Electrical safety in the home

A guide for older people and their relatives

electricalsafetyfirst.org.uk
Electricity can kill. Every year, around 350,000 people are seriously injured and 70 people are killed because of an electrical accident in the home.

Electricity also causes more than 20,000 house fires a year – that’s almost half of all accidental house fires. Older or vulnerable people can be at more risk because they often live in old or poor quality housing that contains faulty electrics or old appliances.

We are Electrical Safety First, a UK charity dedicated to reducing deaths and injuries caused by electrical accidents. We want to make sure that everyone in the UK can use electricity safely.

The good news is that by carrying out some simple visual checks on your electrics and learning how to use your products safely, many risks can be avoided.

The advice in this leaflet covers a range of topics from faulty electrical appliances and gardening tips, to finding a qualified electrician and staying warm in your property. This guide is for all homeowners, tenants or landlords, as well as anyone concerned about the safety of a neighbour or relative. We know that some vulnerable people can be more susceptible to electrical accidents, and so, as well as a section on looking after those around you, there’s also a useful directory at the end should you need any more information.

We hope this leaflet will help keep you and your loved ones safe at home.
2 The basics

Do you know when the electrics in your house were last checked? If you own the property you live in, we recommend that you get your electrics fully tested every ten years, and every five years for rented homes. It’s also a good idea to get them tested when you first move into a property, just in case.

1 Check your fusebox:

What does it look like?
Your fusebox controls the electrics in your home and so it’s important that it’s working safely. All fuseboxes should contain a main switch, fuses and/or circuit breakers. A fusebox should NOT have a wooden back, cast iron switches or look like a mix of different fuseboxes. If your circuit-breakers trip or fuses regularly blow, then it’s worth getting them checked by a registered electrician.

Does it have an RCD?
An RCD, or Residual Current Device, is a life-saving device that cuts out power if there’s an accident and can stop you from getting a fatal electric shock.

Don’t know whether you have an RCD or not? Don’t worry, there’s a really easy way to check this: just find and press the ‘Test’ or ‘T’ button. If you have a working RCD, pressing it will switch off the power to the areas of the home that it protects. If you don’t have an RCD in your fusebox or it’s not working, then you should use plug-in RCDs for all the sockets in your home. So, test your RCD today! If you’re in any doubt or can’t find the test button, then ask a relative or neighbour to check it for you.
2 Check your plugs and sockets:

Does your house have round pin sockets, braided flex hanging from ceiling light fittings or sockets mounted in skirting boards? If so, your electrics could be over 50 years old and need checking and updating. Plugs and sockets should not be damaged, display burn marks, make crackling noises or give out excessive heat. For peace of mind, we recommend asking a registered electrician to carry out an Electrical Installation Condition Report, or EICR, (previously known as a Periodic Inspection Report, or PIR).

For more information about EICR reports and for tips on how to find a qualified electrician, see sections 6 and 7.

3 Check your light fittings:

As with plugs and sockets, any signs of overheating, such as curled labels, discolouration or scorching, should be a warning sign. If you see any signs of cracking or burn marks around the light fittings, stop using them immediately and get them checked by a registered electrician.

4 Check your cables:

Cables should be in good condition with no signs of damage, cracking or splitting, and should be enclosed in a PVC sheath. Check the cables of your appliances to make sure they’re in good condition, with the cable securely attached to the appliance and the plug. Cuts, damage or signs of excessive wear and tear mean that the lead or plug might need replacing.

Try to avoid trailing cables across the floor or under carpets and rugs, as this can be a trip hazard.
Using electricity in the home

Electricity and the misuse of electrical appliances are one of the top causes of accidental fires in British homes. Some of the biggest electrical risks can be found in the kitchen, bathroom and garden.

Follow the advice in this booklet to stay safe around the home.

