Wearing Glasses

Glasses for people with learning disabilities

Research shows 6 in 10 adults with learning disabilities need glasses to correct their vision. People with learning disabilities have the same need to wear glasses as other people. Vision isn’t just about reading, working and driving. It is about being able to understand the world around you, moving around safely and communicating with others.

504,796 adults in England or 6 out of 10 adults in England with learning disabilities have refractive error ie will need glasses.

Tens of thousands of children with learning disabilities are also affected.

It’s as important, if not more so, for people with learning disabilities to benefit from correctly prescribed glasses which fit well and are comfortable to wear. Not being able to see the world clearly is incredibly frustrating and can have a real impact on a person’s mood and behaviour.

An eye test with an optometrist is the best way to check how well someone can see. Everyone should have an eye test at least every 2 years. It’s important to remember no-one is too disabled to have an eye test. A person with learning disabilities is entitled to an eye test which meets their needs. You don’t have to be able to read or talk to have an eye test.

Optometrists use specific terms to describe why a person needs to wear glasses. This fact sheet is designed to explain those terms, as it is important both the person concerned and their supporters understand why glasses have been prescribed. After an eye test we strongly recommend the optometrist is asked for a written statement explaining why glasses have been recommended, when they should be worn and how they might help. Please see our “Feedback from my optometrist” form.
Common reasons for wearing glasses

Glasses help correct errors within the eye that prevent a person seeing clearly and in detail.

Accommodation

Accommodation is the term used to describe the eye’s ability to change focus to see objects clearly. Many people with learning disabilities are unable to ‘accommodate’ properly and may need glasses to see clearly for intermediate tasks (40-60cms from the eye), such as using a computer, and near tasks (20-40cm).

Short sightedness (myopia)

Myopia means near objects are seen clearly and distant objects are blurred. The further away objects are, the more blurred they will be. How close to the eye objects will become clear depends on the extent of the person’s short sightedness.

Myopia can be very severe in people with learning disabilities. For some people objects only become clear within five to ten centimetres of the person’s eyes. A person who is short sighted may need or choose to wear glasses just for distance use, such as television, cinema or going out. Others, especially people with severe myopia, may benefit from wearing their glasses for more general use, but may still remove them for very close activities.

Long sightedness (hypermetropia/hyperopia)

Long sightedness is when someone’s eye isn’t focusing clearly and their close vision is even more blurry than their long-distance vision. Long sightedness is more common amongst people with learning disabilities, as are problems with the eye’s ability to change focus to see objects clearly. This means long sightedness can be a more significant problem for people with learning disabilities than for others.

Some people who are long sighted will need or choose to wear glasses only for close work, others for constant use.
Glasses for near vision

Glasses for near vision are often described as reading glasses. However, this term can be misleading as just because someone does not read, it does not mean they do not need reading glasses. Glasses for near tasks can help with writing, drawing, doing puzzles, crafts, recognising faces and eating a meal, so they should be considered for all people who need them.

Presbyopia

Presbyopia is the normal ageing process of the eye; something we all experience from age 40 to 45 onwards but which can start much earlier for some people with learning disabilities. As we grow older most of us struggle to read at arm’s length. This is when we start to wear near vision glasses, bifocals or varifocals.

As people with learning disabilities age, they too will experience deterioration in their vision. Supporters should look out for signs of eyesight worsening with age and ensure people are encouraged to get regular eye tests.

Having 2 pairs of glasses

Some people need a one lens (prescription) for near vision and another for distance vision. This problem can be solved by having 2 pairs of glasses. It is important both pairs of glasses, and glasses cases, are clearly labelled so there is no confusion. People with learning disabilities may need support with this and to be reminded to take both pairs of glasses when they go out. We also have some pictures which can be stuck on glasses cases. Find out more in our easy read factsheets “Getting new glasses” and “Wearing glasses”.

Bifocals and varifocals

Some people prefer a single pair of glasses. Bifocals have a lens of a certain strength in the upper section for distance vision and a different power in the lower section for near vision. Varifocals are similar but there is a gradual change between the upper and lower section of the lens. Some people can find it difficult to get used to wearing bifocals and varifocals and may be better off having two separate pairs of glasses.

Astigmatism

Astigmatism causes distorted vision because the curved front surface of the eye (the cornea) is misshapen, shape more like a rugby ball than a football. This condition can occur alone or, more commonly, in addition to short sightedness and long sightedness.

