

## WARNING SIGNS IN CHILDRENS' EYES

### Guidelines for childhood eye exams:

The American Academy of Pediatrics and the American Association for Pediatric Ophthalmology and Strabismus agree that all children should have their eyes examined by the pediatric- or family doctor: 1) at birth, 2) at regular check-ups with vision testing using verbal charts before school. We feel that at least one thorough exam by an eye doctor including cycloplegic refraction and dilated retina check should be done by the age of five even in children who do not show signs of eye problems. Since brain visual development can be seriously and adversely affected before the age of 8-10 years ("Amblyopia") early and persistent intervention is critical for 5% of children. Urgent or more frequent eye exams are indicated if you observe one or more of the following **Warning Signs** in a child.

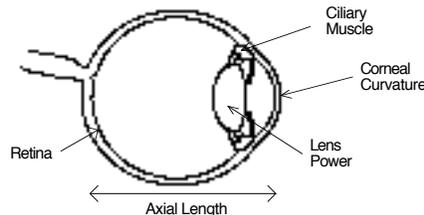
- Lack of fixation:** After a few weeks of age, a normal baby should be able to look at your face and follow your eyes as you move from side to side. Even before that, a normal baby will quickly close both eyes when exposed to bright light.
- Jerking Eye Movements:** As a baby begins to fix his/her eyes, they should rest steadily without jerking side-to side or up-and-down. Such persistent or intermittent eye movements called "nystagmus" can indicate brain dysfunction or subnormal visual potential.
- White Pupil:** The pupil is the hole in the iris through which light enters the back of the eye and the retina. Under normal conditions, the pupil is black or it may appear reddish-orange in photographs. A white or discolored pupil can indicate a cataract or a life-threatening tumor in the eye.
- Slow or unequal pupils:** The pupils should be round, roughly equal in size and each should get larger in the dark and smaller in bright light. Irregular pupils can indicate serious eye disease or abnormal development. Unequal or slowly reacting pupils may indicate retinal or brain disease.
- Excess Sensitivity to light:** Called "photophobia," this can be caused by harmful inflammation in or on the eye or by an abnormally functioning retina.
- Redness:** Inflammation and infection in or on the eye will cause the tiny blood vessels overlying the white sclera to dilate causing an injected, red appearance. A broken blood vessel on the eye ball may make a bright red blood blister which is usually not as serious unless caused by trauma.
- Drooping Lid:** Abnormalities of the brain or tissue around the eye ball may cause one or both lids to droop (ptosis) or retract. Other children have a drooping lid at birth which may cause vision loss secondary to astigmatism.
- Misalignment:** Days to weeks after birth, a baby's eyes should be aligned (most of the time) on interesting objects, near and far, left and right, and up and down. Any persistent misalignment called "strabismus" will usually cause vision loss (amblyopia) and may be due to nerve or brain problems.
- Head Tilt:** When a baby's eyes are better aligned in one direction than another, a head tilt or head turn may result.
- Swelling around the eyelids:** Lumps, changes in color or swelling around the eyes and lids can be caused by tumors or life-threatening infections.
- Pain or headache:** Inflammation or high pressure in an eye can cause pain ranging from a dull ache to excruciating and radiating back to the rest of the head. In addition, the eyes may be involved in the cause or diagnosis of some other kinds of headache.
- Excess tearing:** Blocked tear ducts are not the only cause of excess tearing. Serious inflammations, blurry vision and nerve problems are also possible reasons.
- Squinting or frequent blinking:** Partially closed eyelids may produce temporary improvement in some types of blurry or double vision. Frequent blinking may occur with eye inflammation or allergies or with neurologic disorders.
- Moving close to see:** A baby's eyes can focus much closer than an adult's. However, children who persistently sit close to the TV, or who hold objects close to their eyes may have significant visual impairment.
- Large Eyes:** Vision-robbing congenital glaucoma may cause very large eyes.

Child's Name: \_\_\_\_\_

### PLEASE CHECK (✓) ANY WARNING SIGNS THAT APPLY TO YOUR CHILD.

When children learn to talk (age 3-4 years), the health of their eyes becomes less of a mystery. Even before that, your pediatric care giver should be able to rapidly screen even the most wiggly of infants for most of these serious problems. Preverbal and early school-aged children can also be **Photoscreened**. If parents or primary doctors remain concerned, or if the **Photoscreen** is abnormal, children should then see (visit) the eye doctor.

**REFRACTIVE ERRORS (glasses problems):** **Farsightedness** and **Nearsightedness** depend on the length of the eye, the power of the lens, the curvature of the cornea and the pull of the ciliary muscles distorting the young flexible lens. **Astigmatism** is usually due to irregular curvature of the cornea; the front of the eye is more like the side of a football than the shape of a basketball (no astigmatism). **Anisometropia** is unequal power of the eyes. **Children with large amounts of farsightedness (hyperopia), astigmatism and anisometropia are at high risk of refractive amblyopia...**if left untreated potential brain blindness in one or both eyes!



The infant eye: the cornea and lens should be capable of focusing light from near and far objects through the pupil allowing the retina to send an images from both eyes to the brain.

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