

Adapting your home: vision and hearing impairment or loss

Introduction

There are disabilities which do not affect the ability of older and disabled individuals to physically complete tasks or activities but for which equipment or adaptations can make life easier. This fact sheet provides information on how to reduce the difficulties people experience linked to vision (sight) impairment or loss and hearing impairment or loss.

Visual impairment or loss (sight)

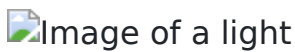
Our ability to see is reduced as we grow older, but there are also conditions which affect sight which are not linked to aging. DLF's fact sheet Choosing equipment for communication and vision provides information on some equipment to assist people with a visual impairment or who are blind.

Nationally, support is provided by the [Royal National Institute of Blind People \(RNIB\)](#), the [Royal Society for Blind Children](#) and [Sense](#) who support deafblind people. Local organisations will offer community support and help for those needing support to access education up to the age of 25. Information on how to access this support is available on your [Local Authority website](#). Condition specific charities offer advice and information on how to manage. An example is [RP Fighting Blindness](#), supporting those with Retinitis Pigmentosa. Opticians and [NHS professionals](#) can also provide information and support.

The cause of sight loss will influence the visual area affected or the level of vision differently, so please be aware that some suggestions made in this fact sheet will not be appropriate for all people.

Light and lighting

How much light and how strong this light is will affect how much people are able to see. It is not possible to prescribe an ideal light level as this will depend on the condition affecting eyesight, the task or activity, and also the level of natural light available.



There are different types of lighting available. For example, fluorescent lights provide lighting over a large area. Down lighters illuminate a defined area. Daylight bulbs or lights may provide a better light source than LED light bulbs. Where lighting is needed for a specific task or activity, such as meal preparation in the kitchen or personal care in the bathroom, lighting a specific area may assist. In the kitchen this could be by spotlights or lights installed below wall units. Some bathroom cabinets and mirrors now have lights installed which illuminate the wash basin.

Natural or sun light is often enough for some people to complete activities, but depending on the time of day or year, the light may be too bright. Closing curtains or blinds may assist.

People who find natural light difficult to cope with may prefer to apply anti-glare film on their windows to reduce glare. Non-glare lights and light bulbs are available and the [Macular Society](#) advise using light shades and a number of lights around a room rather than a single central light. Up-lighters, dimmer switches and round paper shades will also reduce the amount or level of direct light.

The surfaces light shines on to may increase glare. Matt surfaces (including paint on walls) reflect less light, and so carefully selected paint finishes, fixtures and fittings can reduce the amount of glare. Bathrooms often have white suites and use bright down lighters. For some this may create too much glare for comfort.

Installing low level LED light strips or motion sensor lights may help with navigating between rooms at night for those with low vision, as this reduces the need to locate light switches.

Bathroom lighting (as well as extractor fans and showers) may have a white pull cord; these can be difficult to locate against a light background. Adding a larger, contrasting light pull and running the cord through an 'eye' (to reduce the amount of swing) will help with locating the pull cord. Alternatively, installing bathroom switches outside of the bathroom means contrasting wall mounted switches can be used.

Colour and highlights



Using contrasting colours on doorways, light switches and sockets can help those with low vision to find them. The colours used do not necessarily have to be strong contrasts (yellow and black or red and white for example) but using two different shades of the same colour can provide enough contrast to highlight an area or feature in a room. Painting skirting boards or door frames a different colour to the wall helps define the size of a room and make the exit points stand out.

Contrasting colours and highlights in flooring can also highlight the changes between rooms and in floor levels such as internal steps or stairs. Colour used on the edge (or nosing) of a step highlights where the step is and can be used indoors and outside. (It is recommended that rugs are not used to provide contrast, as these can be moved and can cause trips and falls, especially for those with poor balance.)


Door furniture (handles and locks) which contrast with the door colour can help identify them, as will installing a contrasting stair rail (bannister) and grab rails if these are needed.

In the bathroom, tiles of a contrasting colour can be used to highlight the shower area, hand basin and toilet.

