

## Glasses for Children

## Why does a child need glasses?

Children may need glasses for several reasons, some of which are different than for adults. Because a child's visual system is growing and developing, especially during the first 5-6 years of life, glasses may play an important role in ensuring normal development of vision. The main reasons a child may need glasses are:

- To provide better vision, so that a child may function better in his/her environment
- To help straighten the eyes when they are crossed or misaligned (strabismus)
- To help strengthen the vision of a weak eye (amblyopia or "lazy eye"). This may occur when there is a difference in prescription between the two eyes (<u>anisometropia</u>). For example, one eye may be normal, while the other eye may have a significant need for glasses caused by near-sightedness, far-sightedness or astigmatism.
- To provide protection for one eye if the other eye has poor vision



## How can a child be tested for glasses, especially in infancy or early childhood?

An ophthalmologist (eye M.D.) can detect the need for glasses through a complete eye exam. Typically, the pupils are dilated in order to relax the focusing muscles and obtain an accurate



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measurement. By using a special instrument, called a retinoscope, your child's ophthalmologist can arrive at an accurate prescription. The ophthalmologist will then advise parents whether there is a need for glasses, or whether the condition can be monitored.

# What are the different types of refractive errors (need for glasses) that can affect children?

#### There are 4 basic types of **<u>refractive errors</u>**:

- <u>Myopia</u> (near-sighted) This is a condition where the distance vision is blurred, but a child can usually see well for reading or other near tasks. This occurs most often in school-age children, although occasionally younger children can be affected. The prescription for glasses will indicate a minus sign before the prescription (for example, -2.00). If the myopia is slight, allowing a child to sit a little closer to the front of the classroom may be an alternative.
- Hyperopia (far-sighted) Most children are far-sighted early in life (this is normal!) and need no treatment for this because they can use their own focusing muscles to provide clear vision for both distance and near vision. Glasses are rarely needed if the far-sightedness is less than +1.00 or even +2.00. When an excessive amount of far-sightedness is present, the focusing muscles may not be able to keep the vision clear. As a result of this, problems such as crossing of the eyes, blurred vision, or discomfort may develop. A prescription for hyperopia will be preceded by a plus sign (for example, +3.00).
- <u>Astigmatism</u> Astigmatism is caused by a difference in the surface curvature of the eye. Instead of being shaped like a perfect sphere (like a basketball), the eye is shaped with a greater curve in one axis (like a football). If your child has a significant astigmatism, fine details may look blurred or distorted. Glasses that are prescribed for astigmatism have greater strength in one direction of the lens than in the opposite direction. A prescription for astigmatism will have several numbers and will look something like this: -2.00 +2.50 X 90.
- Anisometropia Some children may have a different prescription in each eye. This can create a condition called <u>amblyopia</u>, where the vision in one eye does not develop normally. Glasses (and sometimes patching or eye drops) are needed to ensure that each eye can see clearly.





## How will I ever get my child to wear glasses?

That is a question most parents ask, especially when their child is an infant or toddler. The best answer is that most young children who really need glasses will wear their glasses without a problem (happily) because they realize that the glasses improve their vision. Initially, some children may show some resistance to wearing their glasses, but it is necessary for parents to demonstrate a positive attitude. If the child does not cooperate, the doctor may prescribe eye drops in an attempt to help the child adjust to the glasses. Toddlers may wear the glasses only when they are in a good mood and reject them (and everything else) when they are not. Schoolage children may have small <u>refractive errors</u> that do not require glasses, while others may voice concern about difficulties in the classroom. Most children who have difficulty reading do not need glasses, but this can be determined during a complete eye exam.

#### Does my child need bifocals?

Children rarely need bifocals. Occasionally, children who have crossed eyes (<u>esotropia</u>) may need to have bifocals to help control the crossing. Also, children who have had <u>cataract</u> surgery usually need bifocals or reading glasses.

#### Will wearing glasses make my child's eyes worse or more dependent on them?

No. In fact, the opposite may be true. If a child does not wear the glasses prescribed, normal vision development can be adversely affected.



## What are some things I can do to help my child adjust to glasses?

Getting a good frame fit by an optician who is experienced in pediatric eyewear is of great importance. The frame should be very comfortable with the eye centered in the middle of the lens. The frame should look like it fits the child now — not one that he/she will grow into in a year (Figures 1 and 2). Lenses made of a material called polycarbonate will provide the best protection for your child because this lens material is shatterproof. Many children's frames have soft, comfort-cables that fit around the ears.

Adding a strap or silicone temple tips (also called ear grips) are simple additions that can help keep glasses in the correct position on a child's face (Figure 3). Most children will wear glasses well if the prescription is correct and should adjust to the glasses within two weeks. If your child continues to complain that "I can't see in my glasses" or constantly looks over the glasses call your physician.



Fig. 3: Temple tips help keep glasses in proper position

#### What do I do about sports and swimming now that my child needs glasses?

There are glasses specifically made for sports (recreational glasses) that are a great option. Ask your optician about prescription swim goggles. They are often not as expensive as you might think.

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