The eye is more powerful in one direction than the other, so that objects held in different positions are focused differently. This leads to parts of the object appearing blurred.

A person with a high amount of astigmatism will benefit from wearing glasses for all tasks. However, glasses to correct severe astigmatism can lead to images being distorted and are more difficult to get used to than glasses that correct short sightedness or long sightedness.
Choosing glasses

After your eye test, if you need glasses your optometrist will give you a prescription. You can take this prescription to another optician to get your glasses, but this can sometimes cause complications.

Choosing glasses is very important. If possible, the person with learning disabilities should be involved in this choice as they are more likely to wear glasses they are happy with.

While no-one wants to spend more than is necessary, remember the cheapest pair of glasses may not be the most comfortable or attractive or the person may not want to wear them! Some people are entitled to receive a voucher towards the cost of their glasses. You will need to show the optometrist proof of your entitlement. For more information, visit the NHS Choices website - www.nhs.uk/pages/home.aspx

It’s important to choose glasses that fit well and best meet the person’s needs. A dispensing optician is the best person to help and advise on the most appropriate glasses. Some glasses can be adjusted for unusually shaped faces, for example frames designed for people who have Down’s Syndrome who often have a very low nose bridge and glasses which come with curl sides or head straps. There are also ranges of very flexible and strong frames for people who may take off and throw glasses regularly.

Often larger frames are good as they don’t restrict vision, but in the case of some higher prescriptions this might make glasses uncomfortably heavy. Special consideration also needs to be made when choosing glasses for people with unusual posture to ensure they are looking through the centre of their glasses lens, people who wear hearing aids, who sometimes wear a helmet or who have head rests on their wheelchair. Your optician should be able to order specialist frames.

Thinner lenses are available for strong prescriptions, but can be more expensive.

It is important to protect eyes from the sun as all glasses absorb harmful UV light. Prescription sunglasses may be the most comfortable option in bright sunlight, but are not usually available on the NHS. Wearing a peaked sunhat can help.

Remember to tell the person the glasses they try on in the optometrist’s showroom do not have the prescribed lens in them.
Fitting and wearing glasses

Fitting glasses

It is important that glasses fit properly, if they are uncomfortable, they are more likely to be rejected.

Glasses must fit on the nose, not slide up or down. Some people with small, flat noses may have problems if they have heavy lenses as these may pull the glasses down their face.

The arms of the glasses must fit on ears and not hurt them. It is important to check that people don’t have skin problems on or around their ears.

The arms of the glasses must not cut into the side of a person’s face.

When the new glasses are collected, it is vital that the person tries them on so the optician can check that they are suitable.

Wearing glasses

Lots of people take time to get used to new glasses - not just people with learning disabilities. Looking through glasses can feel very strange to begin with, especially if you have never worn glasses before. Sometimes the optometrist will recommend a weaker lens to begin with, so the person can get used to wearing them.

Some people will not want to wear glasses and may need to be gradually introduced to wearing them – an adaptation programme may help. Others may need support to wear their glasses in a range of different environments, such as at a day service, college or work. Information on when glasses should be worn needs to be shared with different carers and supporters so they can offer the correct support.
**An adaptation programme**

This programme is designed to introduce the person to the new sensations of wearing glasses gradually and in a positive way. It is best not to start until you are certain the glasses fit well and are comfortable.

Choose an activity the person enjoys and one for which the glasses will help. If they are short sighted, glasses improve distance vision, so the activity may be watching TV. If the person is long sighted, the greatest benefit will be for near tasks like drawing, looking at magazines, family photographs, or enjoying a meal.

The activity chosen should be safe and not involve any risk to the person who may have initial problems in judging depth or distance (for example activities on the move). Put the glasses on at the start of the activity and make the activity very short at first. If the person takes the glasses off, simply stop the activity without comment, if appropriate. Alternatively, ask the person to put the glasses back on for a short time with lots of encouragement.

Persevere slowly: increase the length of time, and/or introduce a second “glasses wearing” activity. Don’t worry if it takes a long time; it can take a while for new glasses to become part of a person’s daily routine. Good support will promote a lifelong habit of wearing glasses giving the person the benefit of good vision.

