupied sector, over 17,000 reside in the PRS. Those who are described as being 'permanently sick/disabled or looking after family/ home' were more broadly spread across tenures, with 47% living in social housing, 22% in the PRS, and the remainder in the owner-occupied sector.[75]

4.3. Dwelling Age and Location

Northern Ireland has a considerable number of older homes (i.e. those built before 1919). In 2016, they comprised 11% of total housing stock and an increasing number are being privately rented. In the PRS, 13.7% of all dwellings were built pre-1919, compared to 11.3% for the owner-occupied sector. The 2016 HCS estimates that in the PRS, only 38% of dwellings were built post 1980[76]. The survey also notes that there has also been a continued increase in people living in urban areas, from 69% in 2009 to 73% in 2016. There has been a corresponding decrease in those living in rural areas (from 31% in 2009 to 27% in 2016).[77]

4.4. The Northern Ireland Housing Executive

The Northern Ireland Housing Executive (the Housing Executive) was established in 1971 as Northern Ireland's strategic housing authority. It offers a range of services to people living in socially rented, privately rented and owner-occupied accommodation, as well as supporting and working with relevant public bodies. As a landlord it has approximately 86,500 homes and administers a budget of £750m, employing more than 3,000 staff. It also offers home improvement grants to homeowners and private tenants and support to help improve the energy efficiency of private dwellings[78]. In June 2020, Communities Minister Carál Ní Chuilín acknowledged the investment challenges facing the Housing Executive homes with more than £7.1 billion investment needed over 30 years to simply maintain the status quo.

4.5. Access to Repairs and Improvement Services

Due to reduced funding, the Housing Executive is currently only accepting applications for mandatory Disabled Facilities and Repair grants. Discretionary renovation and repair grants are now only available in exceptional circumstances. An Ulster University report for the Housing Executive reviewed the effectiveness of home improvement agency (HIA) care and repair services in 2011.[79] It noted: "Whilst there is clear recognition of the need for HIA services … there remains no co-ordination and no overarching statutory collaborative strategy that seeks to extend HIA services within Northern Ireland, in a consistent and sustainable programme."[80]

In recent years, several home improvement and handyperson schemes have closed due to a lack of funding. But those still in operation were cited by Age NI – the leading charity for older people in Northern Ireland- as fulfilling an important role, particularly for isolated older people unable to carry out or arrange repairs, including electrical hazards.[81]

75 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
76 Ibid
77 Ibid
78 NIHE website: https://www.nihe.gov.uk/
79 Home Improvement and care and repair agencies are not-for-profit organisations funded by local and central government. They provide specialist support and advice to older and disabled people, as well as those on low incomes, for maintaining, adapting, and improving their homes
80 Northern Ireland Housing Executive. Moving forward with services for older people in Northern Ireland– a home improvement agency/ care and repair scoping study. Dr Michaela Keenan, University of Ulster in partnership with IMS Research (Ltd). March 2011 https://www.nihe.gov.uk/getmedia/ed4a9abd-28c5-48a7-b855-8f5d838e2c70/moving_forward_with_services_for_older_people_in_northern_ireland.pdf.aspx
81 Interview with Duane Farrell, Policy Manager, Age NI

5. HOUSING STANDARDS – AN OVERVIEW

5.1. The Fitness Standard

The Housing Executive has overarching statutory responsibility for the assessment and enforcement of the Housing Fitness Standard, which applies to all housing in Northern Ireland and requires them to be free from serious disrepair. To be classified as unfit, a dwelling must fail one or more of its 11 criteria. Unfortunately, the Fitness Standard does not provide specific requirements in key areas, such as fire or electrical safety. In 2016 there were an estimated 16,400 unfit dwellings in Northern Ireland.[82]

PRS properties which fail requirements can be placed under rent control to encourage the landlord to bring the property up to the Fitness Standard. However, the Standard falls short in dealing with modern housing challenges and has not kept pace with health and safety issues, including those caused by electricity. Against the current criteria, the number of unfit dwellings is now small, meaning the information on housing fitness does not provide a compelling evidence base to underpin new policy initiatives to improve housing conditions. This supports the case for the adoption of the Housing Health and Safety Rating System as the minimum housing standard for housing in Northern Ireland.

