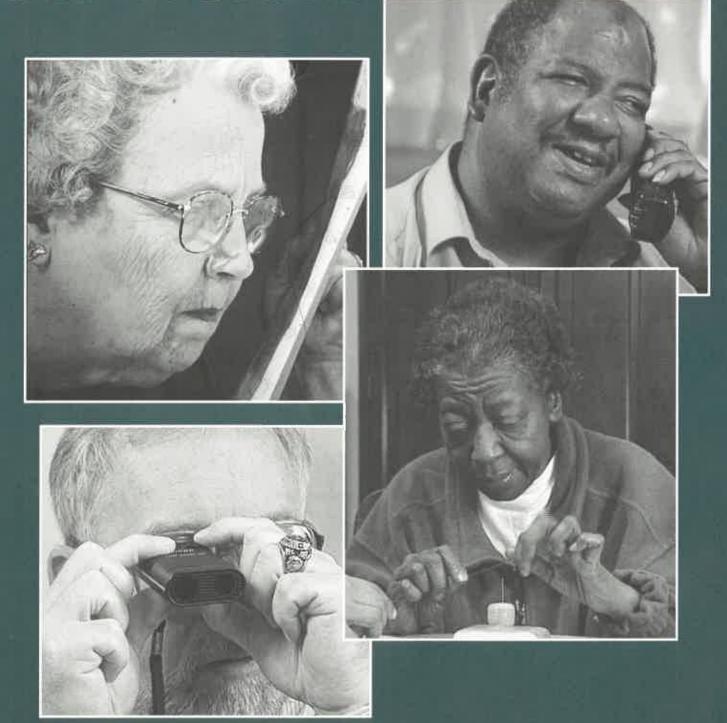
What you should know about low vision.



National Eye Institute • National Institutes of Health

If you or someone you know can't see very well... Read this booklet.

This booklet will help people with vision loss and their families and friends better understand low vision. It describes how to get help and live more safely and independently.

This booklet is from the National Eye Health Education Program, sponsored by the National Eye Institute (NEI). The NEI, one of the Federal government's National Institutes of Health, is the major sponsor of vision research in the United States. The NEI was established by Congress in 1968 to discover safe and effective ways to prevent, diagnose, and treat eye diseases and disorders.

For more information about the NEI, contact:

National Eye Institute

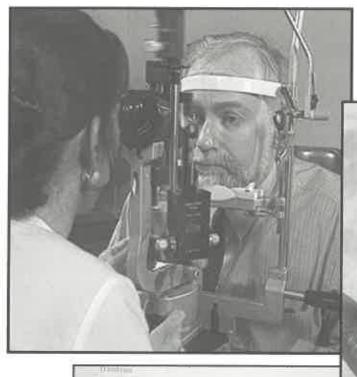
2020 Vision Place

Bethesda, MD 20892-3655

Telephone: (301) 496-5248

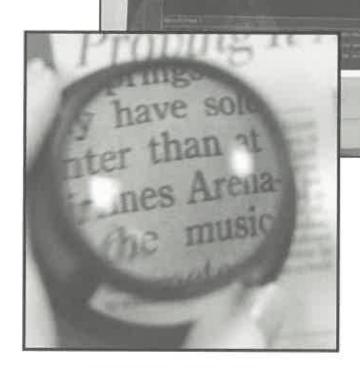
E-mail: 2020@nei.nih.gov

Website: http://www.nei.nih.gov





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What is low vision?

Low vision means that even with regular glasses, contact lenses, medicine, or surgery, people find everyday tasks difficult to do. Reading the mail, shopping, cooking, seeing the TV, and writing can seem challenging.

Millions of Americans lose some of their vision every year. Irreversible vision loss is most common among people over age 65.

Is losing vision just part of getting older?

No. Some normal changes in our eyes and vision occur as we get older. However, these changes usually don't lead to low vision.

Most people develop low vision because of eye diseases and health conditions like macular degeneration, cataract, glaucoma, and diabetes. A few people develop vision loss after eye injuries or from birth defects. While vision that's lost usually cannot be restored, many people can make the most of the vision they have.

Your eye care professional can tell the difference between normal changes in the aging eye and those caused by eye diseases.

