

Eye-Opening Facts about Vision in Children

Prevalence of vision disorders in children

19 million

children worldwide are living with a vision disorder¹

1 in 20

children are at risk for permanent vision loss due to vision disorders like amblyopia²

80%

of vision disorders can be prevented or cured¹

1 in 3

American children has received eye care services before the age of six³

Common pediatric eye problems

Astigmatism
Blurred Vision

Amblyopia
Lazy Eye

Myopia
Nearsightedness

Hyperopia
Farsightedness

Strabismus
Eye Misalignment

Anisocoria
Unequal Pupil Size

Anisometropia
Unequal Refractive Power

Causes of vision impairment⁴



- Damage to the eye
- Incorrect eye shape
- Problem in the brain

Amblyopia is the #1 cause of vision loss in U.S. children.²

Signs of vision disorders^{4,5}



Red-rimmed, crusted or swollen eyelids



Closing or covering one eye



Blinking more than usual



Difficulty doing close-up work



Tilting their head



Squinting



Watering of eyes



Holding objects close to eyes



Complaints of blurry objects

Importance of early detection and treatment



Up to 10% of preschoolers and 25% of school-aged children have a vision disorder that can impact learning and quality of life.⁶

Equal input from both eyes is vital for the development of the vision system.⁷



Without early detection and treatment, a child's vision may be permanently impaired if eyes are unable to send clear image signals to the brain.⁷

Detecting vision disorders in children

Vision screenings and comprehensive eye exams are complementary methods for identifying vision disorders.³

Less than 15%

of preschool children receive comprehensive eye exams⁸

Less than 22%

of preschool children receive vision screenings⁸

Vision screenings

- First line of defense for identifying vision disorders
- Efficient and cost-effective
- Help detect amblyopia, strabismus and refractive errors
- Conducted by primary care providers, eye care professionals, school nurses and other trained laypersons
- A child should be referred to an eye care professional if they fail a vision screening test

Comprehensive eye examinations

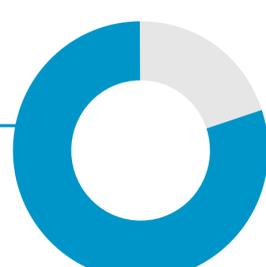
- Required for a formal diagnosis and treatment
- Pupils are dilated to allow thorough investigation of the eye
- Examine visual acuity, depth perception, eye alignment and eye movement
- Conducted by an eye care professional (optometrist or ophthalmologist)

Lifelong impact

Uncorrected vision disorders may result in:¹¹

- Impaired development
- Behavior problems
- Interference with early literacy and learning
- Permanent vision loss

80% of all learning happens visually¹⁰



How instrument-based vision screeners can help⁹

- Recommended for children who are unable to perform a visual acuity chart test
- Measure refractive errors and alignment by capturing an image of the eyes
- Detect vision disorders that may cause visual impairment
- Can be as quick and simple as taking a picture with a digital camera



What can you do?

- 1 Children between the ages of three and five years should receive a vision screening at least once to help promote healthy vision.¹²
- 2 Asymptomatic or low risk children should receive an eye exam at age three, before entering first grade and then every two years thereafter.³
- 3 High-risk children (e.g., born prematurely, family history of vision problems or eye disease, noticeable abnormalities or symptoms of decreased vision, etc.) should bypass a vision screening and be directly referred to an eye care professional.¹³

Speak with your doctor to learn more about the benefits of instrument-based vision screenings and comprehensive eye exams by an eye specialist.

Sources

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²Children's Eye Foundation. <https://www.childreneyefoundation.org/see>. Accessed January 2, 2019.

³Prevent Blindness Wisconsin. Our Vision for Children's Vision: A National Call to Action for the Advancement of Children's Vision and Eye Health. https://www.preventblindness.org/sites/default/files/national/documents/OurVisionforChildren_2010_0.pdf. Accessed January 2, 2019.

⁴Centers for Disease Control and Prevention. Facts About Vision Loss. https://www.cdc.gov/ncbddd/actearly/pdf/parents_pdfs/VisionLossFactSheet.pdf. Accessed January 2, 2019.

⁵American Association for Pediatric Ophthalmology and Strabismus. Abnormal Head Position. <https://www.aapos.org/terms/conditions/8>. Accessed January 3, 2019.

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⁸Centers for Disease Control and Prevention. Keep an Eye on Your Vision Health. <https://www.cdc.gov/features/healthyvision/index.html>. Accessed January 3, 2019.

⁹Neely, DE. American Association for Pediatric Ophthalmology and Strabismus. Pediatric Vision Screening: Guidelines for Effective and Efficient Vision Screening in Children. Updated May 31, 2016.

¹⁰Prevent Blindness Wisconsin. Vision Screening Frequently Asked Questions. <https://www.preventblindness.org/sites/default/files/Wisconsin/documents/Vision%20Screening%20FAQ.pdf>. Accessed January 15, 2019.

¹¹National Association of School Nurses. Vision and Eye Health. <https://www.nasn.org/nasn-resources/practice-topics/vision-health>. Accessed January 2, 2019.

¹²Final Update Summary: Visual Impairment in Children Ages 1-5; Screening. U.S. Preventive Services Task Force. September 2016. <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/visual-impairment-in-children-ages-1-5-screening>

¹³Prevent Blindness Wisconsin. Understanding Vision Screenings and Eye Examinations. <https://www.preventblindness.org/understanding-vision-screenings-and-eye-examinations>. Accessed January 3, 2019.