5.2. The Decent Homes Standard

The Decent Homes Standard was introduced in June 2004 to promote measurable improvements to housing in Northern Ireland. It incorporates four main criteria including: the statutory minimum fitness standard for housing; repair; modern facilities and services and thermal comfort. A decent home is considered one that is wind and weather tight, warm and has modern facilities.

Once again, however, it does not have a specific focus or measure for electrical safety.

In the 2016 HCS, 8% of all dwellings in Northern Ireland failed the Decent Homes Standard. The data shows that the highest failure rates were in owner-occupied (8%) and privately rented sectors (11%), whereas rented homes in the social housing sector have a much lower proportion, at 3%. People over the age of 75 (10%) were much more likely to live in non-decent homes than other age groups, reflecting similar findings in the earlier 2011 survey. The Housing Executive developed a 'Maintenance Investment Strategy' aimed at achieving the Decent Homes Standard for all their homes.

IN 2016, THERE WERE AN ESTIMATED

16,400

UNFIT DWELLINGS IN NORTHERN IRELAND.

As with the Fitness Standard, the state of repair of a dwelling is also a key element of the Decent Homes Standard. To be considered 'decent', the building must be in "a reasonable state of repair". While disrepair is particularly prevalent in empty properties, it is also higher in the PRS and social housing (both 53%) than in the owner-occupied sector (45%). Housing data also shows a clear relationship between the age of a home and disrepair, with nearly three-quarters (73%) of all dwellings built before 1945 having faults[83].

82 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
83 Ibid

PEOPLE OVER THE AGE

75

WERE MUCH MORE LIKELY TO LIVE IN NON-DECENT HOMES THAN OTHER AGE GROUPS

5.3. The Housing Health and Safety Rating System

The Housing Health and Safety Rating System (HHSRS) is a risk-based standard that has been the minimum standard for housing in England and Wales since 2006. The system identifies hazards in the home, evaluating the potential impact on the health and safety of its occupants, and is undertaken by local authority Environmental Health Officers (EHOs). The hazards are divided into Category 1 and Category 2 hazards, denoting the seriousness of each hazard. Any hazards that have a score of over 1,000 are described as 'Category 1' and fail the statutory minimum standard.

Although the HHSRS has not been formally adopted in Northern Ireland, data is collected and analysed through the model for the HCS to provide a further indication of housing conditions. The 2016 HCS reveals that approximately 9% (43,400) of owner-occupied and 8% (11,100) of PRS dwellings had Category 1 hazards. The proportion in the social sector was lower at 4% or 5,300 homes, a similar pattern to the findings in 2011. Dwellings with people aged 75 or more had the highest rate of Category 1 hazards (11%; compared with 6% for households with people aged between 25 and 39).[84]

Following the publication of the 2016 HCS, the Housing Executive commissioned the Building Research Establishment (BRE) to undertake a one-off study to establish the cost of poor housing in Northern Ireland. Based on the 2016 housing survey, it was noted that there were 2,000 Category 1 electrical hazards in dwellings which, if addressed, would provide nearly £9M of societal savings to the public purse, each year[85]. This includes costs to the NHS and other factors such as loss of occupational output as a result of injury.

84 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
85 Ibid

71%

OF PEOPLE AGED 75 YEARS OLD OR OVER HAVE A LIFE-LIMITING ILLNESS.

Stakeholder Views

A range of key stakeholders were interviewed to inform this report. They included: The Chartered Institute of Housing (CIHNI); DfC; Northern Ireland's Housing Executive (NIHE); the Northern Ireland Fire and Rescue Service (NIFRS); the Northern Ireland Federation of Housing Associations (NIHFA) and the Landlords Association for Northern Ireland (LANI). Key concerns from our conversations with these stakeholders are given below and have helped inform some of the recommendations in this report.