How do I know if I have low vision?

There are many signs that can signal vision loss. For example, even with your regular glasses, do you have difficulty:

- Recognizing faces of friends and relatives?
- Doing things that require you to see well up close, like reading, cooking, sewing, or fixing things around the house?
- Picking out and matching the color of your clothes?
- Doing things at work or home because lights seem dimmer than they used to?
- Reading street and bus signs or the names of stores?

Vision changes like these could be early warning signs of eye disease. Usually, the earlier your problem is diagnosed, the better the chance of successful treatment and keeping your remaining vision.

How do I know when to get an eye exam?

Regular dilated eye exams should be part of your routine health care. However, if you believe your vision has recently changed, you should see your eye care professional as soon as possible.

Meet Mary, Jim, Crystal, and Mike.

By making better use of their remaining vision, people can continue to enjoy doing important daily activities. Here are some examples.

Mary's Story Mary is slowly losing her "straight-ahead" vision, which allows her to read and recognize faces. She has age-related

macular degeneration, an eye disease that affects central vision.

"I began having trouble reading."



While Mary's eye care professional has reassured her that she will not lose her vision completely, she is frustrated because she does not see as well as before.

Mary thought that nothing she did would help. Then her eye care professional suggested that she see a specialist in low vision.

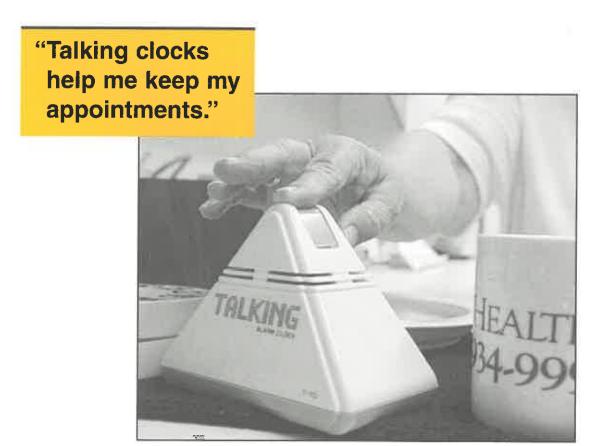
A specialist in low vision is an optometrist or ophthalmologist who is trained to evaluate vision. This person can prescribe visual devices and teach people how to use them.

There are a wide variety of devices that help people make the most of their remaining vision. The specialist recommended special magnifying devices for Mary that helped her see things more clearly.



"The specialist helped me find the devices that work best."

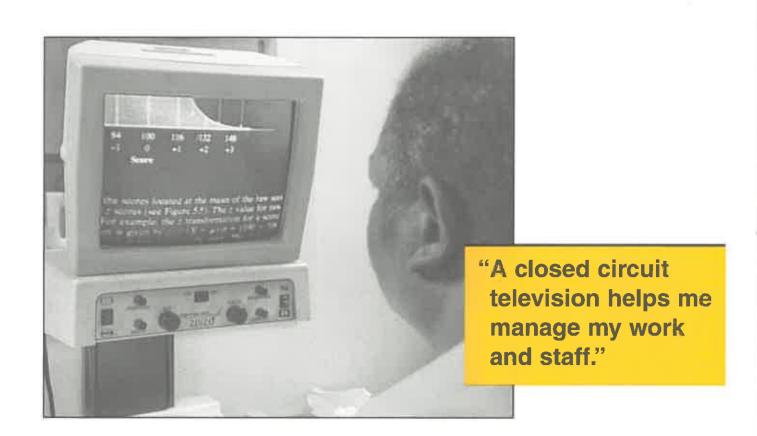
Mary also went to a vision rehabilitation program that taught her new ways of doing tasks. Someone from the program came to Mary's home to see what changes could be made. She also learned about helpful devices, such as talking clocks that tell the time with a press of a button. Large print books and publications made it easier to read and allowed Mary to keep enjoying one of her favorite activities.





Jim has lost a lot of his side vision because of glaucoma. He found it difficult to do his job.

