

Low Vision Resources for People with Diabetic Retinopathy

Presenter

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Low Vision Specialist



Diabetic Retinopathy Facts

Currently more than 5 million Americans age 40 and older have diabetic retinopathy due to type 1 or type 2 diabetes. And that number will grow to about 16 million by 2050, according to the U.S. Centers for Disease Control and Prevention (CDC).

The CDC also estimates that nearly 26 million Americans, or 8.3 percent of the U.S. population, had diabetes in 2010, and 79 million Americans adults age 20 or older are at high risk for the disease.

Also, between 12,000 and 24,000 new cases of blindness related to diabetic retinopathy occur in the United States each year, the CDC says.

People who are most vulnerable to diabetic retinopathy, including the elderly and certain minorities, may not receive appropriate eye care because of lack of



Symptoms of Diabetic Retinopathy & Other Diabetes-Related Eye Problems

- Fluctuating vision
- Eye floaters and spots
- Development of a scotoma or shadow in your field of view
- Blurry and/or distorted vision
- Corneal abnormalities such as slow healing of wounds due to corneal abrasions
- Double vision
- Eye pain
- Near vision problems unrelated to presbyopia
- Cataracts



Some of the Challenges for People with Sight Loss and Diabetes

- Onset of vision loss has the potential to compound challenges faced by people with diabetes, affecting self-management of the disease:
 - Testing blood sugar/self-administering medication-challenging
 - Following a balanced diet
 - Pursuing physical activity
 - Attending scheduled medical appointments
- All difficult for those who have not learned new techniques for shopping, cooking, travel outside the home, and the specific techniques required for diabetes-related self-management occupations.
- In cases of peripheral neuropathy, vision loss may prevent notice of worsening symptoms requiring physician attention



Models of Low Vision Services Throughout the United States of America

- VA Hospitals
- University Based Clinics
- Private Clinics-Independent ODs
- Home Health Agencies Providing Low Vision Services
- Rehabilitation Clinics-Providing PT/OT/Speech/Low Vision
- State Provision



State of Utah Low Vision



Services We Provide

- Low Vision Clinics in cities throughout Utah
- Home Visits
- Vision Training/Therapy
- Large Selection of optical and non-optical devices
- Established for over 50 years

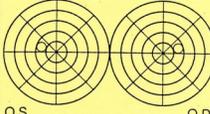
Because the products are sold at cost, our dedicated professional team provides impartial advice.

Consultant Ophthalmologist reviews our reports and assist with marketing.



Referrals

- Ophthalmologists
- Optometrists
- Vocational Rehabilitation Services
- Family and Friends
- Self Referral

 Low Vision Referral Patient's Eye Report				<small>Please send to: Division of Services for the Blind and Visually Impaired 250 North 1950 West, Suite B Salt Lake City, UT 84116-7902 Phone: (801) 323-4343 or 1-800-284-1823 Fax: (801) 323-4396</small>	
Name of Patient:			Phone: ()		
Address:			City:		Zip:
Date of Birth:		Sex: <input type="checkbox"/> M <input type="checkbox"/> F		Today's Date:	
Date of Examination:				B. Field of Vision Please indicate field if restricted.	
A. Visual Acuity:	Distance Vision		Near Vision		
	W/O Correct.	W/Correct.	W/O Correct.	W/Correct.	
	O.D.				
	O.S.				
Most recent Rx:					
O.D.		Add			
O.S.		Add			
Cause of vision impairment or blindness:					
Other ocular history or involvements:					
PROGNOSIS					
Is patient's vision considered: <input type="checkbox"/> Stable <input type="checkbox"/> Deteriorating <input type="checkbox"/> Uncertain					
EYE DOCTOR CERTIFICATION: (Please note that the following certification should be based on the patient's vision in the best eye with best correction.)					
I hereby certify that the above-named patient is:					
<input type="checkbox"/> Legally Blind (20/200 or less vision or $\leq 20^\circ$ visual field)					
<input type="checkbox"/> Visually Impaired (20/70 to 20/200 vision or 20° to 30° visual field)					
<input type="checkbox"/> DSBVI Services Eligible (20/50 to 20/70 deteriorating vision)					
<input type="checkbox"/> DSBVI Services Eligible due to functional vision impairment of physiological origin – please describe (Psychological problems or learning disabilities are <u>not</u> qualifying conditions.)					
Comments or Recommendations:					
Doctor's Signature					
Printed or Typed Name					
Address					
City, State, Zip					
Telephone #					