- It was generally agreed that electrical safety in the PRS should be a key priority for Government. Mandatory smoke and carbon monoxide alarms and the introduction of periodic electrical checks have been proposed in the DfC's '*Private Rented Sector in Northern Ireland – Proposals for Change*' paper.
- LANI believes fire and carbon monoxide protection should be prioritised. It acknowledges the importance of electrical safety in the home but expressed concerns regarding the damage to electrical equipment caused by tenants.
- The Housing Executive noted that the biggest faults they find are with electric showers and smoke alarms, which are sometimes tampered with by tenants. The condition of appliances owned by tenants can also be a cause for concern.
- It was generally noted that gaining access to the homes of older people to carry out improvements can be challenging, as they do not like disruption.
- The Housing Executive follows BSI and internal compliance standards, including five-yearly electrical installation and appliance checks, plus change of tenant inspections. The agency changed from a 10-yearly review cycle to a five-yearly one in April 2016. They believe a mandatory, five-yearly inspection for PRS properties would be a positive development for the sector.
- Clanmill Housing Association is one of the largest in Northern Ireland. It carries out a regular cycle of electrical inspection and maintenance, particularly targeted at those at risk. This includes fixed wire testing every five years, including the replacement of old consumer units, for independent living, sheltered schemes, and vulnerable people.
- Clanmill's representative noted that the storage and charging of mobility scooters can be a problem, as managing space can be an issue. Tenancy agreements should require tenants to inform a housing association regarding the use of heavy-duty electrical appliances such as scooters and power wheelchairs.
- Concern was expressed that any new Housing Fitness Standard would be difficult to enforce due to local councils' lack of resources.

6. AGE AND DISABILITY

This section examines the position of disabled people and older people in Northern Ireland's housing market – and how poor electrical safety and unsafe homes can impact on such vulnerable groups.

6.1. Disability

Estimating the exact number of disabled people is problematic, not least because Northern Ireland has no comprehensive register of people with a disability. Using self-reported data, the Northern Ireland Census 2011 shows that just over one in five of the population (20.7%) had a long-term health problem or disability which limited their day-to-day activities, and 79.3% of the population did not. Many individuals may not wish to disclose or identify as having a disability, so figures are likely to be an underestimate.

The census also showed that disability appears highly stratified by age as 71% of people aged 75 years old or over have a life-limiting illness. By comparison, results from a 2006/07 survey by the Northern Ireland Statistics and Research Agency (NISRA) found that 18% of all those in private households have some degree of disability. The prevalence for adults is 21% and 6% for children. Almost two out of every five (37%) of Northern Ireland households include at least one person with a disability. Around one-fifth of these households contain more than one person with a disability.[86]

As well as an ageing population, there are a range of medical conditions that influence the level of disability in Northern Ireland. Some of these conditions are more prevalent in Northern Ireland than in other UK regions, some related to the conflict that blighted the region for many years. There are also variations in the prevalence of disability across geographical areas, from just under 18% in outer Belfast to 23% in the north of the country.

The HCS of 2016 shows that households where someone was permanently sick or disabled, or looking after the family or home, are more likely to live in social housing, a higher than average proportion at 47%.[87]

6.2. Older People

As with disability, there is no universally agreed definition of the term 'older people'. Definitions range from those that include people over 50 to those aged 65 and over. One third of respondents to the 2014 Northern Ireland Life and Times (NILT) survey thought that the age at which they consider someone as being old is between 70 and 74 years. At the same time however, the Executive's draft *Active Ageing Strategy*, and the legislation which established the post of Commissioner for Older People, defines an older person as being aged 60 or over. The terms 'older people' and 'elderly' in this report refer to women over 60 and men aged 65 and over.

The Northern Ireland Census 2011 confirms that the country has an ageing population, with more people over 65 and fewer children than in recent years. However, these are not uniform changes as some locations have an increased number of younger people and children. In Northern Ireland, the proportion of people aged 65 or over is projected to rise from 15.9% to 24.8% in 2041. The sharpest increase is expected to be in those aged 85 or over[88]. Northern Ireland also has high levels of reported disability, particularly in the over 75 age bands[89]. These changing demographics have implications for the types of housing and other services that will be required.

