

VI Times

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MN Regions 5 & 7 Vision - O&M Staff
Barb Lhotka, Editor



Vision-O&M Staff

The purpose of a newsletter is to provide specialized information to parents and teachers of students with vision impairments. We hope to send regular newsletters that will cover topics of interest that are informative and create a base of knowledge that will assist our students with their on-going success!

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Upcoming Events

- ◆ Lake Carlos - September 2011

Terminology

Educational services for children with vision impairments uses multiple terms to explain the child's vision loss. Some of those terms include:

- **Blind**—the absence of vision for learning.
- **CVI or cortical visual impairment**—when the eye itself is healthy but the child functions as having a visual impairment due to issues with the brain processing the visual information.
- **Legal blindness**—a student with 20/200 visual acuity or less in the better eye after the best correction or a visual field of 20 degrees or less.
- **Light perception**—able to see the presence of a light source.
- **Low vision**—a severe visual impairment at a near or far distance. They have vision that is corrected only to a level between 20/60 and 20/200.

What Do the Numbers Mean?

The term 20/200 is the number used to define legal blindness. What does it mean?

A child whose vision can only be corrected to 20/200 for distance vision can only see at 20 feet what someone with 20/20 vision can see at 180 feet. The images are likely unclear and difficult to discriminate from the background. A child with

20/70 vision needs to be 50 feet closer to see with the same clarity.

Working with children with low vision is an individual task. Not all students who have 20/200 or 20/70 vision see in the same way. The visual condition that they experience influences the clarity, field, and detail of the acuity.

What is State Criteria?

Minnesota criteria for eligibility for educational services requires the student:

- Have a medically verified visual impairment accompanied by limitations in sight that interfere with acquiring information or interaction with the environment.
- Visual acuity of 20/60 or less in the better eye with the best possible correction. For difficult to test students, the medical diagnosis is essential.
- Or a visual field of 20 degrees or less or bilateral scotomas (blind spots in both eyes).
- Or a congenital or degenerating eye condition.
- The Educational Functional

Vision Assessment must indicate difficulty in accessing learning materials; need for adapted materials to access learning; a variable visual ability; experience of high levels of visual fatigue, etc.

State criteria must be met by the student's medical and educational evaluation in order to receive the services of a licensed teacher of the blind / visually impaired. The students we serve are medically involved with vision loss, not perceptually.

It is recommended that an orientation and mobility evaluation be completed as a part of the comprehensive evaluation. This portion of the evaluation will help the team plan for environmental access.

Who Does What?

School Nurse—will monitor the student's overall health concerns.

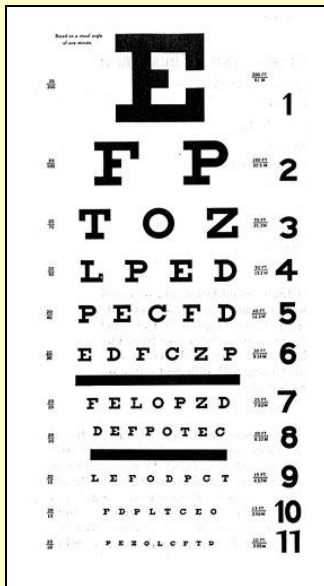
Health Aide—will do vision screenings and assist the school nurse.

Teacher for the Blind / Vision Impaired—will work with staff to accommodate the educational needs of the student due to the vision impairment. The TBVI will also work

with the student to develop the skills to become as independent as possible.

Certified Orientation & Mobility Specialist—will teach the student to travel and access the environment in and outside of the school.

Occupational Therapist—will work with the child on fine motor skills if needed.



The “E” at the top of the chart is the 20/200 line, the letters get smaller toward the 20/20 line on the chart.

Refractive Errors

"The eye's ability to refract or focus light sharply on the retina primarily is based on three eye anatomy features: 1) the overall length of the eye, 2) the curvature of the cornea [clear front of the eye in front of the pupil or black hole] and 3) the curvature of the lens [curved, clear body inside the eye that bends light as it moves from thin to wider] inside the eye." (www.allaboutvision.com.) Refractive errors are common for all of us, the students who are visually impaired cannot have correction of these errors to have better than 20/60 acuity with glasses or contacts.

The refractive errors include:

- Astigmatism
- Hyperopia
- Myopia

Astigmatism

The front of the cornea is not smooth and light bounces to create a blurry image or irregular image as seen below on left.



Hyperopia or Far Sighted

The hyperopic or far sighted eye focuses the image "behind the retina" or in actuality spreads the image over a greater part of the back of the eye than is useful for good focus. The student can't see things close up. The eye length is shorter than normal from front to back or the cornea is too flat to bend the light correctly.

