

# Your Child's Eyes

Adapted from *Caring for Your Baby and Young Child: Birth to Age 5*



Eye exams by your pediatrician are an important way to identify problems with your child's vision. Problems that are found early have a better chance of being treated successfully. Read on to find out more about your child's vision, including signs of vision problems and information on various eye conditions.

## How vision develops

A baby's vision develops very quickly during the first year of life.

- At birth babies don't have normal adult vision, but they can see.
- Newborns can respond to large shapes and faces as well as bright colors.
- By 3 to 4 months most infants can focus clearly on a wide variety of smaller objects. Some babies can even tell the difference between colors (especially red and green).
- By 4 months a baby's eyes should be straight (well aligned) and should work together to allow the development of depth perception (binocular vision).
- By 12 months a child's vision reaches normal adult levels.

Keep in mind that vision doesn't develop exactly on the same schedule in all infants, but the overall pattern of development is the same. Because visual development is so quick during the first year, early detection of visual problems is critical so that permanent visual damage doesn't occur. Because vision continues to develop even after the first year, regular eye exams by your pediatrician remain important to identify problems that may arise later in childhood.

## Warning signs for infants

(up to 1 year of age)

Babies older than 3 months should be able to follow or "track" an object, like a toy or ball, with their eyes as it moves across their field of vision. If your baby can't make steady eye contact by this time or seems unable to see, let your pediatrician know. Before 4 months of age most infants occasionally cross their eyes. However, eyes that cross all the time or one eye that turns out is usually abnormal and is another reason to seek your pediatrician's advice.

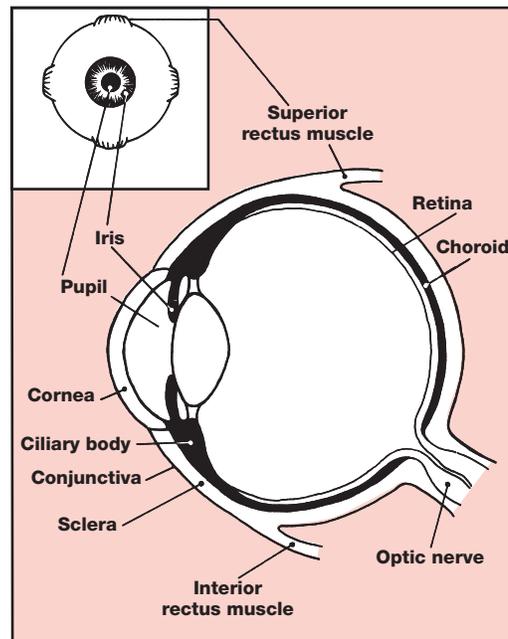
## Warning signs for preschool children

If your child's eyes become misaligned (strabismus), let your pediatrician know right away. However, vision problems such as a lazy eye (amblyopia) may have no warning signs, and your child may not complain of vision problems. Thus, it's important at this time to have your child's vision checked. There are special tests to check your child's vision.

## Warning signs at any age

No matter how old your child is, if you spot any one of the following, let your pediatrician know:

- Eyes that look crossed, turn out, or don't focus together
- White, grayish-white, or yellow-colored material in the pupil
- Eyes that flutter quickly from side-to-side or up-and-down



- Bulging eye(s)
- Persistent eye pain, itching, or discomfort
- Redness in either eye that doesn't go away in a few days
- Pus or crust in either eye
- Eyes that are always watery
- Drooping eyelid(s)
- Excessive rubbing or squinting of the eyes
- Eyes that are always sensitive to light
- Any change in the eyes from how they usually look

## When should your child's eyes be checked?

Vision screening is a very important way to identify vision problems. During an exam the doctor looks for eye disease and checks to see if the eyes are working properly. Children with a family history of childhood vision problems are more likely to have eye problems themselves.

The American Academy of Ophthalmology and the American Academy of Pediatrics recommend that children have their eyes checked by a pediatrician at the following ages:

### Newborn.

All infants before discharge from the hospital should have their eyes checked in the newborn nursery for infections, defects, cataracts, or glaucoma. This is especially true for premature infants, infants who were given oxygen, and infants with multiple medical problems.

