

Visual Impairments

What are visual impairments?

- Visual impairment is present when a child cannot see well enough to interact with others and participate in daily child care or school activities (at the child's developmental level).
- Low vision involves a decrease in sight (usually permanent) that interferes with a child's ability to develop fine- and gross-motor skills and language and cognitive functions. It is an impairment in vision that, even with glasses and maximal medical treatment, adversely affects a child's development.
- *Partially sighted*, *legally blind*, and *low vision* are terms used to describe the different levels of visual impairment related to a child's needs in child care or another educational setting.
 - A child who is *partially sighted* (also called *moderate low vision*, with typically 20/60–20/100 best-corrected at-a-distance visual acuity) has a visual problem that requires some special accommodations in child care and school. These children may also need glasses at an early age and an assessment for low-vision devices.
 - A child who is *legally blind* (defined as having an at-a-distance visual acuity of 20/200 or worse in the better eye) has very limited vision or a severely constricted visual field. Students who are totally legally blind learn braille or other nonvisual means that require specialized instructions. Students with a severely constricted visual field may be able to read but still need special accommodations in child care and school and with instruction in safe travel and pre-reading skills.
 - A child with *severe low vision* has visual impairment with a visual acuity of typically less than 20/400 in the better eye. Children with severe low vision can see shapes and people around them, but most everything will be blurred, even with glasses. They may require a fair amount of accommodation, intervention, and devices, and they may need to be taught to read using braille instruction. An infant or a toddler may need specialized or expert care in a child care setting, and a low-vision evaluation is needed to determine how best to support the child in his or her environment.

How common are they?

- The rate at which visual impairments occur in children, adolescents, and young adults aged birth through 18 years is 12.2 cases per 1,000.
- Severe visual impairments (legally or totally legally blind) occur in children, adolescents, and young adults aged birth through 18 years at the rate of 0.06 cases per 1,000.

What are some common characteristics of children who have visual impairments or of visual impairments as children present with them?

- Children may have medical conditions or specific eye diagnoses that lead to visual impairment.
 - These problems include retinopathy of prematurity, albinism, cataracts, optic atrophy, retinitis pigmentosa, aniridia, colobomas, glaucoma, tumors, and congenital infections and disorders.
 - The effect of visual problems on a child's development depends on the severity of the problem, the level of visual impairment, the age at which the condition appears, and services offered to the child, as well as on other coexistent medical diagnoses.
 - Children who have visual impairments secondary to multiple disabilities may have significant developmental problems and cortical issues.
- If a child with a visual impairment is diagnosed in infancy and treatment (both medical and educational) begins early, the rate of success at home and school will increase.
- A child who has a severe visual impairment cannot see parents/guardians, teachers and caregivers, or peers, so the child may not imitate social behavior or see or interpret nonverbal cues. This situation can make it harder to become self-sufficient and independent. Because children's senses of self-worth develop during the years they may be in child care and school, it is extremely important that others who interact with children with visual impairments support them and help them feel good about what they can do, celebrate their accomplishments, and value them as whole people. Early intervention services can address social, cognitive, and communication gaps that occur because of sensory loss.

Who might be on the treatment team?

- The treatment team for a child with a visual impairment can include the primary care provider in the medical home, a pediatric ophthalmologist (an eye doctor who mostly works with children), developmental-behavioral pediatricians, low-vision specialists, teachers of the visually impaired, and child-development experts or early education and care teachers.
- Young children with visual impairments may not explore their environments in the same way as a child who can see. Special accommodations and *early intervention* are important and necessary.
 - Early intervention is a state-funded system of services to support infants and toddlers with disabilities and their families. These services are often home based.

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- Therapists and other professionals who are part of the early intervention system can work with teachers and caregivers to incorporate exercises and equipment into the day-to-day lives of these young children.
- For children 3 years (ie, 36 months) and older, *special education and related services* are available through the public school to provide services and interventions necessary for school achievement.
- Often, community agencies for people who have blindness work with the child and family to assist with specific home, child care, and school adaptations.
- Use sounds and auditory cues to help children understand what is going on and what will happen next; for example, say what you are doing, use songs or music for transitions from one activity to another. Model for the other children in the classroom how they can do this in a sensitive way too.
- Directly supervising children by sight and sound is best, especially in child care programs.
- Allow children to experience leadership opportunities within the classroom, as this experience will foster self-confidence and independence.

What adaptations may be needed?

Dietary Considerations

- There are no special dietary considerations, but it is helpful to establish consistent place settings and expectations around eating.
- Help children anticipate that spills may be possible, and teach them how to handle this situation themselves as well as how to ask for help when they need it.

Physical Environment and Other Considerations

- Provide appropriate levels of light. Many children with low vision have increased lighting needs, but those with photophobia may require reduced lighting levels.
- Provide orientation and mobility instruction and scanning techniques to help the child navigate in the classroom. Sharp objects such as scissors and art supplies should be kept in an enclosed container. Also, maintain a consistent routine. This consistency will help all children, especially those with visual impairments, feel more comfortable, because they will know what to expect and where things are.
- Provide a safe environment by keeping drawers and cabinet doors closed as well as by keeping traffic patterns free of toys, throw rugs, electrical cords, and other objects that might be hard to see or that might move around. Orient the child to locations of steps and stairs, and tape the edges of steps to provide high contrast. Teach the child to use handrails.
- Establish barrier-free routes in the area where the child spends time and within the facility, such as from the classroom to the bathroom. Use contrasting colors, such as a green plate on a white tablecloth. (It is difficult to see a white plate on a white tablecloth.)

- A Care Plan for a child with a visual impairment may include specific information for teachers and caregivers or the child to help emphasize listening skills, communication choices, ways to handle new situations or settings, and moving from one place to another.
- Technology such as computers and low-vision optical devices and videos may enable children with visual impairments to participate more fully in classroom activities.
- Use braille books, magnifiers, and audio.

What should be considered an emergency?

- There are not many medical emergencies that children with visual impairments would typically experience (exceptions include a retinal detachment with symptoms of flashes and “floaters”), but extra time and supervision will be necessary in an evacuation for a programmatic (facility) emergency such as a fire. This condition should be taken into consideration in emergency planning, and all children should know what to expect and how they can help the child with a visual impairment and each other.
- Children with visual impairments are at greater risk for falls and unintentional injuries (eg, banging into furniture, tripping). Prevention of these events is a crucial component of the Care Plan.

What are some resources?

- Blind Children’s Center: www.blindchildrenscenter.org, 323/664-2153
- Commission for the Blind (in various states) (Contact local health resources for more information.)
- Lighthouse Guild: www.napvi.org, 1-800-284-4422