Kitchen safety:
The majority of electrical fires start in the kitchen, so it’s vital that extra care is taken when using electrical equipment, that all appliances and surfaces are kept clean and tidy and that all electrical appliances are installed correctly. In particular:

• Sockets and switches should be fitted a safe distance (at least 30 cm horizontally) from sinks or cookers to prevent the switch, socket and lead from being exposed to splashing or high temperatures
• Check that fixed appliances, such as fridges and washing machines, have an on/off switch that is easy to reach
• Don’t leave large electrical appliances, like washing machines and dishwashers, running when you’re out of the house or overnight
• Keep all surfaces and appliances clean. Don’t allow grease to build up on cookers or use the top of microwaves as extra storage

Bathroom safety:
Water conducts electricity, so when the two mix, the result can kill. Therefore, any electrical work in the bathroom must be carried out by a registered electrician and the following special requirements should be considered:

• It is unusual to have a mains socket installed in a bathroom but if there is one, it should be at least three metres away from the bath or shower
• All light fittings should be enclosed and out of reach of any wet hands
• Because of dampness and wet hands, a ceiling mounted pull cord switch is preferable to a wall-mounted light switch
• Electric and gas water heaters in a bathroom must be fixed and permanently wired, unless they are powered by a socket fitted three metres from a bath or shower

Never bring mains-powered portable electrical appliances, such as hairdryers, heaters or radios, into a bathroom.
Safety outdoors:

Many garden accidents are the result of handling equipment carelessly, lack of concentration or failure to follow the manufacturer’s operating instructions. These simple tips can help you avoid a serious accident:

• Sockets used to supply electrical equipment outdoors must be protected by an RCD, preferably in your fusebox. If this isn’t possible, use a plug-in RCD or install a socket that has one built in.

• Cutting through the lead of a lawnmower or hedge trimmer could kill you. Be careful when you are working in the garden and be aware of the cables. Mains-powered tools or gardening equipment must be protected by an RCD.

• Make sure that you wear sensible footwear when working outside – rubber soled shoes can reduce the severity of an accident.

• Extension leads, cables and connections must be suitable for outdoor use. They should be weather resistant with moulded connections that prevent moisture from seeping in.

General safety tips:

• Unplug appliances before you try to carry out any maintenance on them.

• Never drill or fix nails in walls without knowing what’s behind them – walls and partitions conceal electrical cables and gas and water pipes.

• Never overload an extension lead by plugging in appliances that together will exceed the maximum current rating stated for the lead. This could make the plug in the wall socket overheat and possibly cause a fire. Use our socket calculator to check if you’re exceeding the maximum load: www.electricalsafetyfirst.org.uk/overloadingsockets.
More than half of all house fires are caused by electrical accidents, with the vast majority caused by appliances, so the risk posed by faulty electrical products, such as recalled items or counterfeit goods, is huge.

Recalled products:

Over four million household appliances have been recalled by manufacturers in the past four years and most of these have faults that include a risk of fire or electric shock. But the majority of these may still be in UK homes, as the success rate for an electrical product recall is just 10-20%.

Most people associate product recalls with larger items, like fridges, ovens and washing machines. But smaller items can also pose a safety risk. In fact, the electrical items most reported as faulty or dangerous are smaller ones, such as chargers, hairdryers, toasters and kettles.

We advise you to follow these simple steps:

• Ensure the safety of all your electrical appliances by using the free Electrical Safety First online product checker. Just enter the model number, brand name or description of your product to see if your product has been recalled. If it has, you will then be advised on next steps. Go to www.electricalsafetyfirst.org.uk/recall

• Whenever you buy an electrical item, the first thing you should do is register it with the manufacturer, as this is the easiest way for them to contact you should there be a problem

• Keep an eye out for recall notices and act on them straight away. Manufacturers try to reach their customers in numerous ways, including posters in shops, adverts in newspapers, emails, letters, and on social media
Counterfeit products:

Counterfeit electrical goods almost always contain incorrect or faulty parts that can overheat or break just days after purchase, increasing the risk of fire, serious shock or even electrocution.

Unfortunately, it has become increasingly difficult to identify fake goods as the printing on packaging has become more sophisticated, meaning they are becoming increasingly hard to spot. The best way to protect yourself from substandard and counterfeit goods is to buy your electrical products from reputable retailers on the high street.