The incomes of different age groups also vary significantly. Older people generally have lower incomes than other age groups, which impacts on their ability to meet their housing needs. The HCS shows that older people make up the group most likely to live in unfit properties. Wallace (2015) reported that not only is owner-occupation the

86 Northern Ireland Statistics and Research Agency. (2015). Northern Ireland Survey of Activity Limitations and Disability, 2006-2007
87 https://www.nihe.gov.uk/Documents/Research/HCS-2016-Main-Reports/HCS-Main-Report-2016.aspx
88 https://www.nisra.gov.uk/statistics/2011-census/results
89 Northern Ireland Housing Executive website: https://www.nihe.gov.uk/About-Us/Corporate-Strategies/Older-People

dominant tenure for those aged 60 years or older, but this demographic is also the largest group living in non-decent homes. Wallace estimated this to be in the region of 32,000 homeowners[90].

As we have seen, the tenure which contains the largest pool of older people is the owner-occupied sector. It is this group which is most at risk of living in a non-decent home and therefore of electrocution and fire, as home maintenance may be poor due to age related disability or impairment. Households with an older person may also face difficulties adapting their homes to meet their changing needs. Funding for home adaptations is limited and equity release is not a viable option – nor the best solution- for many households with an older person.

6.3. Dementia

According to the Dementia Services Development Centre, in 2010 the number of people in Northern Ireland diagnosed with dementia was estimated to be 19,000 and expected to rise to more than 60,000 by 2051. Certain symptoms of dementia can greatly increase the risk of injury or death from electricity; and electrical safety has been found to be one of the greatest concerns of carers and family members when leaving a person with dementia on their own.[91] Many of the issues faced by older people, particularly cognitive impairment, are also experienced, usually more acutely, by those living with dementia. An Electrical Safety First report notes that while an electrical appliance may have been tested and deemed safe, incorrect use, perhaps arising through cognitive impairment, can present a serious hazard.[92]

Assistive technology can help manage and reduce electrical risk in the homes of older people, particularly those living with early to moderate dementia, by allowing them to maintain important daily routines. Small scale, low tech assistive devices can also be effective and with minimal cost,

60,000

ARE EXPECTED TO BE LIVING WITH DEMENTIA BY 2051

provided the devices meet individual needs and are reviewed regularly. Smart technology can monitor the use of electrical devices in the home, helping detect worrying deviations from daily routines. For example, to combat the threat of electrical fires, heat detectors can send an alert to a family member or carer's phone.

Stakeholder Views

As part of the research for this report several interviews with key agencies were undertaken, in addition to a focus group involving older and disabled individuals.

The focus group contained 13 members of the Housing Executive's Disability Housing Forum and was facilitated by Disability Action. Representatives included two wheelchair users and others with a range of disabilities. All were aged 60 years and over and lived in various housing tenures, though most were in Housing Executive accommodation and many came from rural areas.

Key issues for the focus group included:

- A range of difficulties with electrical equipment was reported, from problems reaching electrical sockets to dealing with faulty wiring in a pre-fitted plug.

90 Housing and Communities Inequalities in Northern Ireland. Wallace, A. 2015
91 George Holley-Moore and Jonathan Scrutton. The International Longevity Centre, UK. A Shock to the System: Electrical Safety in an Ageing Society. Electrical Safety First. 2015
92 Ibid

- Fridges installed under benches were of concern given the lack of ventilation, and some people reported concerns around the safety of tumble dryers.
- All the wheelchair users had been affected by power cuts and access to a generator was considered essential in dealing with such outages.
- People were aware of the Northern Ireland Electricity Networks' (NI Networks) critical care service for those dependent on life-supporting electrical equipment. However, there was confusion around the different guides for different tenures and there was a call for more publicity to promote the service.
- All participants expressed increased concern following the Grenfell Tower fire and asked for more advice on the safe use of electricity and electrical appliances. It was noted that there was more awareness of government advice and information on gas safety.
- It was felt that, compared to the Housing Executive, housing associations (HAs) were less focused on electrical safety.
- There was also concern that the level of service from HAs depended on location, with less attention provided in rural areas.
- People felt they could not afford to repair or replace white goods if there was a problem with them.
- There was a consensus on the need for five-yearly electrical checks in the PRS, though concern was expressed in relation to who had to pay for them.
- It was felt that better co-ordination between service providers for older and disabled people was required.
- While the need to not frighten people unduly was emphasised, the group felt that the Housing Executive Disability Regional Forum should receive presentations regarding electrical safety, which could be disseminated to other, relevant organisations.

