

COULD YOUR CHILD HAVE A VISION PROBLEM?

Take this simple yes or no assessment for your child. If you answer "yes" to more than one question, or your child has not seen an optometrist in over two years, it's probably time to schedule an appointment.

DOES YOUR PRE-SCHOOLER:

	Yes	No
Have an eye that ever appears to be out of proper alignment		
Tend to bump into objects		
Have red eyes or lids		
Rub eyes frequently		
Have excess tearing		
Turn or tilt head to use one eye only		
Have encrusted eyelids		
Have frequent styes		
Avoid coloring, puzzles or detailed activities		
Experience difficulty with eye-hand-body coordination		

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DOES YOUR SCHOOL-AGE CHILD:				
	Yes	No		
Lose place while reading				
Avoid close work				
Hold reading material closer than normal or shift the reading distance				
Tend to rub eyes				
Have headaches				
Turn or tilt head to use one eye only				
Make frequent reversals when reading or writing				
Use finger to maintain place when reading				
Omit or confuse small words when reading				
Consistently perform below potential				
Struggle to complete homework				

Regular eye exams, starting when your child is just six months old, by a doctor of optometry can help you be certain that your child's vision is developing normally. Since vision changes can occur without you or your child noticing them, your child should visit the optometrist at least every two years, or more frequently, if specific problems or risk factors exist. If needed, the doctor can prescribe treatment including eyeglasses, contact lenses or vision therapy.

Keep in mind, a school vision screening, while helpful, is not a substitute for a comprehensive eye examination. Schedule your child's back-in-school eye examination to make the most of a good education.



CHILDREN'S VISION

The Equation is Simple: Good Vision = Better Learning

HOW IMPORTANT IS GOOD VISION TO LEARNING?

Good vision is an important part of education. Many experts believe 80 percent of learning is done through a child's eyes. Reading, computer usage and chalkboard work are all visual tasks students perform every day. A child's eyes are always in use in the classroom. Therefore, when a child's vision is not working properly learning and class participation will suffer.

WHAT IS GOOD VISION?

Good vision includes visual acuity, eye health, visual integration and visual skills such as eye teaming, eye focusing and eye motility.

- Visual acuity the ability of the eyes to see and distinguish fine details, the clarity of vision
- Visual integration the ability to process and integrate visual information so we can understand what we see
- Eye teaming the ability of the eyes to work properly together
- Eye focusing the ability of the eyes to easily focus and shift focus to near and distant points.
- Eye motility the eyes ability to move together

WHAT ARE THE CONSEQUENCES OF UNDETECTED/UNTREATED VISION PROBLEMS?

Children with undetected vision problems are sometimes inaccurately diagnosed with attention deficit disorder (ADD) or attention deficit hyperactivity disorder (ADHD). When vision is difficult, it requires greater effort than normal leading the child to avoid close work. It may appear the child is daydreaming.

IS YOUR CHILD STRUGGLING IN CLASS?

Many children with undetected vision problems struggle in the classroom. These symptoms include:

- Trouble finishing written assignments
- · Losing their place when reading
- A short attention span when doing close work
- · Skipping words when reading
- Having greater potential than grades may indicate

InfantSEE® and VISION USA

The AOA is committed to improving the quality and availability of eye and vision care. As part of that commitment, Optometry's Charity™ - the AOA Foundation, manages public health programs to increase access to care:

InfantSEE® provides one-time, no-cost eye health and vision assessments for all babies six to 12 months of age.

Visit **www.infantsee.org** or call 888-396-EYES (3937) for more information.

VISION USA provides basic eye health and vision care services free of charge to uninsured, low-income people and their families. Call **800-766-4466,** 7 a.m. to 9 p.m., CST, Monday through Friday, for more information.





GLOSSARY OF COMMON VISION CONDITIONS

AMBLYOPIA, also known as "lazy eye," is loss or lack of development of clear vision in just one eye. The cause is the lack of use of that eye in early childhood.

ASTIGMATISM is a vision condition that causes blurred vision due either to the irregular shape of the cornea, the clear front cover of the eye, or sometimes the curvature of the lens inside the eye.

COLOR DEFICIENCY is the inability to distinguish certain shades of colors or, in more severe cases, see colors at all. Color deficiencies are almost always hereditary and affect one in 12 boys, but only one in 200 girls.

CONVERGENCE INSUFFICIENCY is an eye coordination problem in which the eyes have a tendency to drift outward when reading or doing close work.

HYPEROPIA is often called farsightedness. This vision condition occurs when distant objects are usually seen clearly, but close objects do not come into proper focus.

