



American Academy of Optometry Policy Statement

Childhood Vision Screening

Early detection and treatment of childhood vision disorders are essential in ensuring healthy vision for our nation's children and can be optimally achieved through a continuum of care consisting of both vision screenings and comprehensive eye examinations. Because visual disorders including significant refractive error may develop at any age and some visual disorders may have more severe consequences at one age than another, children should be evaluated at regular intervals throughout childhood. Any indication of a vision disorder or suspicion of any eye problem by a parent, teacher, or health care provider warrants a referral for a comprehensive eye examination by an eye care professional.

While a comprehensive eye examination by an optometrist or ophthalmologist is the "gold standard" of eye care, not all children have ready access to professional eye examinations for various reasons including education and language barriers, health literacy, cost, geographic access, immigration status, and transportation challenges.¹ Hence, vision screenings can serve a useful role by reaching and identifying those in need of professional eye care through schools, community centers, or medical homes. Critical to a successful screening program is effective follow up to ensure that evaluation and treatment by an eye care professional is received in a timely manner.²

Vision screening methodology must be evidence-based to minimize under- and over-referrals. The screening procedures should have high sensitivity and specificity for identifying the targeted vision problems based on data from large-scale screenings performed by comparable screening personnel in typical screening settings, in which all children who pass and fail the screenings also receive comprehensive eye examinations conducted by eye care professionals.³

Vision screenings however, do not replace comprehensive eye examinations and cannot be expected to detect all vision and eye health problems. In addition, a comprehensive eye examination is necessary for an eye care provider to make a formal diagnosis and initiate treatment. Parents, health care providers, and community leaders need to be informed of the differences between vision screenings and comprehensive eye examinations and the role that each plays. Public education is also needed because vision problems are often not obvious to the child or parents yet these problems have a potential impact on a child's visual development and learning.

While vision screenings complement comprehensive eye examinations, children with readily recognized eye abnormalities (e.g., strabismus, leukocoria, ptosis) and those at high risk for vision problems should forgo vision screenings and be sent directly for a comprehensive eye



exam. Children with one or more of the following are considered to be at increased risk for vision disorders:

- Neurodevelopmental or genetic disorders such as Down syndrome, cerebral palsy, autism spectrum disorders, attention-deficit/hyperactivity disorder (ADHD), hearing impairment, cognitive impairment, or speech delay⁴⁻⁸
- Systemic diseases or use of medications known to cause vision disorders
- Previously diagnosed visual conditions by an eye care professional
- First-degree family history of vision disorders such as strabismus, amblyopia, or significant refractive error
- Learning difficulties with or without an Individualized Education Program (IEP)
- Observed symptoms such as squinting, closing one eye, rubbing eyes, etc.
- Parental or teacher concerns of a possible eye problem
- History of premature birth or low birthweight^{3,9-11}

In addition to comprehensive eye exams, vision screenings should be available throughout childhood including birth to < 3 years, preschool, and school-aged years. Screenings at all ages should be designed to detect significant refractive error, amblyopia, strabismus, and observable external ocular disease. Procedures to detect reduced visual function at near as well as to identify color vision deficits in boys should be considered for screenings of preschool and school-aged children.

In summary, in order to facilitate early detection of children's vision problems and meet the vision needs of all children, the American Academy of Optometry recognizes the value of a continuum of eye care that includes both evidence-based vision screenings and access to comprehensive eye examinations by optometrists or ophthalmologists.

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