Follow these simple tips to identify counterfeit goods:

- Beware of any item that is much cheaper than you expected. If a bargain looks too good to be true, then it probably is.
- Check that the packaging note looks genuine. Does the item come with instructions and a guarantee?
- Check for damage when you get home, especially loose or broken fittings or frayed wires.
- Check that the item has a UK plug and that you know the country of origin.
- Visit www.electricalsafetyfirst.org.uk/safeshopping for more information and tips.

If you suspect a product is dangerous to use, or that it is a fake copy of a well-known brand, you should contact your local Trading Standards office or Citizens Advice straight away. If you have any suspicions about the product’s safety, or if you think it’s a fake, do not use it.

The electrical goods most often reported as faulty or dangerous are:

- Electrical chargers
- Adaptors, including those used for travel
- Extension and spare product leads
- Hairdryers, tongs and straighteners
- Small kitchen appliances like kettles, toasters and irons
Looking after yourself or your loved ones

Our research shows that one million people over 75 live in non-decent homes that are not warm enough, are in a state of disrepair or do not have modern facilities. These homes rarely meet basic electrical safety standards, and don’t include life saving devices such as a modern fusebox, circuit breakers and PVC wiring.

If you live in an old property or you’re worried about an older neighbour or relative, there are some simple things you can do:

• **Undertake a full electric check.** If the property is over 50 years old and its electrics haven’t been checked in the last ten years, ask a registered electrician to carry out an Electrical Installation Condition Report, or EICR, (previously known as a Periodic Inspection Report, or PIR)

• **Check the smoke alarm.** Every property should have a working smoke alarm, and batteries should be changed every year. You can test the smoke alarm by pressing the ‘Test’ button. If there’s no smoke alarm then contact your local Fire and Rescue Service

• **Sign up to the priority register.** Older people should ask their energy provider to add them to the priority service register, which means that they are eligible for a tailored billing service, free meter readings, and alternative facilities for cooking and heating if something goes wrong

** Assistive technology is an easy way to reduce the risk of electrical accidents in the home. Examples include:**

• Safety cut off devices for water, gas and electricity

• Automatic switch off for electric cookers to prevent overheating

• Electrical appliances with simplified controls, designed to be dementia-friendly

• Smart technology that can monitor the use of electricity in the home of someone with dementia, helping detect deviations from daily routines

• Heat detectors that can send an alert to a carer’s phone in case of fire

**What else should I look out for?**

Sometimes a health condition such as dementia or Parkinson’s can increase the risk of an electrical accident, as these conditions cause reduced mobility or forgetfulness. If you’re worried about an elderly relative or neighbour, carry out a quick visual check of their home. To help you, download our free [Home Electrical Safety Check app](#) that tells you what to look out for in each room of the house.
We know that heating your home can be expensive, especially in the winter. Portable heaters and electric blankets are popular solutions, but they have been known to start a number of house fires, mainly through misuse.

**Portable heaters:**
Portable heaters cause a significant number of house fires each year, but there are some very simple ways to avoid putting yourself at risk:
- Keep your heater on a level surface, well away from anything that could knock it over
- Make sure your heater is at least a metre away from combustible materials, such as paper, furniture or curtains. Never use it to dry your clothes!
- Don’t leave your heater unattended or use it while you are sleeping
- Never power a heater from an extension lead – they can easily be overloaded and cause fires
- Make sure you buy your heater from a recognised retailer and manufacturer

**Electric Blankets:**
To make sure that you use your electric blanket safely:
- Examine your blanket regularly for signs of wear or damage
- Use the blanket only for the purpose intended:
  - over-blankets must only be positioned above you in bed
  - under-blankets must only be positioned under you in bed
- Don’t use a creased blanket or one that is still folded
- Don’t use a hot water bottle at the same time as using your electric blanket
- Don’t touch the blanket with wet hands or feet
- Don’t use an electric blanket on an adjustable bed without making sure that the blanket and cord don’t get trapped in its hinges
Getting work done

Many people take on small jobs around the home to save time and money, but it’s quite easy to underestimate a task and attempt something for which you may not have the right skills or experience.

