

# Children's eye health

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#### Overview

Being able to see clearly is important for a child's overall development. Most children have excellent sight and do not need to wear glasses. But if there are problems and these are not picked up at an early age, a child may have permanently reduced vision in one or both eyes. The earlier eye problems are picked up, the better the outcome will be.

Some children, but not all, may have vision screening at school (between the ages of four and five). However, if you have any concerns about your child's eyes, do not wait for the vision screening at school. Take your child to a local optometrist for a sight test. Some reasons to take your child for a sight test include, a family history of needing strong glasses at a young age, a squint (where the eyes are not looking in the same direction) or a lazy eye (a childhood condition where the vision does not develop properly) or if you are concerned that your child is not seeing as well as you think they should.

Children do not have to be able to read or talk to have their eyes examined. It is possible to find out whether a child has healthy eyes or needs glasses without asking them any questions. Eye examinations for children under 16 are paid for by the NHS.

#### Which children should be tested?

You should make sure your child has a full eye examination if:

- they have special needs children with special needs often have eye problems
- there is a history of a squint or lazy eye in the family, or
- people in the family needed to wear strong glasses when they were young children. Even if you do not have a family history of eye problems or have not noticed any problems it is still important to take your child for a full sight test.

## Which signs should I look out for?

It is particularly important that a child has an eye examination if you notice that:

- one eye turns in or out this may be easier to spot when the child is tired
- they rub their eyes a lot (except when they are tired, which is normal)
- they have watery eyes
- they are clumsy or have poor hand-eye co-ordination
- they avoid reading, writing or drawing
- they screw up their eyes or frown when they read or watch TV



Children do not have to be able to read or talk to have their eyes examined.

- they sit very close to the TV, or hold books or objects close to their face
- they have behaviour or concentration problems at school
- they don't do as well as they should at school
- they complain about blurred or double vision, or
- they have unexplained headaches.

Flash photography can help detect some eye problems. When looking at photos of your child, if there is a red glow in the pupil of one eye only (sometimes referred to as photographic red eye), or if you see a white colour in their pupil, you should contact your optometrist for more information. In young children this could be a sign of a very rare and serious condition.



An easy test you can do at home when your baby is more than six weeks old is to see if their eyes follow you around a room.

#### Babies

Babies can see when they are born, but their eyes don't always focus well. A baby's eyes may squint sometimes (they may not always line up with each other), but if their eyes always seem to squint this should be investigated.

Babies' eyes develop gradually. After about six weeks they should be able to follow something colourful or interesting with their eyes. They may also smile back at someone who is not using sound to get their attention.

An easy test you can do at home when your baby is more than six weeks old is to see if their eyes follow you around a room. If they don't seem to be able to focus on you properly, can't follow you and recognise your facial gestures, or if their eyes wander when they are looking at you, it could suggest a problem.

You can also try covering each of your baby's eyes in turn. If they object to having one eye covered more than the other, they may have problems seeing out of one eye. As they get older, you can start to point out objects both close up and far away. If they struggle to see the objects, contact an optometrist for advice.

# Long-sightedness (hyperopia)

To see clearly, the light coming into your eye needs to focus on the retina at the back of your eye. If your eyeball is too short (from front to back), light focuses behind the retina and this means you are long-sighted. People who are long-sighted have to work harder to focus, particularly on things that are close up, but they may still be able to see clearly.

As children's eyes are smaller than adults' eyes, it is normal for children to be long-sighted. This does not mean that they need glasses. However, if a child is very long-sighted, one eye may turn in as the child tries to focus on things. The child will need glasses to correct this and stop the eye that is turning from becoming lazy (see later). Children who are long-sighted do not normally complain that they can't see things. You may notice that they are having problems focusing or concentrating on things, particularly close up.



Children who are long-sighted do not normally complain that they can't see things.

Children who are long-sighted are used to focusing too much to see clearly. This means your optometrist may need to put some drops in your child's eyes to find out how long-sighted they are. These drops temporarily reduce the natural focusing of the eye. This allows the optometrist to get a more accurate measurement of your child's glasses prescription. The drops will make the child's pupils larger. They will also make their vision blurry for a few hours, but will return to normal after that.

## Short-sightedness (myopia)

If your eyeball is too long (from front to back), light focuses in front of the retina and this means you are short-sighted. People who are shortsighted have difficulty seeing things that are far away, such as the TV or the board at school. Children often become short-sighted when their eyes grow too much.

