

Importance of Eye Exams for Children

Children with uncorrected vision conditions or eye health problems face many barriers in life ... academically ... socially ... and athletically. High-quality eye care can break down these barriers and help enable your children to reach their highest potential.

Vision doesn't just happen. A child's brain learns how to use eyes to see, just like it learns how to use legs to walk or a mouth to form words. The longer a vision problem goes undiagnosed and untreated, the more a child's brain learns to accommodate the vision problem.

That's why a comprehensive eye examination is so important for children. Early detection and treatment provide the very best opportunity to correct vision problems, so your child can learn to see clearly.

The first day of school is just around the corner, and most parents are busily making their way through a list of "to-dos": school clothes shopping, appointments for immunizations and physicals, and trips to the store for pencils, pens, paper and all the other "must-haves" for the classroom—all with the intention of getting students *Ready for School*.

Is a visit to the optometrist on your list? A comprehensive eye examination for students is one of the most important "to-dos" and yet one that is often overlooked. Without an eye exam, many children have vision problems that remain undiagnosed, and may even be misdiagnosed as a learning disorder. Eighty percent of all learning is performed through vision. Make sure your child has the best possible tools to learn successfully.

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. Use of the Snellen chart (eye chart for distance) alone only identifies five percent of the vision problems in children according to the American Foundation for Vision Awareness. 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 a child reports that he is seeing 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 (although it is usually picked up if a child's eyes are crossed).
- 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 a vision screening was

attempted. (An attempt was defined as 10 or more seconds spent trying to get the child to cooperate with a vision screening.)

- Fewer 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 vision examinations can only be conducted by an eye care professional 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 preschool 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.

- Visual acuity is measured at several distances so that the student can comfortably and efficiently read, work on the computer or 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 doctor 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.
- 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.
- Eye-hand coordination, critical for handwriting, throwing a ball or playing an instrument, and visual perception, used to interpret and understand visual information like form, size, orientation, texture and color perception, are both important visual functions that are investigated during a comprehensive eye examination.
- Ocular health is determined by examining the structures of the eye