When to use a registered electrician
If in any doubt about your skills or the complexity of the task at hand, we recommend you hire an electrician registered with one of the government-approved schemes. Using a registered electrician not only means your electrical work will be carried out by a qualified and experienced professional, but there will be an official procedure in place should something go wrong.

Complying with the law
Apart from some types of minor work, all electrical installation work must either be reported to your local authority building control, or carried out by an electrician who is registered with one of the government-approved schemes. This is because most fixed electrical installation work in your home, garden, conservatory or outbuilding must meet Building Regulations which, simply put, means that all work should be designed and installed to protect people from fire and electric shocks. By law, if you own your home or are the landlord of a property, you must be able to prove that all electrical work complies with Building Regulations. Local authorities can make homeowners or landlords remove or alter any work that does not meet the Building Regulations.

The easiest way to ensure that electrical work complies with the Building Regulations is to use a registered electrician. When the work is complete, you will receive an Electrical Installation Certificate or Minor Work Certificate that confirms that the work meets BS 7671, and a Building Regulations Compliance Certificate that confirms that the work meets the Building Regulations. Alternatively, an unregistered electrician or non-professional can carry out the work but it must then be checked by a registered electrician to ensure it complies.

Electrical Installation Condition Report (EICR)
If you’re worried about the electrics in your home, you may want to consider asking a registered electrician to produce a report, known as an Electrical Installation Condition Report or EICR (previously known as a Periodic Inspection Report, or PIR). This reviews the condition of your electrical wiring, containing an overall assessment of the safety of the wiring, observations on its condition, and a number of recommendations (in order of priority) for action (if any is required) to restore the wiring to a satisfactory condition for continued safe use.
To find a registered electrician or to check out the credentials of a recommended tradesman, visit [www.electricalcompetentperson.co.uk](http://www.electricalcompetentperson.co.uk) if in England and Wales, go to [www.certificationregister.co.uk](http://www.certificationregister.co.uk) if you are in Scotland, or [www.electricalsafetyfirst.org.uk/findanelectrician](http://www.electricalsafetyfirst.org.uk/findanelectrician) if you live in Northern Ireland.

**Scheme Operators**

**England and Wales:**
The following organisations are authorised by the Government to register electricians so they can carry out domestic electrical installation work which meets Part P of the Building Regulations.

**EC Certification Ltd (Trading as Elecsa)**
Telephone: 0845 634 9043
Website: elecsa.co.uk

**NAPIT Registration Ltd**
Telephone: 0870 444 1392
Website: napit.org.uk

**NICEIC**
Telephone: 0870 013 0382
Website: niceic.com

**Benchmark Certification Ltd**
Telephone: 0845 038 0022
Website: corgiservices.com

**British Standards Institution**
Telephone: 0845 080 9000
Website: kitemark.com

**Scotland:**
The following organisations are approved by the Scottish Government to register electricians to carry out domestic electrical installation work which meets the Building Standards system.

**NICEIC**
Telephone: 0870 013 0382
Website: niceic.com

**SELECT**
Telephone: 0131 445 5577
Website: select.org.uk

**Northern Ireland:**
There are currently no legal requirements for domestic electrical installation work in Northern Ireland. However, the following organisations do register electricians who should be competent to carry out this type of work.

**ECA**
Telephone: 020 7313 4800
Website: eca.co.uk

**NAPIT Registration Ltd**
Telephone: 0870 444 1392
Website: napit.org.uk

**NICEIC**
Telephone: 0870 013 0382
Website: niceic.com
Useful links continued

The following contacts may provide useful information if you’re in need of additional advice:

**Age UK**
Age UK aims to improve later life through information and advice.
**Telephone:** 020 7820 6770
**Email:** general@ageuklondon.org.uk
**Website:** ageuk.org.uk

**Alzheimer’s Society**
The Alzheimer’s Society works to improve the quality of life of people affected by dementia in England, Wales and Northern Ireland.
**Telephone:** 020 7423 3500
**Email:** enquiries@alzheimers.org.uk
**Website:** alzheimers.org.uk