Remember the ultimate choice of whether to wear the glasses or not has to lie with the individual. Although we believe improved vision improves quality of life, it is unlikely an adult will do harm by rejecting glasses. If you are concerned about long-term consequences discuss this with the optometrist.

A strap can be used to keep glasses on, but this option should only be used with the consent of the person.

**Taking care of glasses**

It is important glasses are cleaned regularly as the lenses quickly get dirty! Glasses should be cleaned using the soft cloth provided with the glasses case.

When putting glasses down, do not put the lenses face down as this can scratch them.

Glasses and nose pads may need to be adjusted regularly to ensure they continue to fit. Nose pads can get brown and mucky-looking and may need to be replaced. Opticians are usually happy to make adjustments without any charge.

Although there is no entitlement under the NHS to provide a spare pair of glasses if they become damaged, if a person is reliant on glasses, it may be
best to buy a spare pair as a long wait to have the main pair repaired could cause distress.

Some people will be more likely to break their glasses (intentionally or accidentally), and may benefit from ‘unbreakable’ flexible frames. These frames cost more but work well for anyone likely to throw, damage or accidentally break their glasses.

**Ongoing support with wearing glasses**

It is recommended information about why a person wears glasses is kept in a relevant place, such as their Health Action Plan or SeeAbility’s Vision Passport.

Any details about glasses maintenance should be included in a person’s daily routine, such as regular cleaning after meals or after an activity like sport or gardening.

If the person is a wheelchair user, take care to ensure they are not forced to face directly into bright light or sunlight as this could be very uncomfortable and potentially sight threatening.

People who have worn glasses all their life may not appreciate just how difficult it might be for someone to become familiar with the feeling and effect of wearing glasses for the first time. Similarly, supporters who have not worn glasses before should not underestimate how disorientating it can be for some people to wear glasses.

If the person has difficulties wearing their glasses at any time, pop into the opticians to check everything is OK with the glasses. Our eyesight can change and this can be a sign the glasses are not as effective as before and a new prescription may be needed. Regular eye tests will help to minimise any problems.
Prescriptions for glasses

Understanding prescriptions for glasses

The abbreviations and numbers used by optometrists when writing a prescription are difficult for a lay person to understand. Here we’ve explained the most commonly used terms.

R: right eye  L: left eye

sph or sphere: the number for how long sighted (hyperopic) or short sighted (myopic) you are

A plus/positive number means you are long sighted (hyperopic).
A negative/minus number shows you are myopic (short sighted).

cyl or cylinder: this describes the shape of your eye. It measures how oval your eye is, which indicates how much astigmatism you have. Astigmatism is when your eye is oval or rugby ball shaped, rather than round. Most people have a small amount of astigmatism, which they may not be aware of. The cyl can be a plus or minus number depending on how the optometrist chooses to write it down. The larger the number, the more astigmatism you have.

axis: this is always a number between 0 and 180, and describes the angle (in degrees) at which the astigmatism is. It is important for the person who is making up the glasses to know the axis.

prism: where the front and back surfaces of the glasses lens are designed so they are inclined at an angle to one another. This helps both eyes to work together better if, for example, the person has a squint.

base: the direction in which the prism is effective - up, down, in or out.

distance: a distance prescription should be used for watching TV, driving or any activities taking place at a few metres distance. Some people may wear this prescription all the time and may not need a different prescription for other activities.

near: a near prescription should be used for close work such as reading or craft work carried out at a distance of 25-45 cm, (10-18 inches).

intermediate: this describes a prescription for work at any distance from 40 cm to 1m (16 to 40 inches), including hobbies like woodwork or using a computer.

add or addition: the part of the prescription added on to the distance prescription to enable people who need reading glasses to focus on close work. It is always written as a positive number, and is usually in the range +0.75 to +4.00. Some people with poor vision may need a stronger add, this may mean that they need to hold their reading or craft work closer to their eyes to see it clearly in focus.
Prescription examples

Everyone’s glasses prescription will look different. If you don’t understand yours, ask your optician to explain it to you.