Surface finishes


If a home is open-plan it may be difficult to identify different areas if you are blind or have a visual impairment. Different colours and floor coverings can help with this. For example walking from a carpeted area to a wood or laminate floor would indicate to the user they are in a different area by both the texture felt underfoot and by the sound their footsteps would make.

Safety in the home

 Image of a smoke detector

Hard-wired smoke and carbon monoxide detectors remove the need for batteries to be replaced. Alarms with a voice message and siren functions are also available. Your local Fire and Rescue service are able to offer a free home assessment to advise you on the options available and how these can be funded. Further reading: [Smoke Alarms by the UK Fire Service](#).

To help prevent baths and sinks overflowing, sensors with audible alarms can be installed.

 Image of an intercom system

Intercom systems can be linked to televisions, computers, tablets etc. and if necessary integrated systems will allow operators to remotely open the entry door. Some doorbell systems can be operated by a smart phone app which can also be used remotely when away from a property.

White goods

Talking white goods such as washing machines or microwaves remove the need to use buttons to operate them. Some washing machine models can be voice controlled via a smartphone app.

Heating and lighting

Thermostats with a voice control function can assist in setting temperatures or heating programmes. A thermostat that detects or monitors light levels by detecting daylight and artificial light levels can also help with managing electricity consumption.

At the time of writing, Smart Meters accessible by those with low vision are not yet available but [RNIB](#) are working with partners to support the development of a suitable system.

Digital technology

Managing sight loss in the home may not require large scale changes and digital technology (smartphones and apps for example) can provide mainstream options to help reduce the impact of sight loss.

RNIB have produced a [beginner's guide to using mobiles and smart phones](#). In addition to smart phones, there are various 'smart speakers' on the market which will listen to voice commands and can make shopping lists, control the environment at home and are particularly useful for people with a visual impairment.

Garden and access

Ensuring that the entrance to your home is well lit will help with access. Lighting along pathways and at the door can be activated by motion sensors or when light levels are low. Strong light, including sunlight, may cast shadows which make identifying steps or the edge of a path difficult (Duffy, 2002). Colour or contrast can be used to highlight the edge of paths and steps.

Hearing impairment or loss (deafness)

The degree of hearing loss and how it affects people is different. It may be that only certain tones or noise levels can be heard or there may be total hearing loss. This means that it may be someone is unable to manage with any background noise, or they can tolerate low background noise levels. Finding what works may be a case of trial and error, but hearing loss does not always mean cutting out all background noise. Adapting a home to compensate for hearing loss may just involve simple changes or the introduction of assistive technology (devices or systems that support a person to maintain or improve their independence, safety and well-being). Reducing the noise from outside the home will assist those who are unable to hear when there is a level of background noise for example.

Windows and doors

Triple glazed windows can help keep the warmth in the home and reduce any noise from outside the property. Selecting curtains with a heavy weight fabric will further help to reduce noise levels when they are drawn closed. However, opening windows and doors during warmer weather will increase the levels of external noise coming in.

Reducing noise from other rooms (such as televisions and music) can be achieved by ensuring that doors are well-fitting and are kept shut when reducing noise levels is important.

Floor surfaces

Wooden or hard-floor surfaces can generate noise when people walk on them with their shoes on. Installing carpets reduces the level of noise. Alternatively, a simpler option may be to ask everyone to remove their shoes or use slippers when indoors. **N.B** - this may not remove the increased level of airborne noise if hard floor surfaces are used, as other sounds will also be magnified (unlike rooms where carpet is used, where sounds are 'muffled'). If your bathroom has a tiled and hard floor covering for example, the sound generated in the bathroom will be very different to other rooms in the home.

If you prefer to use hard floor surfacing, then adding rugs and soft furnishings to a room will reduce the amount of noise which is reflected back; but be aware that rugs may be a trip hazard.

Alerting devices

You can be alerted to when there's a visitor at the door, when your telephone is ringing or if there is a hazard, such as smoke or fire for example, through a range of alerting devices.

