

Diabetes and Vision Loss

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Visual Acuity (VA)

LOW VISION

Best Corrected VA 20/50
or Worse in Better Seeing Eye

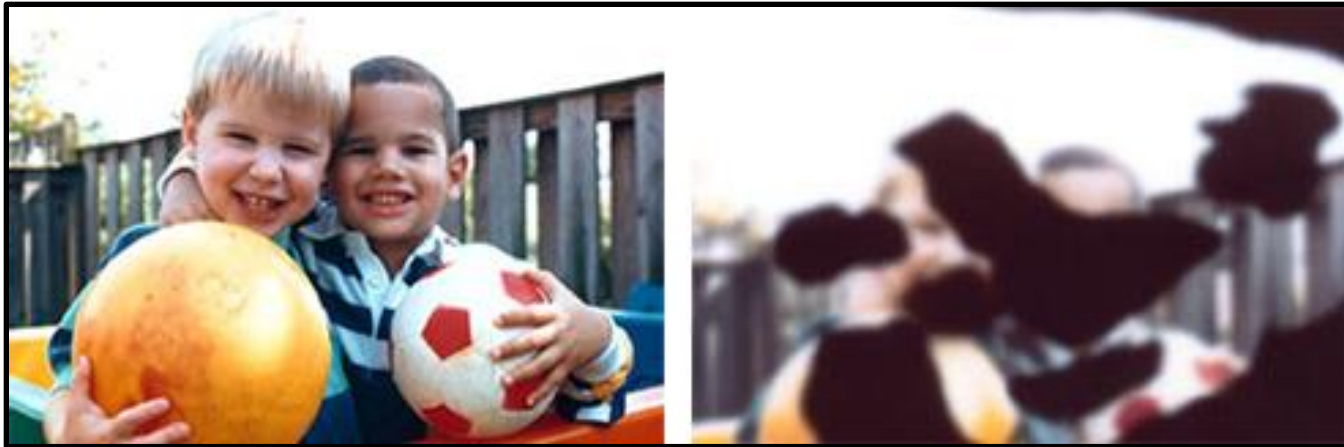
LEGAL BLINDNESS

Best Corrected VA 20/200
or Worse in Better Seeing Eye

or

<20 Degrees Visual Field
in Better Seeing Eye

Diabetic Retinopathy



Glaucoma



Macular Degeneration



Hemianopsia – TBI/Stroke



Traumatic Brain Injuries

"Head Injuries & Vision Disorders"



Signs & Symptoms

- Double or blurred vision
- Dizziness
- Headaches
- Eye Strain
- Difficulty reading
- Poor judgment of depth, bumping into objects
- Balance and coordination problems, abnormal posture
- Eye turn, head tilts
- Closing or covering one eye

Excess Disability

Excess disability is characterized by problems and task performance difficulties related to vision loss that have a substantial impact on the person's functional independence or personal safety, and that are out of proportion to the degree of visual impairment as measured by visual acuities or visual fields. Veterans whose vision is better than legal blindness may have excess disability due to:

- Sudden or traumatic visual disorder (especially related to military service).
- Disabling co-morbidities (e.g., hearing impairment, mobility impairment, etc.)
- Systemic diseases that cause fluctuating visual impairment;
- Combined losses of other vision functions (e.g., contrast sensitivity, stereopsis, etc.);
- Sudden changes in caregiver status; and
- Other reasons.

LOW VISION BLIND AIDS

Hand Held Magnifiers



Closed Circuit Television (CCTV)



Portable Video Magnifiers



Distance Aids

Diabetes and Vision Loss

Seven Key Behaviors that lead to optimum diabetes self-management and health

1. Monitoring
2. Taking Medication
3. Healthy Eating
4. Being Active
5. Problem Solving
6. Healthy Coping
7. Reducing Risks

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MONITORING

Three major difficulties with monitoring tasks for people with visual impairment

1. Accessing the numerical readout on the monitor
2. Placing a drop of blood on the glucose test strip
3. Managing and recording blood glucose readings