John’s prescription

John is aged 50, and needs glasses for both distance and for close up. He wears bifocals - glasses with a small area at the bottom used for close work, and a larger area above for distance vision. His prescription could look like this:

<table>
<thead>
<tr>
<th></th>
<th>Sph</th>
<th>Cyl</th>
<th>axis</th>
<th>Prism</th>
<th>Base</th>
<th>-</th>
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</thead>
<tbody>
<tr>
<td>R</td>
<td>+4.00</td>
<td>+0.50</td>
<td>75</td>
<td>-</td>
<td>-</td>
<td>D</td>
</tr>
<tr>
<td>Add</td>
<td>+0.25</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>N</td>
</tr>
<tr>
<td>L</td>
<td>+3.50</td>
<td>+0.75</td>
<td>80</td>
<td>-</td>
<td>-</td>
<td>D</td>
</tr>
<tr>
<td>Add</td>
<td>+2.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>N</td>
</tr>
</tbody>
</table>

Recommended date of next test: April 2017
Signed: an Optometrist

His prescription could also be written:
R +4.00/+0.50x75
L +3.50/+0.75x80 Add +2.50

What this means

The positive or plus sign (+) beneath the ‘SPH’ (sphere) column means John’s eyes are long sighted (hypermetropia). Long sighted means the person sees objects far away in the distance better than up-close for reading. However, long sighted people may still have difficulty seeing far away if they have a large prescription.

John is more long sighted in his right eye with +4.00 units, than his left eye with +3.50 units. The unit is called dioptres (D).

A negative or minus sign (-) would mean the eyes are short-sighted (myopia). Short-sighted means the person sees objects up-close better than far away in the distance.

The numbers beneath the ‘CYL’ (cylinder) and ‘AXIS’ columns mean the eyes have astigmatism. Astigmatism means the surface of the eye is shaped like a rugby ball, as opposed to being shaped like a football. The ‘CYL’ can be written with a plus (+) or minus (-) sign at the beginning of the prescription, depending on how the individual optician decides to write it.
When comparing glasses prescriptions to see if there has been a change, it is important each prescription has the same sign in front of the ‘CYL’, so you are comparing like with like. John has slightly less astigmatism in his right eye with +0.50 units, than his left eye with +0.75 units. The orientation of the astigmatism is slightly different in the right eye at an axis of 75 degrees compared to an axis of 80 degrees in the left eye.

In John’s bifocals, the top part of the glasses will be +4.00/+0.50x75 in his right eye, and the area used for reading will be +2.50 stronger.

The numbers beneath the ‘Add’ mean the eyes require a different prescription to see objects clearly up-close for reading e.g. 33 cm away. John’s ‘Add’ is +2.50.

If he wanted two separate pairs of glasses he would have the following prescription:

**Distance**
- R +4.00/+0.50x75
- L +3.50/+0.75x80

**Near**
- +6.50/+0.50x75
- +6.00/+0.75x80

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**Lucy’s prescription**

Lucy aged 23 is short-sighted (myopic) and wears her glasses all the time - we know that she is short-sighted, as there is a minus sign in front of her prescription.

She has more astigmatism than John - +3.00 in the right eye and +2.50 in the left, which will contribute to her blurred vision when she doesn’t wear her glasses.

Lucy also has a weakness in one of the muscles that move the eyes. The words ‘2 base in’ in Lucy’s prescription mean her eyes need help to work together properly. Lucy needs two units of prism; this describes how the lenses are specially shaped to help Lucy’s eyes work together.

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**Prescription for: Lucy Jones**

**Address:** 18 Stratford Grove, Summertown

**Date of test:** 04 / 04 / 2016

<table>
<thead>
<tr>
<th></th>
<th>Sph</th>
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<th>axis</th>
<th>Prism</th>
<th>Base</th>
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</thead>
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<tr>
<td>R</td>
<td>-5.00</td>
<td>+3.00 x 180</td>
<td>-</td>
<td></td>
<td>2</td>
<td>D</td>
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<td>-</td>
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<td>-</td>
<td>-</td>
<td>-</td>
<td>N</td>
</tr>
<tr>
<td>L</td>
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<td>+0.25 x 175</td>
<td>80</td>
<td>-</td>
<td>-</td>
<td>D</td>
</tr>
<tr>
<td>Add</td>
<td>+2.50</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>N</td>
</tr>
</tbody>
</table>

**Recommended date of next test:** 09 / 06 / 2017

**Signed:** M. Masters

**Date:** 04 / 04 / 2016

For more information and advice on eye health please look at our other factsheets on our website: [seeability.org/looking-after-your-eyes](http://seeability.org/looking-after-your-eyes)