As with any device or app, it is important to check that equipment is compatible to your home set-up/device. In some cases you may need to purchase an adapter.

Doorbells

Knowing when someone is visiting can be difficult if you cannot hear a 'standard' doorbell. It is possible to have a 'hard-wired' system installed which will let you know when someone is at your door, but most doorbells (with the exception of the kits that flash the household lighting) are now wireless and thus require little installation, which can be a more cost-effective option.

Mobile doorbells are available which can have a range up to 150m. They can have a unit you carry with you or that plugs into an electric socket close by. It is possible to select the alert chime and/or volume on some devices. Some also include a flashing light as well as a chime alert.

For those who cannot hear a chime alert there are both flashing and vibrating doorbell systems available.

Smart doorbells use apps to link with your smartphone and often include a video link as well as an alert. These use an internet connection and can provide an alert even when you are away from your home. Alerts on some smartphones can be linked to fitness devices which provides the option of a vibration alert without you needing to have direct contact with your phone.

Telephones and accessories

If possible, mute the TV or radio or move to a quieter space when making or receiving a call. If you have a landline it may be worth placing this in a quieter area of your home away from everyday sounds such as the television, radio, washing machine and tumble

 Image of a telephone with amplifier

drier.

If you are unable to hear your phone ringing, a model with a flashing ringer to alert you of incoming calls may help. Alternatively add-on ringer alerts are available which either flash or vibrate. Some models have a charging cradle which senses incoming calls or texts and will light up to alert. Many phones are compatible with hearing aids.

Some alert systems can be linked to a number of different units such as doorbells and baby monitors, reducing the need for multiple devices.

Some telephones allow you to adjust the call volume. If this does not allow you to hear the person you are speaking to, an amplifier can be attached during the call to increase the volume (this may have to be removed to allow the handset to be replaced). One advantage of this device is that it is easily portable and can be taken to other locations such as workplaces. For corded phones an inline amplifier can be used to increase volume. An alternative to an amplifier is the use of a hands-free phone

If you wear hearing aids, the 'T' setting may be compatible with an amplifier but this is not always the case. Many phones are available from the high street which have a 'Telecoil' setting but there are also devices available with additional features or that are compatible with multiple alarm options.

If you use a mobile phone and find that you get interference, a neck loop should reduce this problem (BT.com, 2018)

Baby monitors


Baby monitors may have lights which indicate noise or movement and models are available which have a vibrating pad to ensure you wake up if your child is crying in the night.

Alarm clocks

You may choose to use your mobile phone as a vibrating alarm under your pillow, but there are clocks on the market which have louder than standard alarm tones or which have vibrating pads which can be placed under your pillow. Fitness devices can have a vibrating alarm set and some smartphone apps use Bluetooth to link with a vibrating pad (Action on Hearing Loss). Vibrating pads will need to be recharged.

Daylight or sunrise alarm clocks may be an alternative way to wake up. These gradually increase light levels in the bedroom simulating sunrise and for some are effective alarm clocks. This may be useful in family homes (or when staying in hotels) where a loud alarm could wake up other residents.

Smoke and carbon monoxide detectors

 Image of a carbon monoxide detectors

Smoke and carbon monoxide detectors are recommended for all homes, but not all the units on the market are loud enough to be audible for those with hearing loss.

Systems are available which provide different methods of alert which include a vibration pad for use under a pillow and/or a pager.

Your local [Fire and Rescue service](#) are able to offer a free home assessment to advise you on what options are available and how these can be funded.

If you wear hearing aids you may be able to hear smoke or CO2 alerts during the day but the sound level may not be loud enough if you are not wearing them, or you are asleep.

Television and music

Positioning your TV in a place where light cannot create glare will assist you in seeing the screen and/or view the sub-titles clearly

If you use headphones, increase the volume gradually until you find a level you can comfortably hear at. N.B - excessive volume can cause hearing loss. NHS Choices (2018) advise that if you do use headphones for long periods, to take them off for at least five minutes in every hour.