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Accessing Numerical Readout

1. Standard Readout using magnifiers
2. Glucometers with Large Print
3. Monitor with Speech Capability



Placing Blood on the Strip

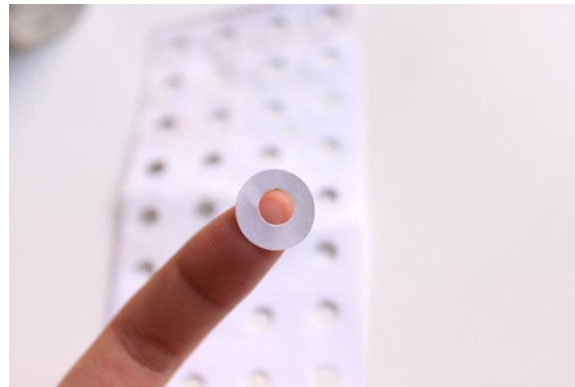
1. Positioning
2. "Think outside the box"
3. Using guides to assist with placement

Managing Recorded Information

1. Utilizing memory features included on the glucometer
2. Working with large print materials
3. Utilizing various optical aids

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MONITORING



DATE:			
DATE TIME	BSL	INSULIN / MEDS	DIET/CARBS
NOTES			

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Taking Medication

Important information to remember when managing medications with a visual impairment:

1. Know your medications (oral medication/injectables)
2. Utilize optical, large print and/or auditory aids to assist with prescription labels
3. Develop a safe and effective delivery system



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Know Your Medications

1. Keep a list of all active medications, dosage and schedule
2. Regularly communicate with your provider regarding medication regimen

Utilize optical, large print and auditory aids

1. Large print labels
2. Reading glasses, hand held magnifiers, hand held video magnifiers, CCTV, etc.
3. Audio prescription readers

Develop a System

1. Utilize Pill Boxes/separate containers for medications (AM/PM)
2. Utilize large print schedules/calendars
3. Do not hesitate to ask for assistance from sighted individual if needed



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Insulin Management



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Healthy Eating

There are many adaptations that can be used to assist with following a nutrition management plan:

1. Portion Control Aids
2. Optical aids
3. Large print/auditory
4. Label/Barcode readers
5. Adaptive cooking device



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Being Active

Physical activity is important to diabetes management. Vision loss can affect the ability to participate in some activities however there are many sports and activities that can be adapted for vision impair



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Problem Solving, Healthy Coping & Reducing Risks

1. Keep yourself informed
2. Keep accurate records
3. Foot care
4. Mindfulness
5. Dealing with burnout



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Diabetes Self Management Courses

Hadley Institute for the Blind and Visually Impaired
700 Elm Street, Winnetka, IL 60093
800-323-4238

Course Title – Diabetes: Toward Self-Management

This course assists persons with visual impairment to identify the factors necessary to successfully manage diabetes

The Carrol Center for the Blind
770 Centre Street, Newton, MA 02458
800-852-3131

Course Title - Diabetes & Visual Impairment: A New View for Patients & Families

This course is designed to improve knowledge and related skills of both diabetes and visual impairment

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Resources

1. Corn, A. L., & Erin, J. N. (2010). *Foundations of low vision: Clinical and Functional Perspectives*. New York: AFB Press.
2. Jose, R. T. (1997). *Understanding Low Vision*. New York: AFB Press.
3. National Eye Institute. (n.d.). Retrieved March 09, 2017, from <https://nei.nih.gov/>
4. Diabetes and Vision Loss. (n.d.). Retrieved April 26, 2017, from <http://www.visionaware.org/info/your-eye-condition/diabetic-retinopathy/diabetes-guides-with-lessons-following-seven-self-care-behaviors/diabetes-and-vision-loss/1234>
5. Ponchillia, S. V. (n.d.). *Diabetes Management and Visual Impairment*. Retrieved April 26, 2017, from <http://www.afb.org/jvib/jvib001312.asp>
6. *Diabetes and Visual Impairment: A New View for Patients and Families*. (2015, March 16). Retrieved April 26, 2017, from <http://carroll.org/diabetes-and-visual-impairment-a-new-view-for-patients-and-families/>
7. *Diabetes: Toward Self-Management*. (n.d.). Retrieved April 26, 2017, from <http://www.hadley.edu/showCourseDetail.asp?courseid=DIA-101>



Questions