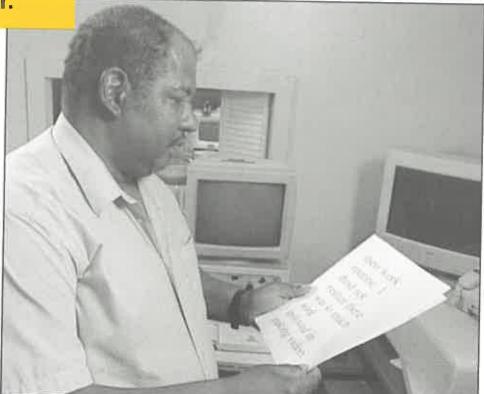
He made some changes to his office so he could work better. A talking computer keeps him up-to-date on sales figures. Writing was very difficult until he used better lighting. A vision rehabilitation teacher showed Jim how to use a writing guide to help write clear notes and employee memos.



Learning to get around safely from an orientation and mobility specialist helped him travel independently.

He also joined a support group to talk about the challenges, frustrations, fears, and unhappiness that can come from living with low vision. At first, he felt that his vision loss would keep him from doing the things he liked to do. In the end, he found that wasn't true.

"I made some changes in my office so I can work better."



Crystal's Story

Crystal lost some vision because of diabetes.

Rather than limit her activities, she chose to look at them as challenges. Crystal met with a vision rehabilitation professional. She received training on how to use certain low vision aids. As a result, Crystal made several changes to her home and simplified her life.

First, raised markings were applied to the most common settings on her microwave dial. This allowed her to more safely adjust the oven.



"The raised markings allow me to safely use my microwave."



Better lighting in her stairways, closets, and home workshop made it safer to move about. A magnifier for reading food labels made controlling her diet easy. Special checks with large print and raised markings simplified paying bills. A special needle allowed her to continue sewing, one of her favorite activities.

For Crystal, the result was increased safety, more freedom, and restored confidence.



Mike also has low vision because of agerelated macular degeneration. But he has found ways to adapt to his vision loss.





"Low vision devices help me see both far away and up close."

Mike's doctor referred him to a vision rehabilitation program. As a result of his evaluation, Mike uses a closed circuit television at home. It enlarges the print in letters, bills, newspapers, and magazines. He uses a telescopic lens for getting around his neighborhood. A hand-held magnifier helps him read his mail in his favorite chair and menus at restaurants. Mike learned to adapt, and low vision has not stopped him from enjoying life.



"I learned to use a closed circuit television to keep reading enjoyable."

What can I do if I have low vision?

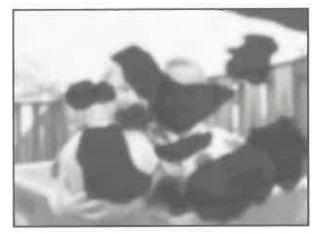
Many people with low vision are taking charge. They want more information about devices and services that can help them keep their independence.



Scene as viewed by a person with normal vision.



Scene as viewed by a person with age-related macular degeneration.



Scene as viewed by a person with diabetic retinopathy.



Scene as viewed by a person with cataract.



Scene as viewed by a person with glaucoma.

Talk with your eye care professional.

It's important to talk with your eye care professional about your vision problems. Even though it may be difficult, ask for help. Find out where you can get more information about services and devices that can help you.

What Mary, Jim, Crystal, and Mike have in common is that they're taking charge of their health. They have different types of vision loss from different eye diseases. Yet each of them asked about available resources that might help them continue to live independently. Each needed specific visual devices and training on how to use them.

Many people require more than one visual device. They may need magnifying lenses for close-up viewing, and telescopic lenses for seeing in the distance. Some people may need to learn how to get around their neighborhoods.

If your eye care professional says, "Nothing more can be done for your vision," ask about vision rehabilitation. These programs offer a wide range of services, such as low vision evaluations and special training to use visual and adaptive devices. They also offer guidance for modifying your home as well as group support from others with low vision.

Investigate and learn.

Be persistent. Remember that you are your best health advocate. Investigate and learn as much as you can, especially if you have been told that you may lose more vision. It is important that you ask questions about vision rehabilitation and get answers. Many resources are available to help you.

Write down questions to ask your doctor, or take a tape recorder with you.

Rehabilitation programs, devices, and technology can help you adapt to vision loss. They may help you keep doing many of the things you did before.