Myopia or Near Sighted

In the myopic or near sighted eye, the image of the distant object is focused in front of the retina. The eye may be longer than average from front to back. Moving materials closer helps the student read them more clearly. Higher degrees of myopia result in greater susceptibility to degenerative retinal changes and / or retinal detachment as the student gets older. A concave or minus lens is used to correct a myopic image by moving the image back to the retina for focus.

Amblyopia

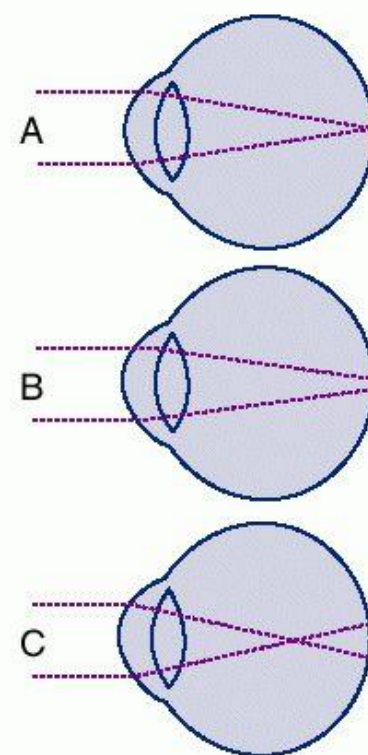
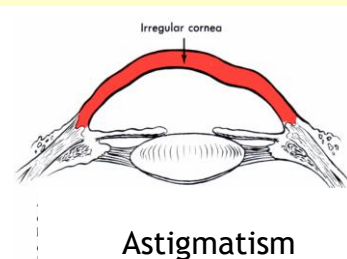
Amblyopia or lazy eye is a condition most often seen in infants and young children. The treatment is generally drops or patching to help the child use the eye that is not the "stronger eye".

There are two causes of amblyopia:

- A large difference in acuity between the two eyes. So one eye takes over and the other "rests".
- Strabismic amblyopia is caused by a misalignment or crossing of the eyes that causes one eye to take over for the other.



Early treatment is essential to maintaining the use of both eyes.



- A. Normal Refraction
- B. Hyperopia or Far Sighted
- C. Myopia or Near Sighted

Topic Preview

Future issues of this newsletter will address:

- Braille
- CVI—Cortical Visual Impairment
- Early Childhood Intervention
- Living Skills
- Low Vision
- Multiple Disabilities
- O&M—Orientation & Mobility
- Parenting
- Recreation / Leisure
- Self-Determination & Advocacy
- Sensory Efficiency
- Social Skills
- Technology
- Transition



NAPVI



MN NAPVI

Warning Signs of an Eye Problem

The ten most common warning signs of an eye or vision problem for young children are:

1. Consistently sitting too close to the TV or holding a book too close.
2. Squinting.
3. Tilting the head to see better.
4. Frequently rubbing eyes, even when not sleepy.
5. Shielding eyes or other signs of sensitivity to light.
6. Excessive tearing and watery eyes.
7. Closing one eye to read, watch TV or see better.
8. Avoiding activities that require near vision, such as coloring or reading, or distance vision such as playing ball or tag.
9. Complaining of headaches or tired eyes.
10. A sensation that a dark curtain has settled across your field of view.

Featured Organization: NAPVI

NAPVI is the acronym for the National Association for Parents of Children with Visual Impairments. According to their website and mission statement:

“NAPVI is a national organization that enables parents to find information and resources for their children who are blind or visually impaired, including those with additional disabilities.

“NAPVI provides leadership, support, and training to assist parents in helping children reach their potential.

“NAPVI is dedicated to:

- giving emotional support
- initiating outreach programs
- networking
- advocating for the educational needs and welfare of children who are blind or visually impaired.”

NAPVI has publications available on their national website at the following:

www.spedex.com/nabvi.

There is a chapter of NAPVI in Minnesota. It is called Minnesota NAPVI: Encouraging Growth Through Knowledge. The website is: www.mnapvi.org.

Minnesota NAPVI sponsors events and training for parents and their children. For more information email: info@MNAPVI.org. One of the events that is being scheduled in Bloomington on January 16th is a Mom's Coffee. The group has also had a tubing outing last year, ice cream socials and Cookies with Santa.

Disclaimer

The articles in this newsletter are for general information purposes only. MN Regions 5 & 7 do not recommend products or endorse organizational membership, we only provide information.