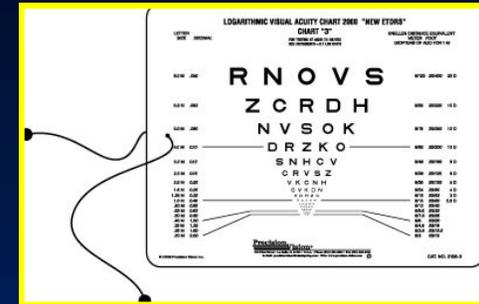
Case History & Vision Testing

Establish Case History

Fields of Vision from Doctors Referral

- Near Vision Chart
- Logmar Chart
- Contrast Sensitivity Chart

Check each eye independently



Types of Magnification

- Non-Prescription Reading Glasses
- Handheld LED Magnifiers
- Stand LED Magnifiers



Types of Magnification and Glare Control

- Pocket Magnifiers



- Monoculars and Distance Devices



- Anti Glare Glasses



Lighting

- Incandescent
- Energy Saving Bulbs
- Fluorescent
- LED
- Halogen

- Full Spectrum Lighting Improves Contrast Levels
- Utilizing and Controlling Light



Electronic Video Magnification

- Hand held Electronic Magnifiers

 - Illuminated Display

 - Wide Field of View

 - Variety of Magnifications

 - Portability



- CCTVs

 - Larger Displays

 - Wide Field of View

 - Multiple Tasks

Considerations:

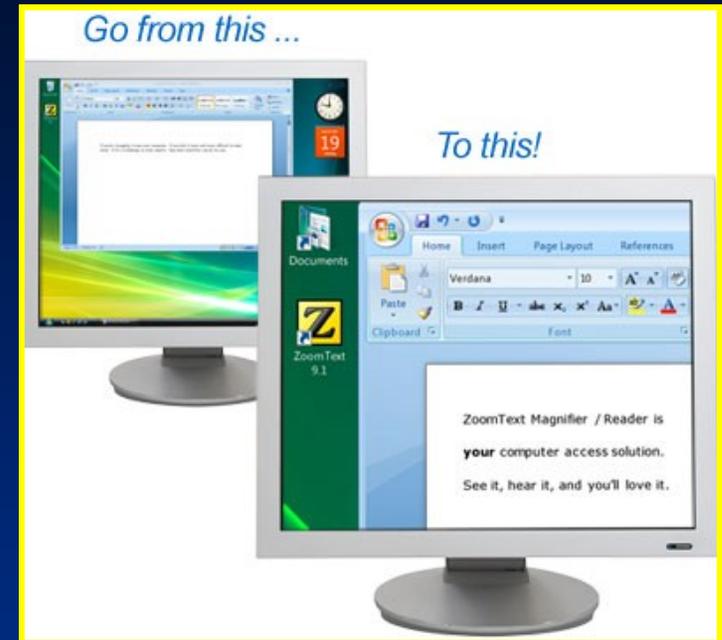
 - Cost

 - Power Consumption



Specialist Software & Hardware

- Dedicated Speech & Magnification Software
- Microsoft and Apple Accessibility
- Scanners
- Barcode Readers



Products for the Blind & Visually Impaired

- . Talking Watches and Clocks
- . Large Faced Watches Clocks
- . Writing Guides
- . Large Print Material
- . Medication Products
- . Large Button Products
- . Calculators
- . Kitchen Products
- . Bathroom Products
- . Leisure Products



Summary of Possible Areas of Need

- . Reading mail, books, newspaper, medication instructions, restaurant menus, or store labels and prices
- . Watching Television and/or live events
- . Viewing using your computer
- . Identifying the setting of your stove, washing machine, or microwave controls
- . Creating and working on crafts and hobbies
- . Identifying money and colors or telling time



Suppliers

. MaxiAids

www.maxiaids.com

. ILA (Independent Living Aids)

www.indepedentliving.com

. LS&S

www.lssproducts.com



CNIB Project

About

- Overview
- Symptoms

Prevention

- Risk Factors
- Eye Are for Life Quiz
- How to Reduce Risk

Diagnosis and Treatment

- Finding an Eye Doctor
- Visiting Your Eye Doctor
- Questions for Your Eye Doctor
- Diagnostic Testing
- Treatment



CNIB Project

Living with DR

- Managing Diabetes
- Testing Blood Sugar (Glucose) Levels
- Techniques for Monitoring Blood Sugar
- Medication, Insulin and Foot Care
- Vision Loss Tools
- Coping with Vision Loss
- Person Stories
- Resources Page

For Health Care Professionals



<http://www.cnib.ca/en/your-eyes/eye-conditions/eye-connect/DR/Pages/default.aspx>

National Library Services for the Blind The Library of Congress



<http://www.loc.gov/nls/>



Other Services

- . National Federation of the Blind
- . American Council for the Blind
- . American Printing House for the Blind



Contact Information:

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