

**Low Vision Solutions Support
Community Health & Independence**

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(A.V.R.E.)



**Low Vision Solutions Support
Community Health & Independence**

- ◆ Overview of Low Vision
 - “Who” - facts and demographics
 - Common Indicators of Low Vision
 - “What” - causes and effects



**Low Vision Solutions Support
Community Health & Independence**

- ◆ What are Low Vision Services?
 - Optometric/Ophthalmologic Specialty
 - NYS Certification
 - Expected outcomes of Low Vision Evaluation
- ◆ Overview of Community Vision Rehabilitation Services



Low Vision Solutions Support Community Health & Independence

- ◆ Solutions
 - Magnification
 - Light and Color contrast
 - Tactile and Verbal
 - Organization
- ◆ Q and A




The Facts

- ◆ Seniors identify vision loss as one of the top three health concerns!
(Broom County Aging Futures Project)
- ◆ 20% of falls by Seniors are caused by poor vision!
(Lighthouse International)
- ◆ Every 7 minutes someone permanently loses sight!
(American Foundation for the Blind - AFB)




The Facts

- ◆ Chronological age is not a direct cause of vision loss!
- ◆ Visually impaired people have hospital stays 2.4 days longer than "sighted" people




The Demographics

- ◆ National Eye Institute (NEI) estimates 35 million Americans are experiencing one of the four major causes of vision loss.
- ◆ That number is projected to grow to 50 million by 2020.
- ◆ 30% of Seniors are severely visually impaired




The Demographics

- ◆ 10%-15% of Seniors are legally blind
- ◆ 735,000 New York Seniors are severely visually impaired and 367,000 are legally blind



Legal Blindness vs. Visual Impairment

- ◆ Legal Blindness is vision not exceeding 20/200 in the better eye with best correction or a field of vision of 20 degrees or less
- ◆ Visual Impairment is vision not exceeding 20/70 in the better eye with best correction or the inability to read standard newsprint with regular glasses



Supporting Community Health & Independence

- ◆ Community-based long term care is “hands on” care- to assist with ADL/IADL impairments;
- ◆ Blindness services focus on teaching skills to **remain independent**;
- ◆ Sensory impairment is a leading indicator of ADL/IADL impairment;




Supporting Community Health & Independence

- ◆ If we can teach how to adapt to vision loss and **keep independence**, risk of increased frailty and falls decreases;
- ◆ Potential **reduced dependency** on long-term care and related costs.




Common Indicators of Low Vision

- ◆ There are many signs that can signal vision loss. For example, even with regular glasses, individuals may have difficulty:
 - recognizing faces of friends and relatives;




Common Indicators of Low Vision

- doing things that require one to see well up close, such as reading, cooking, sewing, fixing things around the house, or picking out and matching the color of your clothes;




Common Indicators of Low Vision

- doing things at work or home because lights seem dimmer than they used to;
- reading street and bus signs or the names of stores.




Observable Signs that Someone May Be Experiencing Vision Loss

- ◆ Have they begun to:
 - Bump into things?
 - Move hesitantly or walk close to the wall?
 - Grope for objects or touch them in an uncertain way?
 - Squint or tilt their head to see?



Observable Signs that Someone May Be Experiencing Vision Loss

- Request more or different lighting?
- Hold books or other reading matter close to the face?
- Drop food or silverware when eating?
- Have trouble making out faces, the lettering on signs, etc.?




Observable Signs that Someone May Be Experiencing Vision Loss

- Not notice stains on clothing or wear mismatched clothes?
- Act visually disoriented or confused in a familiar place?
- Trip on area rugs?



Observable Signs that Someone May Be Experiencing Vision Loss

- ◆ Have they been saying things like:
 - I see halos or rings around lights?
 - I have migraine headaches that give me blurry vision?
 - I can't see anything at night?
 - There are spots in front of my eyes?



Observable Signs that Someone May Be Experiencing Vision Loss

- My eyes hurt?
- I keep seeing flashes of light?
- I sometimes see double?
- Everything looks distorted?
- I need more light?


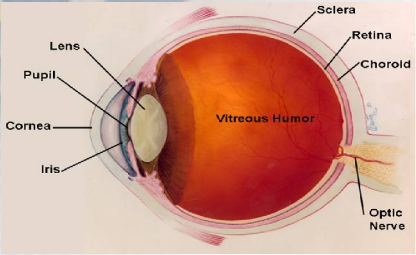


Observable Signs that Someone May Be Experiencing Vision Loss

- ◆ Individuals displaying these or other similar behaviors more and more frequently should be encouraged to get an eye exam as soon as possible.




Our Vision




Our Vision-The eye +optic nerve + the brain = vision

- ◆ Eye is like a camera
- ◆ Light bounces off an object and is reflected through cornea
- ◆ Light passes through aqueous humor
- ◆ Light is focused by the lens passing through vitreous humor on to retina
- ◆ Macula is the “dot” on the retina-central vision




Our Vision-continued

- ◆ Retina generates electrical impulses
- ◆ Impulses are transmitted through the optic nerve to the vision part of the brain
- ◆ The brain interprets the impulses and converts them into what we see.




