

Preventing your child's short-sightedness (myopia) from getting worse

This leaflet aims to answer questions that parents or carers may have about their child's diagnosis of short-sightedness (myopia). It explains the condition and how to prevent it from getting worse. If you have any more questions, please speak to a doctor or nurse responsible for your child's care.

Causes of short-sightedness

If your child is short-sighted, their eyeball has become slightly longer and thinner than usual (elongated). This causes light to focus in front of, rather than on, the light-sensitive layer called the retina at the back of the eye. As a result, distant objects appear blurry but close-up objects are still clear.

Short-sightedness often starts during childhood. It usually advances as your child grows.

Research shows that:

- about one-third of the world's population are short-sighted
- 4 in 10 (40%) of young people who live in Europe have this eye condition

By 2025, it is estimated that over half of the world's population (52%) will be short-sighted.

Your child's risk of becoming short-sighted

There are some things that can make your child more likely to become short-sighted:

- **Family history:** If one or both parents are short-sighted, your child might have a higher risk of getting this condition.
- **Spending a lot of time reading or doing close-up work:** If your child spends too much time on close-up activities like reading or screen work, this can contribute to them becoming short-sighted.
- **Not spending enough time outdoors:** If your child does not spend enough time playing outdoors, this may make them more likely to become short-sighted.
- **Ethnicity:** Families with east Asian or south Asian backgrounds may have a higher risk of becoming short-sighted.

Tests to diagnose short-sightedness

Short-sightedness is usually diagnosed through a straightforward eye test. This involves using special tools like a retinoscope (which shines a beam of light into the eye) and lenses. The test measures how your child's eye focuses the light.

Why short-sightedness can get worse with time

As your child matures, their eyes also grow. This natural process can contribute to their short-sightedness getting worse with time. When this happens, it is called myopia progression.

There are some things that can be done to support your child's vision and prevent their short-sightedness from getting worse. This is called myopia control.

Why myopia control is important

Being very short-sighted is associated with serious eye conditions as an adult, such as:

- retinal detachment (when the retina is pulled away from its usual position at the back of the eye)
- glaucoma (when the optic nerve, which connects the eye to the brain, becomes damaged)
- cataracts (when the small transparent disc called the lens inside the eye becomes cloudy)
- myopic macular degeneration (when the macula, which is the part of the retina that helps someone to see clearly straight ahead, becomes so damaged that they lose vision)

You can take steps to prevent your child's short-sightedness from getting worse. This helps to reduce the risk of conditions that could threaten their sight later in life.

Myopia control options

Children who are short-sighted need to wear their glasses all the time. Other treatments include:

- **Special lenses in glasses:** Your child can wear special lenses in their glasses called peripheral defocus lenses to prevent their short-sightedness from getting worse. If your child uses these lenses, their peripheral (side) vision will be intentionally blurred but their central vision will stay clear.
- **Multifocal soft contact lenses:** Your child can wear special contact lenses called peripheral defocus contact lenses to prevent their short-sightedness from getting worse. If your child uses these lenses, their peripheral (side) vision will be intentionally blurred but their central vision will stay clear.
- **Orthokeratology (Ortho-K):** Your child can wear special contact lenses overnight. These lenses gently reshape the cornea (the transparent front part of the eye). They offer clear daytime vision without the need for glasses or contact lenses.
- **Atropine eye drops:** Atropine eye drops can help to slow down the rate at which your child's short-sightedness progresses. They temporarily relax the eye's ability to focus. A health professional needs to give your child these eye drops.

These treatments are not a cure for short-sightedness and do not directly reduce the symptoms. Instead, they are designed to slow down the rate at which short-sightedness advances.

At present, none of the treatments listed here are approved or available through the NHS. Some of the treatments are available through high-street opticians. If you talk to an eye care specialist, they can explain suitable options for your child's personal needs.

What you can do to help your child

As a parent or carer, you play an important role in protecting your child's vision. Here are some tips to prevent their short-sightedness from getting worse:

- **Encourage your child to spend more time outdoors:** Aim for your child to spend at least 2 hours doing outdoor activities every day, or a total of 14 hours every week. Being exposed to natural daylight helps to keep their eyes healthy.
- **Manage your child's screen time:** If your child is under 2 years old, it is best to avoid screen use. For a child between 2 and 5 years old, limit their screen time to 1 hour a day. A child between 5 and 12 years old should not spend more than 2 hours a day looking at a screen outside of school.
- **Make sure that there is good lighting for your child:** Make sure that there is good and preferably natural lighting when your child reads or does close-up tasks. Well-lit environments reduce eye strain.
- **Make sure that your child takes breaks from close-up work:** Encourage your child to take breaks after school to rest their eyes from reading or other close-up activities. Short breaks can help a lot with eye fatigue.
- **Take your child for regular eye tests:** You need to take your child for routine eye tests. If they wear glasses with up-to-date and accurate prescriptions, this will help to keep their vision healthy.

Support and more information

For more information about short-sightedness, contact your local optician and visit websites such as:

- www.nhs.uk/conditions/short-sightedness
- www.mykidsvision.org

Contact us

If you have any questions about your child's short-sightedness, please call the orthoptic answerphone and a member of the team will aim to contact you as soon as possible, **phone** 020 7188 4299, **email** gst-tr.paediatricophthalmologyenquiries@nhs.net

For more information on conditions, procedures, treatments and services offered at our hospitals, please visit **web** www.evelinalondon.nhs.uk/leaflets

Evelina London Medicines Helpline

If you have any questions or concerns about your child's medicines, please speak to the staff caring for them or contact our helpline, **phone** 020 7188 3003, Monday to Friday, 10am to 5pm **email** letstalkmedicines@gstt.nhs.uk



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