Disability Action is the only pan-disability organisation in Northern Ireland, with over 100 member groups. They noted:

- As many disabled people must survive on benefits, there were concerns that additional costs to check the safety of electrical appliances would be a burden. Equipment supplied by Trusts is regularly checked but if purchased direct, the owner of the equipment would have to pay for maintenance.
- The Grenfell Tower fire has increased concern around evacuation procedures and the safety of everyday electrical appliances, as well as specialist equipment.
- There is a need for a high-profile awareness campaign relating to electrical fires, focusing on older and vulnerable groups.
- The NIFRS fire risk assessment service is considered useful, but Disability Action would like to focus more on home visits around electrical safety for disabled people, particularly those in rural areas.
    - Smart technology in homes will encourage greater independence, but increased electrical risk should also be considered.
    - Automatic cut-off on various domestic appliances is important – particularly for those with dementia.
    - Several HAs require equipment for those with disabilities to be charged outside the building, which can cause difficulties for people with mobility issues.

Age NI was formed as the result of the merger between Age Concern and Help the Aged in 2009. The following points were raised:

- Care homes and the social housing sector, in addition to the PRS, should be required to undertake five-yearly electrical safety checks.
- Dementia poses a particular risk in relation to electrical safety.
- Traditionally, women left it to male partners to sort electrical problems, so older women living alone may well be a high-risk group.
- The cost of using an electrician is a deterrent for many older people, who need to be reassured that electrical inspection and repair costs are reasonable.
- Age NI is aware of the issue of rogue traders and their impact on older and vulnerable groups. Bogus caller alert schemes, such as the Quick Check Service run by the police, should be publicised more widely

The **My Life, My Way** project supports older people with dementia and their carers in the Belfast and Northern Trust areas. They noted:

- There were a number of issues for dementia sufferers, including leaving cookers on and unattended, thereby increasing the risk of fire.
- They have addressed this by using a device attached to the cooker which automatically turns it off after it reaches a set temperature, if left unattended.

South Belfast Seniors Lifestyle Forum raised the following issues:

- There was increased concern around electrical safety following the Grenfell Tower fire.
- Members found it hard to read meters and thought 'touch sockets' were useful for those who found it difficult to change plugs.
- Many expressed concerns around the risks associated with chargers and overloading sockets.
- A card providing advice and emergency numbers, fixed to consumer units, was considered useful.
- Generally, people felt that social housing providers have good systems in place to tackle electrical issues.
- However, they also raised the issue of charging vital electrical equipment. This was illustrated when an individual was refused permission by her HA to charge her mobility scooter in a communal area and had to undertake this in her bedroom with a faulty socket.
- The use of portable RCDs in such situations was considered very important.
- Members expressed concern at finding an electrician to undertake small jobs.
- They were also worried about not finding out about recalled products.
- All members called for an awareness campaign to highlight the electrical risks for older and vulnerable people but emphasised that this should be done sensitively, so as not to unduly frighten them.

Belfast City Council (BCC)

BCC, and some other local authorities provide a free Home Safety Check service for older people, which includes checking electrical sockets and replacing burnt or damaged plugs. Referrals to the service are made via various specialist services, such as occupational therapists and NIRFS. They noted:

