

Vision and Hearing Screening

Hearing and vision screenings allow for early detection and prompt treatment of important health problems. In accordance with Maryland law, students in first grade, eighth grade, and entering the school system for the first time are screened for potential vision or hearing difficulties unless there is written documentation of testing within the past year from a vision or hearing specialist. Students referred by a parent or teacher will also be screened.

Important Information About Children's Vision

1. What is the difference between a vision screening and a comprehensive eye examination?

A vision screening is not a substitute for a comprehensive eye exam. A vision screening can be performed by a school nurse or vision care technician and includes all or some of the following tests:

- Visual acuity measurement
- Depth perception
- Eye muscle balance
- Photoscreening

The goal of school vision screening programs is to identify children with vision problems who are or may be at risk for vision problems, that if not detected early, can lead to permanent vision loss. Screenings are not diagnostic, but a screening can determine if a comprehensive eye examination is needed.

Comprehensive eye examinations can be performed only by an eye doctor (ophthalmologist or an optometrist). Comprehensive eye examinations include:

- Medical and family history
- Visual acuity measurement
- Depth perception
- Eye muscle balance
- Pupil function and assessment of peripheral vision
- Structural eye health evaluation including dilation with drops
- Refraction to determine the need for glasses

2. Which at-risk groups are encouraged to have a comprehensive eye examination by an ophthalmologist or optometrist? At-risk groups include those:

- Who failed a vision screening or who cannot be screened at school;
- Whose parents/guardians, caregivers, school staff are concerned that their child or student has a vision related problem or is not reaching age appropriate developmental or academic milestones;
- With known neurodevelopmental disorders (motor abnormalities such as cerebral palsy, cognitive impairment, autism spectrum disorder, hearing impairment, or speech delay);
- With systemic or genetic diseases known to have associated eye disorders (e.g. diabetes, juvenile idiopathic arthritis);
- Using medications known to have ocular side effects;
- With a history of premature birth of less than 32 weeks or low birth weight of less than 3.3 pounds who has not already had a normal comprehensive eye examination;

- With a known family history of strabismus, amblyopia, or high refractive error in a parent, sibling, or child.

3. What are warning signs, symptoms, risk factors, and behavioral problems associated with vision disorders or eye conditions that should be evaluated by a primary care physician, optometrist, or ophthalmologist?

- Squinting or frowning when trying to focus
- Tilting or turning of head to one side most of the time
- Complaints of blurred or double vision
- Watery, red eyes or complaints of burning, scratching, or itchy eyes
- Closing or covering one eye when doing near work
- Needing to hold reading material close to their face or closer to board
- Headache, nausea, or dizziness
- Strabismus
- Unusual sensitivity to light
- Cloudiness or haze of cornea
- Unequal or irregular pupils
- Excessive blinking
- Eyelid lesion or infection
- White pupil
- Signs of eye injury

4. What are the potential impacts of untreated visual impairments?

Visual functioning is a strong predictor of academic performance in school-age children¹. Untreated vision problems may interfere with learning and can lead to permanent vision loss. Early detection and treatment of vision problems are critical for optimal eye health and academic success. Students with undiagnosed vision disorders or eye conditions may exhibit problems with attentiveness, behavior in the classroom, or behavior at play.

5. What are the most common vision problems in children?

The vast majority of vision problems in students are treatable, the most common of which are:

- Refractive errors (the need for glasses)
- Strabismus (eye misalignment)
- Amblyopia (lazy eye)

There are less common and more difficult to treat medical eye conditions which include, but are not limited to:

- Nystagmus
- Optic atrophy
- Cortical visual impairment
- Glaucoma
- Optic nerve hypoplasia
- Retinopathy of prematurity

¹ Prevent Blindness: <https://preventblindness.org/childrens-vision-and-eye-health>