**Carers Trust**
The Carers Trust works to improve support, services and recognition for anyone living with the challenges of caring, unpaid, for a family member or friend.
**Telephone:** 0844 800 4361
**Email:** info@carers.org
**Website:** carers.org

**Carers UK**
Carers UK is a charity set up to help people who look after an older, disabled or seriously ill family member or friend.
**Telephone:** 0808 808 7777
**Email:** iconadvice@carersuk.org
**Website:** carersuk.org

**Citizens Advice**
Provides free, confidential and impartial advice to everyone on their rights and responsibilities.
**Website:** adviceguide.org.uk

**Contact the Elderly**
Contact the Elderly is a national charity dedicated to tackling loneliness and social isolation among older people.
**Telephone:** 020 7240 0630
**Email:** info@contact-the-elderly.org.uk
**Website:** contact-the-elderly.org.uk

**Dementia UK**
Dementia UK is a national charity, committed to improving quality of life for all people affected by dementia.
**Telephone:** 0845 257 9406
**Email:** direct@dementiauk.org
**Website:** dementiauk.org

**First Stop (Elderly Accommodation Counsel)**
Service for older people, their families and carers, aiming to give them the assistance they need to live as independently and comfortably as possible.
**Telephone:** 0800 377 7070
**Email:** info@firststopadvice.org.uk
**Website:** firststopcareadvice.org.uk

**Friends of the Elderly**
Friends of the Elderly is a charity dedicated to providing support for older people.
**Telephone:** 020 7730 8263
**Email:** enquiries@fote.org.uk
**Website:** fote.org.uk
Independent Age
Provides an information and advice service for older people, their families and carers.
**Telephone:** 0800 319 6789  
**Email:** advice@independentage.org  
**Website:** independentage.org

National Care Association
The National Care Association represents the interests of carers for the elderly, people with dementia, with learning disabilities, the physically handicapped, the mentally ill, children and domiciliary care agencies.
**Telephone:** 01634 716 615  
**Email:** info@nationalcareassociation.org.uk  
**Website:** nationalcareassociation.org.uk

National Pensioners Convention
Promoting the welfare and interests of older people, as a way of securing dignity, respect and financial security in retirement.
**Telephone:** 020-7383-0388  
**Email:** info@npcuk.org  
**Website:** npcuk.org

The NBFA Assisting the Elderly
Provides support for isolated, marginalised and lonely older people on low incomes.
**Telephone:** 020 7828 0200  
**Email:** info@nbfa.org.uk  
**Website:** nbfa.org.uk

Parkinson’s UK
The UK’s Parkinson’s support and research charity.
**Telephone:** 0808 800 0303  
**Email:** hello@parkinsons.org.uk  
**Website:** parkinsons.org.uk

Royal National Institute of Blind People (RNIB)
Offering information, support and advice to those with sight loss.
**Telephone:** 0303 123 9999  
**Email:** helpline@rnib.org.uk  
**Website:** rnib.org.uk

Salvation Army
A worldwide Christian church and registered charity, offering practical support to people of all ages, backgrounds and needs.
**Telephone:** (020) 7367 4500  
**Email:** info@salvationarmy.org.uk  
**Website:** salvationarmy.org.uk

Shelter
Offers free, expert housing advice to anyone, as well as specialist legal and support services for those who need more in-depth housing help.
**Telephone:** 0808 800 4444  
**Email:** info@shelter.org.uk  
**Website:** shelter.org.uk

Stroke Association
Supports stroke survivors, families and carers.
**Telephone:** 0303 303 3100  
**Email:** info@stroke.org.uk  
**Website:** stroke.org.uk

The Silver Line
Free confidential helpline providing information, friendship and advice to older people, 24 hours a day.
**Telephone:** 0800 4 70 80 90  
**Email:** info@thesilverline.org.uk  
**Website:** thesilverline.org.uk
Find out more

For more information about electrical safety visit:

electricalsafetyfirst.org.uk