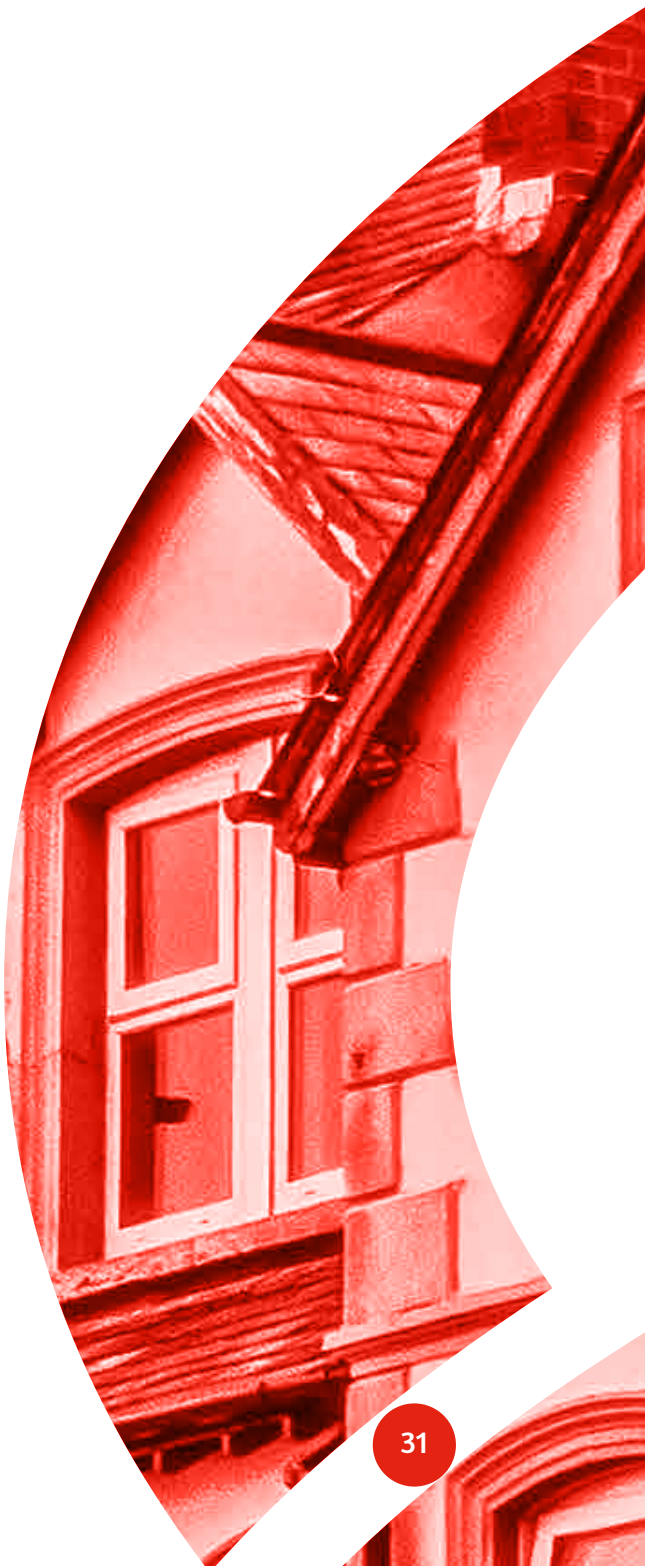
- To address concerns around the use of old or damaged electric blankets, the council has run awareness campaigns on this issue.
- BCC carried out electric blanket tests at a series of home safety events for older people in 2016and found that out of the 78 blankets tested, 77% failed safety tests.

- Some councils offer a testing and replacement service for electric blankets, but it is difficult to find people to repair them and it is often cheaper just to replace them. Electrical Safety First recommends replacing electric blankets every 10 years.
- The Housing Executive renovation and repair grants have had a significant impact in tackling electrical safety in older properties. At present only the repairs and disabled facilities grants are considered mandatory with all others considered on a discretionary basis[93].
- However, there are issues with shared PRS housing, where tenants have overloaded sockets with multiple appliances.

Housing Rights

Housing Rights is the leading advice agency on housing issues in Northern Ireland. It has called for the current Fitness Standard to be replaced by the Housing, Health and Safety Rating System (HHSRS) as the best model for assessing housing conditions and their impact on people. According to the charity:

- The HHSRS provides a much more holistic and rounded assessment of a dwelling and of the risks it poses to occupants, especially older people and children.
- It has been used effectively in England and Wales for several years and has been given international recognition, having been adopted in the United States.
- Housing Rights is also aware of the long-recognised body of evidence on the impact of housing on health and has referenced other relevant agencies, such as the Northern Ireland Human Rights Commission (NIHRC).
- The NIHRC has advised the UN Committee on Economic, Social and Cultural Rights to ask the Northern Ireland Executive about its plans to adopt the HHSRS in Northern Ireland.