Home/domestic loop systems allow those using hearing aids to use the 'T' setting to increase clarity and volume.

Headphone jacks on TVs can allow you to plug in and pair up wireless headphones, media streamers, and Bluetooth systems.

Provision of equipment

There are a few options available for funding of equipment and minor adaptations; this can vary across the UK. We provide an overview of the options available here, but it is worthwhile checking what arrangements are in place locally.

In England, if you are assessed as requiring preventative intervention, **equipment under £1000** would be free of charge to you (Department of Health 2014, section 2.9). In Scotland, Local Authorities make their own arrangements for provision of minor adaptations and details can be accessed via your [Council website](#). If the equipment or adaptation costs **more than £1000**, you may have to apply for a Disabled Facility Grant (Mandelstam 2016).

Money Helper has some useful information about [funding for adaptations](#).

It is recommended that you seek advice from an occupational therapist before considering which equipment is suitable to you. You may be entitled to an assessment by a [Local Authority Social Services Occupational Therapist](#). Alternatively a list of independent Occupational Therapists can be found on [The Royal College of Occupational Therapists' website](#).

Private purchase

If you need advice before you buy, contact your local equipment demonstration centre where you would have the opportunity to try out a range of equipment. There are several of these around the country where you can go for impartial advice. Your local authority will also be able to supply information about where your nearest centre is located. Also Disabled Living Centres and some retailers have showrooms which have areas set up so you can try out items of equipment to see if they will suit you before you commit to making a purchase.

If you are unsure if you can afford the equipment or any of the associated costs, requesting an assessment or advice from an Occupational Therapist or local well-being service (local areas may have different titles for support services) will help with decision-making. It may be that another way of accessing equipment is more suitable for you.

Also consider if you can afford a service contract for more complex items of equipment. These may seem expensive at first but in the long run call out costs or replacements may prove to be costly. Some items such as hoists and slings need to be 'LOLER' (Lifting Operations and Lifting Equipment Regulations, 1998) checked. This is because they are used to move people mechanically and these checks are a legal requirement every six months. Others with moving parts or electrics will have a service schedule recommended by the manufacturer which is included in the instruction manual.

Before purchasing, look for a sales company that belongs to a trade association, such as the [British Healthcare Trades Association \(BHTA\)](#). BHTA members have signed up to a code of practice governing standards of customer service (further details are given in the Useful organisations and resources section).

Some suppliers will fit equipment, but some is sold 'supply only'. Finding a tradesman to fit items may not be easy. There may be a local arrangement for fitting small items such as a care and repair service or Home Improvement Agency or there may be a list of 'trusted traders' provided. Websites such as [Checkatrade](#) provide feedback from previous customers which can help you find a reputable service provider and [Trading Standards](#) may be able to advise if there are concerns over a company you are considering using.

VAT exempt purchases

Equipment which is specifically designed for those with disabilities may be purchased 'VAT free'. N.B - this is not claimed back via the personal tax system / HMRC, but during your purchase. If you have purchased something which should have been VAT free, it is not possible to claim this back from the supplier or HMRC.

Equipment suppliers may have the VAT exemption form on their website or you can download a general form from the [Government website](#). You will need to fill in a form for each supplier you use, but you will only need to do this for the first purchase with them.

Disabled Facilities Grants (DFGs)

A local authority Disabled Facilities Grant, often referred to as a DFG, may be available for essential home adaptations for you as a disabled person, if they are deemed 'necessary to meet your needs' and the work is 'reasonable and practical'. This can include extensions and structural work to accommodate fixed hoists, stairlifts, downstairs bathrooms, shower units etc. If this type of adaptation is needed, a local occupational therapist will come to assess your needs and then contact the relevant council departments. The occupational therapist's recommendations are taken as evidence that the work proposed is appropriate and meets all the requirements for funding.

The occupational therapist will be able to explain the application process. Information is also available from your [local authority](#) and on the [Government website](#).