Know that, like Mary, Jim, Crystal, and Mike, you can make the difference in living with low vision.

Where can I get more information?

For more information about low vision, contact:

Your state or local rehabilitation agency for the blind and visually impaired.

American Academy of Ophthalmology

P.O. Box 7424 San Francisco, CA 94120–7424 (415) 561–8500 http://www.aao.org

American Foundation for the Blind

11 Penn Plaza, Suite 300 New York, NY 10001 1–800–232–5463 (212) 502–7600 http://www.afb.org

American Optometric Association

243 N. Lindbergh Boulevard St. Louis, MO 63141 (314) 991–4100 http://www.aoanet.org

Council of Citizens with Low Vision International

1-800-733-2258

Lighthouse International

111 E. 59th Street

New York, NY 10022

1-800-334-5497

1-800-829-0500

(212) 821-9200

(212) 821–9713 (TDD)

http://www.lighthouse.org

National Association for Visually Handicapped

22 W. 21st Street, 6th Floor

New York, NY 10010

(212) 889-3141

http://www.navh.org

National Eye Institute, NIH

2020 Vision Place

Bethesda, MD 20892-3655

(301) 496-5248

http://www.nei.nih.gov

What can I do about my low vision?

Although many people maintain good vision throughout their lifetimes, people over age 65 are at increased risk of developing low vision. You and your eye care professional or specialist in low vision need to work in partnership to achieve what is best for you. An important part of this relationship is good communication.

Here are some questions to ask your eye care professional or specialist in low vision to get the discussion started:

Questions to ask your eye care professional

- What changes can I expect in my vision?
- Will my vision loss get worse? How much of my vision will I lose?
- Will regular eyeglasses improve my vision?
- What medical/surgical treatments are available for my condition?
- What can I do to protect or prolong my vision?

- Will diet, exercise, or other lifestyle changes help?
- If my vision can't be corrected, can you refer me to a specialist in low vision?
- Where can I get a low vision examination and evaluation? Where can I get vision rehabilitation?

Questions to ask your specialist in low vision

- How can I continue my normal, routine activities?
- Are there resources to help me in my job?
- Will any special devices help me with daily activities like reading, sewing, cooking, or fixing things around the house?
- What training and services are available to help me live better and more safely with low vision?
- Where can I find individual or group support to cope with my vision loss?

Glossary

Age-Related Macular Degeneration (AMD)—

An eye disease that results in a loss of central, "straight-ahead" vision. AMD is the leading cause of vision loss in older Americans.

Cataract—A clouding of the lens. People with cataracts see through a haze. In a usually safe and successful surgery, the cloudy lens can be replaced with a plastic lens.

Diabetes—A chronic disease related to high blood sugar that may lead to vision loss.

Eye Care Professional—An optometrist or ophthalmologist.

Glaucoma—An eye disease, related to high pressure inside the eye, that damages the optic nerve and leads to vision loss. Glaucoma affects peripheral, or side, vision.

Low Vision—A visual impairment, not corrected by standard eyeglasses, contact lenses, medication, or surgery, that interferes with the ability to perform everyday activities.

Ophthalmologist—A medical doctor who diagnoses and treats all diseases and disorders of the eye, and can prescribe glasses and contact lenses.

Optician—A trained professional who grinds, fits, and dispenses glasses by prescription from an optometrist or ophthalmologist.

Optometrist—A primary eye care provider who prescribes glasses and contact lenses, and diagnoses and treats certain conditions and diseases of the eye.

Orientation and Mobility Specialist—A person who trains people with low vision to move about safely in the home and travel by themselves.

Specialist in Low Vision—An ophthalmologist or optometrist who specializes in the evaluation of low vision. This person can prescribe visual devices and teach people how to use them.

Vision Rehabilitation Teacher—A person who trains people with low vision to use optical and nonoptical devices, adaptive techniques, and community resources.

Visual and Adaptive Devices—Prescription and nonprescription devices that help people with low vision enhance their remaining vision. Some examples include magnifiers, large print books, check-writing guides, white canes, and telescopic lenses.



NIH Publication No. 03-4672 Revised April 2003 Reprinted March 2005