93 https://www.nidirect.gov.uk/articles/improvements-housing-executive-property

CONCLUSION

Electrical safety affects us all, but it is particularly significant for those at higher risk of fire and injury because of their age and circumstances. In this report, we have presented a range of measures to help protect people against faulty and defective electrical installations and products.

Collaboration

A key recommendation in this report is for the Northern Ireland Executive to establish an expert panel to consider how to best protect people from electrical risk in their homes. It should involve key stakeholders such as the Departments of Health, Communities and Finance, together with NIFRS, the Public Health Agency, plus industry and consumer interests. We are also calling for the establishment of an All Party Group as a forum for focusing on home electrical safety.

In such a collaborative setting, a more holistic understanding of key safety issues would be obtained. Subjects for review could include the introduction of improved electrical safety standards in future Building Regulations, such as a requirement for fitting whole house RCD protection when rewiring older owner-occupied properties. It could also consider the disparity between the gas and electrical safety legislative frameworks, which was highlighted in many of the interviews conducted as part of this study.

Specific Policy Interventions

We have found overwhelming support for DfC to introduce legislation requiring private landlords to carry out periodic electrical inspections in the PRS, at least on a five-yearly cycle. This echoes the unanimous agreement from respondents to the DfC discussion document, *Private Rented Sector in Northern Ireland- Proposals for Change*.

We also found a clear need to update the Housing Fitness Standard – particularly regarding enhancing electrical safety standards across housing tenures, including higher risk owner-occupied properties in tower and mixed-tenure blocks. We would like the DfC to include specific protections, such as the requirement for five-yearly electrical inspections, not only in the PRS but also the social housing sector. This could be affected by adopting the HHSRS model as a template.

Although the Housing Executive has introduced regular electrical inspection arrangements across its stock, and several HAs carry these out for specialist accommodation, we believe this should be extended to all rented homes on a five-yearly basis, to create a more consistent approach. The residential home and care sector should also adopt this inspection cycle.

Electrical Safety First is calling on Government to commit to reducing the number of domestic fires affecting those aged over 65, a particularly high risk group. In addition, we believe Government should consider measures such as providing a free, five-yearly electrical safety review of all households with a registered disabled person or one of pensionable age. Funding to home improvement agencies to help rectify any electrical hazards found in the homes of disabled and older people, who are unable to fund the work themselves, should also be considered. Measures to ensure that tenants, including older and disabled people, in the PRS are legally protected in reporting electrical hazards to landlords, without fear of retaliation via eviction or rent increases, must also be reviewed by the DfC.

Our recommendation for the DoH to provide additional fire safety powers in domestic premises to NIFRS has already been requested by the Fire and Rescue Services. Regulations could be introduced under Article 30 of the Fire and Rescue Services (Northern Ireland) Order.

Protection Measures

There are a number of relatively cheap and proportionate measures to protect people from electrical hazards in the home which should be considered by Government and relevant agencies. These include supporting the installation, use and regular testing of RCDs in older properties. Other

appropriate measures include whole house RCD protection and the provision of portable RCDs for certain appliances, such as power wheelchairs and mobility scooters. It has been reported that these are not only charged in communal areas of social housing but also in people's bedrooms.

Raising Awareness

Our research found low awareness of electrical safety issues shared by older and disabled people. To address this, District Councils, and other relevant agencies should produce targeted information campaigns and resources, particularly for these vulnerable groups. For example, Councils could distribute a simple electrical safety checklist to those verified individuals and agencies who frequently enter the homes of older and disabled people. This group could include GPs, carers, handyperson services, gas and electrical personnel, and all health, housing, and social care staff. Government and advice agencies could also promote greater awareness of the Northern Ireland Electricity Networks' (NIE Networks) critical care information service to people who are dependent on life supporting electrical equipment.

Post Brexit

The Northern Ireland Executive should maintain close working relationships with European partners, to ensure that products entering the Northern Ireland market are safe and that dangerous products are intercepted and reported and don't find their way into people's homes. We recommend the Executive ensures there is no reduction of product safety standards now that the UK has left the EU.

Research

Various obstacles were encountered in sourcing relevant statistics and information for this report. We recommend Government supports both more research and more detailed reporting of electrical incidents to better inform future public safety policies. NISRA and NIFRS could capture and publish a greater range of statistics regarding electrical and accidental fire incidents, from location and housing tenure, to the age, gender, and any disability of victims of fires.