Vision loss in Seniors-Most Common Causes

- ◆ Cataracts
- ◆ Age Related Macular Degeneration-ARMD
- ◆ Diabetic Retinopathy
- ◆ Glaucoma






Cataracts

- ◆ Clouding of the lens
- ◆ Light does not pass through the lens
- ◆ Excellent surgical results
- ◆ Eggs-raw and sunny side up




Cataracts




ARMD

- ◆ Macula-central spot-degenerates
- ◆ Loss of central -detail- vision
- ◆ Person sees out the side of eye with less detail
- ◆ Light - Color contrast-Magnification
- ◆ Glare



ARMD - Continued

- ◆ Stationary object location
- ◆ do not move furniture, personal items, kitchen utensils, tools etc
- ◆ large print
- ◆ Organizational skills




ARMD - Continued




Diabetic Retinopathy

- ◆ Blood vessels in the retina break
- ◆ blood clouds the vitreous
- ◆ light does not pass through clearly
- ◆ laser seal broken vessel and clean vitreous
- ◆ continuing breakage






Diabetic Retinopathy - Continued

- ◆ Spots-floaters-cloudiness
- ◆ Monitor stress, lifting, strain etc
- ◆ Diabetic controls-medication, diet etc
- ◆ Tactile loss in extremities
- ◆ Fatigue
- ◆ Concentration




Diabetic Retinopathy - Continued




Glaucoma

- ◆ Pressure in the eye
- ◆ Field of vision loss
- ◆ Loss of peripheral-side vision
- ◆ Tunnel vision
- ◆ Damage to optic nerve


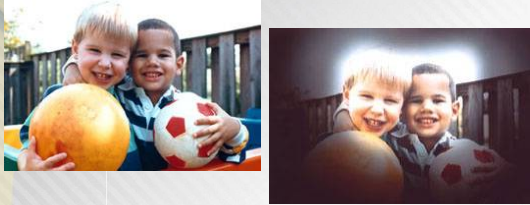


Glaucoma - Continued

- ◆ Moving/approaching objects
- ◆ Object location-furniture-tools-kitchen utensils-personal items



Glaucoma - Continued



Senior Vision Services

- ◆ Low Vision Evaluation
- ◆ Orientation and Mobility
- ◆ Rehabilitation Therapy (independent living and communication skills)
 - Understanding vision loss
 - Peer groups and connections




Senior Vision Services

- ◆ Low Vision Therapy
- ◆ Employment



What are Low Vision Services?

- ◆ **WHAT IS LOW VISION?**
A person with low vision retains some vision, but has difficulty performing routine tasks such as reading, writing or watching TV. Low vision can result in sensitivity to glare, blurry vision, changes in field of view, or a combination of these conditions.
- ◆ **WHAT IS A LOW VISION EVALUATION?**
A non-diagnostic assessment of the visual needs of a person with low vision. LVE is a special exam performed by a low vision certified Optometrist or Ophthalmologist.




Low Vision Evaluation Solutions

- ◆ Identification of an appropriate set of recommendations that include:
 - Special magnification devices and tools
 - Lighting and color contrast recommendations
 - Follow up and training



What Are Low Vision Aids?

- ◆ Low vision aids are devices that help people with low vision use their remaining vision. Low vision aids cannot restore perfect vision or cure eye disease.
- ◆ Filter lenses that control glare
- ◆ Telescopes for distance vision tasks, such as TV, signs and faces
- ◆ Hand-held magnifiers for short-term reading
- ◆ Adaptive devices - special lamps, reading stands, large print materials
- ◆ Closed circuit television (CCTV) systems or video magnifiers for reading and writing



Vision Rehabilitation Professionals

- ◆ **Vision professionals include:**
 - **Orientation and Mobility Specialists** are travel specialists who show children and adults how to travel independently, safely, and efficiently.
 - **Vision Rehabilitation Therapists**, who were formerly known as Rehabilitation Teachers, are specialists in independent living. They help people with limited vision create new approaches to familiar routines so they can live on their own terms.
 - **Low Vision Therapists** use tools and techniques to maximize vision and make everyday activities easier.



Orientation and Mobility

- ◆ Safely and efficiently navigating the environment
- ◆ sighted guide technique-demonstrate
- ◆ cane travel-demonstrate
- ◆ transferable skills



Vision Rehabilitation Therapy

- ◆ Independent Living Skills
- ◆ cooking, cleaning, dressing, clothing coordination
- ◆ special tools and devices
- ◆ communications-Braille, signatures, reading, computers etc




Vision Rehabilitation Therapy (Cont.)

- ◆ Peer Groups and Connections
Group meetings to share problems and solutions
 - Socialization-out of the house!
 - Physical activity
 - Telephone supports




Low Vision Therapist

- ◆ Dispense and provide individualized one on one training in the use of low vision devices consistent with the doctor's findings during the low vision evaluation.



Employment

- ◆ Never underestimate the value of a paycheck!
- ◆ Full time or part time
- ◆ supported or non-supported
- ◆ volunteer work



A.V.R.E. Vision Rehabilitation Services

- ◆ Richterman Low Vision Center
- ◆ ViewPoint (low vision retail center)
- ◆ ACCESS-Tech




Low Vision Solutions

- ◆ Hands-on Demonstration of:
 - Magnification
 - Light and Color Contrast
 - Tactile and Verbal identification
 - Organization




Key concepts to remember!

- ◆ Verbal and tactile cues v. visual cues
- ◆ Color contrast
- ◆ Light intensity and direction
- ◆ Glare
- ◆ Organization and location
- ◆ Magnification



Two Basic Questions

- ◆ To identify people who are legally blind or experiencing vision loss, there are two basic questions that can and should be asked.
 - Do you have difficulty reading newsprint?
 - Do you have difficulty recognizing faces?
- ◆ Other more detailed questions can be asked at low vision examination



Once Identified

- ◆ Make a connection and call . . .

Contact local/regional low vision/blindness agency

<http://nyvra.org/links>

Or

New York State Commission for the Blind and Visually Handicapped

<http://www.ocfs.state.ny.us/main/cbvh/>



Referral & Follow-up

- ◆ We will contact the consumer with your permission;
 - Telephone/in-person assessment of need
 - Schedule Low Vision evaluation
 - Provide the training, adaptive aids and related services to foster independence



Thank You!

- ◆ Contact Information:
 - Rick McCarthy
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 - www.avreus.org