### By 6 months of age.

Pediatricians should screen infants at their well-baby visits to check for proper eye health, vision development, and alignment of the eyes.

### **At 3 to 4 years of age.**

All children should have their eyes and vision checked for any abnormalities that may cause problems with later development.

### **At 5 years of age and older.**

Your pediatrician should check your child's vision in each eye separately every year. If a problem is found during routine eye exams, your pediatrician may have your child see an eye doctor trained and experienced in the care of children's eye problems. Your pediatrician can advise you on eye doctors in your area.

## **Learning disabilities**

Learning disabilities are quite common in childhood years and have many causes. The eyes are often suspected but are almost never the cause of learning problems. So-called vision therapy is unlikely to improve a learning disability. Thus, your pediatrician may refer your child for an evaluation by an educational specialist to find the exact cause.

## **Specific eye problems**

### **Astigmatism.**

An irregularly shaped cornea that can cause blurred vision. It's often treated with glasses if it causes blurred vision.

### **Blepharitis (swollen eyelids).**

An inflammation in the oily glands of the eyelid. This usually results in swollen eyelids and excessive crusting of the eyelashes. It's usually treated with warm compresses and washing the eyelids with baby shampoo. Antibiotics may be needed if there's an infection.

### **Blocked tear ducts.**

In some infants the eyes overflow with tears and collect mucus. Gentle massage of the tear duct can help relieve the blockage. If that doesn't work, a tear duct probing procedure or surgery may be needed.

### **Cataract.**

A clouding of the lens of the eye. Most cataracts must be surgically removed. Cataracts in infants and children are rare and are usually not related to cataracts in adults.

### **Chalazion.**

A firm, painless bump on the eyelid due to a blocked oil gland. It may resolve on its own or be treated with eye drops or warm compresses. In some cases, surgery may be needed.

### **Corneal abrasion (scratched cornea).**

A scratch of the front surface of the eye (the cornea). It can be very painful, and the eyes usually tear and are also sensitive to light. It's usually treated with antibiotic drops or ointment and occasionally an eye patch.

### **Droopy eyelids (ptosis).**

When the eyelids are not as open as they should be. This is caused by weakness in the muscle that opens the eyelid. If severe, it can interfere with vision and need surgery.

### **Falsely misaligned eyes (pseudostabismus).**

Caused by a wide nasal bridge or extra folds of skin between the nose and eye—the eyes look cross-eyed.

### **Farsightedness (hyperopia).**

Difficulty seeing close objects. A small degree of farsightedness is normal in infants and children. If it becomes severe or causes the eyes to cross, glasses are needed.

### **Glaucoma.**

A condition in which the pressure inside the eye is too high. If left untreated, glaucoma can cause blindness. Warning signs are extreme sensitivity to light, tearing, persistent pain, an enlarged eye, cloudy cornea, and lid spasm. Glaucoma in childhood usually needs surgery.

### **Lazy eye (amblyopia).**

Reduced vision from lack of use in an otherwise normal eye. It's often caused by poor focusing or misalignment of the eyes. It's usually treated by applying a patch or special eye drops to the "good" eye. Other treatments commonly include glasses or eye muscle surgery for strabismus.

### **Misaligned eyes (strabismus).**

When one eye turns inward, upward, downward, or outward. This is caused by eye muscles that are too tight. It's usually treated with glasses or, in some cases, surgery.

### **Nearsightedness (myopia).**

Difficulty seeing far away objects. Nearsightedness is very rare in babies, but becomes more common in school-aged children. Glasses are used to correct blurred distance vision. Once nearsighted, children do not usually outgrow the condition.

### **Pinkeye (conjunctivitis).**

A reddening of the white part of the eye, usually due to infections, allergies, or irritation. Signs include tearing, discharge, and the feeling that there's something in the eye. Depending on its cause, pinkeye is often treated with eye drops or ointment. Frequent hand washing can limit the spread of eye infections to other family members and classmates.

### **Stye (hordeolum).**

A painful, red bump on the eyelid due to an infected oil or sweat gland. It's often treated with warm compresses and antibiotic drops or ointment.

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

From your doctor