We offer a range of preventative measures and recommendations in this document which will not only improve the well-being of the most vulnerable in society but also bring cost savings to the public purse. Regular electrical inspections protect both people and property. Collaborative action and better data gathering can improve targeting of vulnerable groups and reduce the call on health services.

During 2019

58%

of all accidental fires in homes were caused by an electrical source.

APPENDIX

METHODOLOGY

Our methodology incorporated both qualitative and quantitative research, including a major literature and relevant data review of home and fire statistics, as well as current policy directives. Qualitative interviews and focus groups were undertaken with an extensive range of stakeholders. These included: older and disabled people; relevant third sector and tenants' organisations; Northern Ireland Fire & Rescue Service (NIFRS); Northern Ireland Housing Executive (NIHE); and other key stakeholders and practitioners in the electrical safety and housing fields.

Scoping review of literature and existing research

We drew upon previous studies in this area (particularly the Electrical Safety First report 'A Shock to the System – Electrical Safety in an Ageing Society', 2015)[94] to avoid duplication of material. A review of existing relevant literature and research was an important first step in creating the context for the project and providing a foundation of existing insight around the issues. Consequently, we focussed on research in relation to housing policy, fire statistics and recent accident prevention strategies.

Older and vulnerable groups

A further aim of this research was to reflect the experience and needs of some of the most vulnerable and marginalised groups in Northern Ireland, so that they can be integrated into future policy developments around home electrical safety. This requirement, and the need for rich insight, supported a primarily qualitative approach to the work.

There is no universally agreed definition of the term 'older people'. Definitions range from those that include people over 50 to a more limited descriptionof those aged 65 and over. However, the terms 'older people' and 'elderly' in this report refer to those who had, until recent Government changes, reached the previous retirement age – over 60 for women and 65 for men. Our definition of disability is taken from the Disability Discrimination Act 1995, which defines it as a physical or mental impairment which has a substantial and long-term adverse effect on a person's ability to carry out normal day-to-day activities.[95]

Without a comprehensive register, it is difficult to clarify the number of disabled people in Northern Ireland.

However, in the 2011 Census, just over one in five reported a long-term health problem or disability which limited daily life. The Census also showed that disability appears highly stratified with age: 70.9% of those aged 75 or older have a life-limiting illness[96].

The groups that were the focus of our research are by definition both vulnerable and hard to reach. Consequently, it was important to take measures addressing the various ethical (and practical) issues involved. Care was also taken to ensure that the research was genuinely inclusive, so that even the most vulnerable individuals were enabled to participate. The focus groups covered broadly the following topic areas:

- Use of electricity and problems encountered
- Perception of risk
- Existing support (if any received) / agency relationships)
- Lifestyle
- Barriers to accessing advice and information, including electrical safety checks
- Financial cost and other restrictions to ensuring electrical safety

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94 A Shock to the System – Electrical Safety in an Ageing Society, Electrical Safety First, 2015: http://www.electricalsafetyfirst.org.uk/what-we-do/electrical-safety-in-an-ageing-society/
95 https://www.equalityni.org/ECNI/media/ECNI/Publications/Employers%20and%20Service%20Providers/DefinitionofDisability07.pdf#:~:text=%28DDA%29%20and%20related%20regulations%20mean%20by%20the%20term,ability%20to%20carry%20out%20normal%20%20day-to-day%20activities.
96 https://www.nisra.gov.uk/sites/nisra.gov.uk/files/publications/2011-census-results-key-statistics-statistics-bulletin-11-december-2012.pdf

Research with key stakeholders, domain experts and practitioners

A number of in-depth interviews took place with key stakeholders in Northern Ireland, including age and disability related organisations, NIHE, NIFRS, industry representatives, the Chartered Institute of Housing Northern Ireland (CIHNI) and Housing Rights. We also spoke to experts in electrical contracting, landlord groups and advocacy agencies. Interviews focused primarily on how electrical safety standards could be improved, particularly for the most vulnerable. We also sought to understand how the various bodies and agencies involved in home and fire safety collaborate, and to identify best practice and effective practical interventions.

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