

## WHAT IS LOW VISION?

A person with low vision can see a little bit but has a hard time doing things the need someone to have good vision. Low vision means a person cannot see clear (usually defined as vision of 20/70 or less) or cannot see as far off to the sides when looking straight ahead (decreased field of vision or peripheral vision), or both problems. People with low vision are not completely blind. They often have some useful sight. Low vision care helps people find new ways to do daily activities like reading and writing. It is not a cure for the problem. For a child, low vision care means learning to use the vision they have in order to get important life skills.

#### WHAT ARE SIGNS OF LOW VISION?

Some signs of low vision are:

- Hard time recognizing people's faces, even people they know
- · Having a hard time with reading
- Not being able to see objects that could be dangerous, like walls or stairs
- Not being able to see the difference between colors
- Trouble seeing things that don't stand out well from what's behind them

## WHAT ARE SOME OF THE CAUSES OF LOW VISION IN CHILDREN?

Low vision in kids can be caused by different things like:

- <u>Albinism</u> a condition where the body does not make color or pigment for the hair, skin and eyes
- Childhood <u>cataracts</u> cloudiness in the lens of the eye
- Childhood <u>glaucoma</u> extra pressure in the eye
- Nystagmus shaky eye movements
- High <u>refractive errors</u> needing very strong eyeglasses
- Injury to the eyes
- Damage to part of the brain that helps you see (cerebral/cortical visual impairment or CVI),
- Problems with the retina or optic nerves

Many of these conditions cannot be fixed. They may get worse over time or stay the same.



#### WHAT IS A LOW VISION EXAM?

Low vision exams for kids may include different eye care specialists like:

- Pediatric ophthalmologists eye doctors and surgeons for children
- Orthoptists eye care providers who help check eye movements
- Optometrists eye care providers who are good at prescribing glasses

They may work as a team to do low vision exams and care. The type of exam depends on the child's age. The goal of the exam is to understand how well the child can see.

A low vision exam often includes checking:

- Visual acuity a measure of how small an object the child can see
- Refractive error finding the right eyeglasses prescription
- Visual field how well someone sees on the side or the peripheral vision,
- Eye muscle function how straight the eyes are and how well they move together
- Color vision ability to see colors

Vision can be different in different places with different lighting. So vision may be tested with different amounts of light or in different places. More testing like an electroretinogram (ERG) and visual evoked potential (VEP) may be used to help understand how well the child sees. These tests are done in a hospital or clinic setting and may need the child to stay calm and still with sedation or anesthesia.

# WHAT TYPE OF TREATMENT IS AVAILABLE FOR PATIENTS WITH LOW VISION?

Different treatments that can help people with low vision include:

- Eyeglasses and/or contact lenses to help make vision more clear
- Magnifiers, binoculars, telescopes to help make things look bigger
- Tinted lenses to help with blurry vision with bright lights. There are many non-optical devices such as
- Closed-circuit TVs to show bigger pictures
- Large print books
- Cellphone apps and tablets also have ways to help people who can't see well



Children under three years old should be referred to community-based early intervention services. School-aged children should work with a teacher for the visually impaired. Whether a child qualifies for these programs depends on where they live.

#### WHAT IS EARLY INTERVENTION?

Early intervention is a group of special education team members. They work with parents and caregivers to make a program called an IFSP or individual family service plan. This plan helps a young child to develop the best that they can. An early intervention team should have a teacher trained in working with the visually impaired. The child may also need physical therapy, occupational therapy and speech therapy.

## WHAT RESOURCES ARE AVAILABLE ONLINE FOR PATIENTS WITH LOW VISION?

- See this link for a larger list of resources:
  - https://aapos.org/syndicated/pediatric-low-vision
- The American Foundation for the Blind: www.afb.org
- American Association for Pediatric Ophthalmology and Strabismus: aapos.org
- American Printing House for the Blind: aph.org
- Children's Eye Foundation: childrenseyefoundation.org
- The National Eye Institute: nei.nih.gov

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