Children with parents who are short-sighted are more at risk of short-sightedness. We recommend that these children have their eyes examined regularly, even if the vision screening in school found that their vision was normal. This is because children's eyes change as they grow up. Both long- and short-sightedness run in families and are easily treated with glasses. Some studies show that children who spend time outdoors are less likely to be short-sighted. Encourage your child to spend time outdoors, but make sure you protect their eyes from the sun (see later).



Scientific studies have shown that children who spend time outdoors are less likely to be short-sighted.

## Astigmatism

If the front of your eye has an uneven shape, like a rugby ball, light rays focus on more than one place at the back of your eye. This uneven shape is called astigmatism, and means you don't see one clear image. This may make it hard to tell 'N' from 'H', for instance. Astigmatism often happens alongside either long- or short-sightedness. Glasses which correct this may make a child feel strange at first, although their vision with the glasses will be clear.

### Lazy eye and squint

About 2 or 3% of children have a lazy eye, clinically known as amblyopia. This may be because they have:

- one eye that is much more short- or longsighted than the other
- a squint, or
- a condition that reduces the amount of light reaching the back of the eye.

If you notice your child appears to have a squint after they are six weeks old, you should have their eyes examined by an optometrist as soon as possible. The sooner a child has treatment, the more likely they are to have good vision. It is more difficult to treat a lazy eye after the eyesight has finished developing. This is usually around the age of seven. However, it may still be possible to improve the vision in the weaker eye.

The NHS recommends that all children should have vision screening during their first year at school. This is not a full eye examination but is an important way of spotting reduced vision at an early age. The screening test is done in school, usually by a school nurse or an orthoptist (an expert in diagnosing how well the eyes move and work together). It is important because many children will not realise that they have a lazy eye, and parents may not be able to see it. If your child misses the school screening for any reason, you should take them to your local optometrist for a sight test (paid for by the NHS).



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The treatment will depend on what is causing the lazy eye.

- If the child needs glasses to correct their sight problems, the optometrist will prescribe these.
- If the child has a squint, this may be fully or partially corrected with glasses. However, some children may need an operation to straighten the eyes. This can be done as early as a few months of age.
- If the child has a lazy eye, using eye drops in the other eye, or wearing a patch over the other eye, can help them to use the lazy eye to make it see better.

If your child has a lazy eye, wearing glasses may improve their sight permanently. Your optometrist will tell you how often and when your child should wear their glasses.

#### Colour blindness

Around one in 12 men and one in 200 women has some sort of problem with their colour vision. If you think your child has a colour vision problem, or if there is a family history of colour vision problems, speak to your optometrist. There is no treatment or cure, but you can tell your child's teachers, so that they use colours appropriately.

## Protect your child's eyes from the sun

It's important to protect your child's eyes in the sun. Make sure your child's sunglasses have UV protection and carry the British Standard (BS EN ISO 12312-1:2013) or UKCA mark. You can also protect your child's eyes by making sure they wear a hat with a brim or a sun visor in bright sunlight.

## How much do eye examinations cost?

In England, Wales, and Northern Ireland the NHS pays for sight tests for children aged under 16, and those aged 16 to 18 who are in full-time education. In Scotland, the NHS pays for eye examinations for everyone. If your child needs glasses, the NHS will give you a voucher to help pay for them. This may cover the full cost of the glasses, or you can put it towards the cost of more expensive ones. You can take the voucher to any optometrist or dispensing optician (a person who sells prescription glasses). Children aged under 16 can only have their glasses dispensed by, or under the supervision of, a registered optometrist, dispensing optician or doctor. You can check if your optometrist or dispensing optician is registered with the General Optical Council by visiting optical.org.



If your child misses the school's vision screening, you should take them to your local optometrist for a sight test (paid for by the NHS).



If you have any concerns about the health of your eyes, please visit your local optometrist. Optometrists are eye health specialists.

This information should not replace advice that your optometrist or other relevant health professional gives you.

#### For more information, please talk to your local optometrist.

If you have any concerns about the health of your eyes, please visit your local optometrist. Optometrists are eye health specialists. An eye examination is a vital health check and should be part of everyone's regular health care. Visit lookafteryoureyes.org for clear and helpful information on vision and eye health issues and keeping your eyes healthy.

The College of Optometrists is the professional body for optometry. We provide qualifications, guidance and development opportunities for optometrists so that they can maintain and develop the knowledge and skills they need to deliver the highest standards of care. Membership of the College shows your optometrist's commitment to the very highest clinical, ethical and professional standards. Look for the letters MCOptom or FCOptom to see if your optometrist is a member or fellow of the College. Other letters after your optometrist's name mean they have done further training and gained extra qualifications in diagnosing and managing specific eye conditions. The qualifications are available in different subject areas such as low vision, paediatric eye care, glaucoma and macular degeneration.