MYOPIA or nearsightedness is when the images of distant objects appear blurred. The eyeball is too long for the normal focusing power of the eye.

STRABISMUS is condition in which both eyes do not look at the same place at the same time. It is sometimes referred to as crossed eyes. Poor eye muscle control usually causes crossed-eyes.

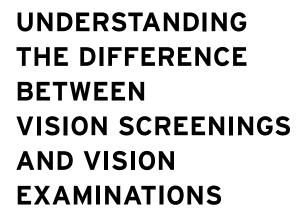
RECOMMENDED EYE EXAM SCHEDULE

PATIENT AGE	RISK FREE	AT RISK
Birth to 24 months	At 6 months of age	By 6 months of age or as recommended
2 to 5 years	At 3 years of age	At 3 years of age or as recommended
6 to 18 years	Before first grade and every two years thereafter	Annually or as recommended

Children considered at risk for the development of eye and vision problems may need additional testing or more frequent re-evaluation. A doctor of optometry can discuss potential risk factors with you.

Start the school year off right, schedule a comprehensive eye exam for your child. For more information on children's vision issues or to find a local optometrist, visit www.aoa.org.





Vision Screenings - See What Your Child May be Missing:

Vision screening programs are intended to help identify children with eye or vision problems that threaten sight or impair their ability to develop and learn normally. However, vision screenings are a limited process and cannot be used to diagnose an eye or vision problem, but rather to indicate a potential need for further evaluation.

- Many vision screenings test for visual acuity only. Even the most sophisticated vision screening tools, administered by the most highly trained screeners, miss one-third of children with eye or vision disorders, according to a study funded by the National Eye Institute. A child may be able to see letters 20 feet away but that does not tell whether his eyes are able to work together to read materials 12 inches away, or if there is an eye health problem or vision perception problem.
- There may be no set standards and criteria for passing a vision screening. Results can be determined arbitrarily.
- A vision screening can give a parent a false sense of security. When the report indicates that a child sees 20/20, parents often assume that no further testing is needed and fail to ever take the child for a comprehensive eye examination.
- Most screening facilities lack equipment to screen young children. Vision screening using traditional methods by non-eyecare professionals is extremely difficult for children less than 4 years of age.





- Amblyopia (poor eyesight in one eye, sometimes known as "lazy eye") is often missed if the eyes are aligned. Children have been known to peek with the better seeing eye, and escape detection of amblyopia.
- According to a study published by the American Academy of Pediatrics, vision screenings were not attempted on more than 60 percent of the three-year old children in pediatricians' offices. They found that in general, the younger the child, the less likely it was that vision screening was attempted. (An attempt was defined as 10 or more seconds spent trying to get the child to cooperate with vision screening.)
- Less than 50% of the children identified as needing professional eye and vision care ever receive that care, and of those who do, the average time between the screening and the examination is 18 months.

Vision Examinations - More Than Meets the Eye:

Comprehensive eye and vision examinations can only be conducted by an eye doctor with the specialized training needed to make a definitive diagnosis and prescribe treatment. Often, specialized equipment and procedures, which are not available as part of a vision screening program, are needed to adequately evaluate a child's eyes and vision status.

Clearly, the prevalence of vision disorders present in pre-school age children and the limitations of vision screening programs support the need for and value of early detection through a comprehensive eye and vision examination by an eye doctor.

Below are essential elements of a comprehensive eye examination used to insure that learning is maximized through good vision.

• The refractive state of the visual system, such as nearsightedness, farsightedness, or astigmatism is determined.

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- Visual acuity is measured, so that the student can read, work on the computer and see the board.
- Focusing or accommodation is an important skill that is tested. The eyes must be able to focus on the object at which they are aimed and easily shift focus from one object to another. This allows the child to move attention from a book or paper to the chalkboard and back. Sustained focus affects the ability to read or write for longer periods of time.
- The optometrist evaluates visual alignment and ocular motility, which means the muscles aiming each eye converge so that both eyes are aimed at the same object, refining depth perception.
- Binocular fusion (eye teaming) skills are assessed. These skills are critical to coordinate and align the eyes precisely so the brain can fuse the pictures it receives from each eye into a single image to enable the child to work comfortably and efficiently for prolonged periods of time.
- Eye tracking skills are tested to determine if the child can track across a page accurately and efficiently while reading, and can copy material quickly and easily from the chalkboard or another piece of paper.
- Testing of color vision prior to school age is conducted since a large part of the early educational process involves the use of color identification and discrimination.
- Ocular health is determined by examining the structures of the eye.
- Elements of visual perception, such as depth (3-D) clues used to interpret and understand visual information, are important visual functions that are typically investigated during a comprehensive eye exam.