Disability Rights UK have some very comprehensive online information about [DFGs and other housing grants](#).

DFGs operate across England, Wales and Northern Ireland. Conditions for DFGs will vary according to the country in which you live. For details of schemes in Scotland see [Disability Information Scotland](#) and Scottish Government (2009) [Care equipment and adapting your home](#). Edinburgh: Scottish Government.

Please note that you may not receive any grant if you start work on your property before the council approves your application.

Charitable funding

If you do not have the funds to buy equipment it may be possible to request support from a charity. They will usually have criteria which they will apply, and most will not consider equipment which should be provided by the NHS or Social Services.

Some charities will only consider requests which are supported by an involved professional, usually an occupational therapist, physiotherapist or a nurse. This may require them to be present during the assessment for an item of equipment. This is to ensure that the equipment is appropriate and will not have an impact on planned treatment or rehabilitation programmes.

Equipment is not always purchased outright and gifted to you. Some items are provided on loan, either for a specified length of time, or to be returned when no longer needed or appropriate for use.

A number of charity websites that offer funding are listed here:

- [Community Care](#) - A list of charities giving grants
- [Turn2us](#) - Turn2us is a national charity that helps people in financial hardship gain access to welfare benefits, charitable grants and support services.
- [My grants](#) - Accessibility grants for disabled and older people
- [Grants for individuals](#) - The Grants for Individuals website is run by the Directory of Social Change and lets subscribers search for grants. It is intended for organisations searching for funding on behalf of individuals.

Prescriptions

Following an assessment some local authorities will issue you with prescription for the equipment that you need. This can be taken to a local retailer (usually a pharmacy or independent equipment retailer) and you can collect the equipment and begin to use it immediately. Usually there is the option to have the equipment delivered to your home if you have difficulty accessing your local retailers.

Equipment hire

If your need is short term it may be cost effective to hire equipment.

Mobility Hire for example is a national source for [mobility and assistive equipment on hire or purchase](#). They offer short or long term rental solutions to meet most requirements – equipment ranges from wheelchairs to bathroom aids.

If the equipment is required for a holiday it is advisable to look for a supplier near to your destination – they will be able to respond to any issues such as a breakdown / breakage.

NB - equipment from Social Services is provided for use at your home address and should not be used elsewhere as:

- it is assessed as suitable for use in your home and selected to work with your bath / bed / toilet type
- they will not be able to respond to breakdowns or repairs.

However, if you are permanently moving home into the area of another local authority, you can take the equipment with you if you still need to use it and it is the most cost effective solution. You will need to discuss this with the service that issued the equipment to you.

Community equipment store loan

This is available via an NHS employee (Nurse / Occupational Therapist or Physiotherapist) or via a Social Services Occupational Therapy Service.

Loans can either be short term to assist after an operation or illness or longer term to promote independence or support care-giving.

Long term loans are usually the responsibility of Social Services (Adult Social Care / Children's Services) and will be provided following an assessment by an Occupational Therapist. Straightforward items, such as raised toilet seats or bath seats and boards can be provided by an occupational therapy assistant. Arrangements vary across the UK and you may find that local arrangements allow different services to provide equipment on behalf of each other.

Also, equipment may be offered as an alternative to an adaptation. Your occupational therapist will explain why they are making this suggestion.

DLA / PIP / Attendance Allowance

Disability Living Allowance, Personal Independence Payments and Attendance Allowance are benefits available for those who need support with activities of daily living. Which of these can be claimed depends on the age of the person claiming the benefit. Information on claiming these is available from the [Government website](#) and the [Citizens Advice Bureau website](#) - this website has advice specific to each of the home nations and enabling you to check your eligibility if you are not already claiming one of these benefits.

Further advice from us

For clear, practical advice and information on **products and suppliers of daily living equipment**, please have a look at our [Living Made Easy website](#).

Another source of advice is a disabled or independent living centre where you would have the opportunity to **try out a range of equipment**. There are several of these around the country where you can go for impartial advice. Your local authority will also be able to give you details of centres in your area.