

# Aging and Your Eyes

Adapted from the National Institute on Aging

Age can bring changes that affect your eyesight. But regular eye exams can help. With early detection, many eye problems can be treated to stop the progression of vision loss.

## Five Steps to Safeguard Your Eyesight

1. Have regular physical exams by your doctor to check for diseases like diabetes. Such diseases can cause an eye disease, diabetic retinopathy if not treated.
2. Have a complete dilated eye exam with an ophthalmologist or an optometrist once a year. The eye doctor puts drops in your eyes that dilate your pupils so that he/she can see the back of your eyes. This is the only way to detect diseases, such as macular degeneration, diabetic retinopathy, cataracts or glaucoma. It is especially important for glaucoma since glaucoma has no symptoms. The eye doctor should also check your eyesight, your glasses, and your eye muscles.
3. Find out if you are at high-risk for vision loss. Do you have a family history of diabetes or other eye disease? If so, it is especially important to have a dilated eye exam every year.
4. See an eye doctor immediately if you have any loss or dimness of eyesight, eye pain, fluid coming from the eye, double vision, redness, or swelling of your eye or eyelid.
5. Wear sunglasses and a hat with a wide brim when outside even in the winter. This will protect your eyes from too much sunlight, which can raise your risk of getting cataracts.

## Normal Changes in the Aging Eye Common Eye Complaints

The following common eye complaints often happen with age. In most cases, they can be treated easily. Sometimes, they signal a more serious problem.

1. **Presbyopia** is a slow loss of ability to see close objects or small print. It is a normal process that happens as you get older. Signs of presbyopia include holding your reading materials at arm's length or getting headaches or tired eyes when you read or do other close work. Reading glasses can usually fix this problem unless there are underlying eye conditions.
2. **Floaters** are tiny dark spots or specks that seem to float across your eyes. You might notice them in well-lit rooms or outdoors on a bright day. Floaters can be normal. But sometimes they are a sign of a more serious eye problem, such as retinal detachment. This often is the case if you see light flashes along with floaters. If you notice a sudden change in the type or number of spots or flashes, see your eye doctor right away.
3. **Tearing** (or having too many tears) can come from being sensitive to light, wind, or temperature changes. Tearing also can come from having dry eye. Protecting your eyes (by

wearing sunglasses, for example) may solve the problem. Sometimes, tearing may mean a more serious eye problem, such as an infection or a blocked tear duct. Your eye doctor can treat these conditions.

4 **Eyelid problems** can come from different diseases or conditions. Common eyelid complaints include pain, itching, tearing, or being sensitive to light. Eyelid problems often can be treated with medicine or surgery.

## **Eye Diseases and Disorders**

The following eye problems are common with age. Often these can develop with few or no symptoms.

Each can lead to vision loss and blindness. Having yearly eye exams is the best way to protect yourself. If your eye doctor finds a problem early, a lot can be done to preserve your eyesight.

1. **Retinal disorders** are a leading cause of blindness in the United States. The retina is a thin lining on the back of the eye. In the center of the retina is the macular which is what enables us to see fine detail. It is made up of cells that get visual images and pass them on to the brain.

Retinal disorders of aging eyes include:

*Age-related macular degeneration (AMD)*. AMD affects the part of the retina (the macula) that gives you sharp central vision. Over time, AMD can ruin the sharp vision needed to see objects clearly or to read or recognize faces. In some cases, AMD can be treated with lasers to help reduce the risk of increased vision loss. Ask your eye doctor.

There are two forms of macular degeneration – wet, which causes bleeding, and dry. The wet form is less common but causes more serious vision loss. There are currently two drugs being used to try to prevent further vision loss in wet macular degeneration. They are Lucentis and Advastin. In some cases these medications have even helped to restore some of the damage done. Ask your eye doctor about research being done to treat AMD.

Macular degeneration is the leading cause of vision loss among older people. Macular degeneration alone will not cause total blindness, however. Affected persons will still have peripheral vision (side vision) and can learn to move their heads to adjust for the loss of their central vision.

**Diabetic retinopathy.** This common complication of diabetes happens when small blood vessels stop feeding the retina as they should. Laser surgery and a treatment called vitrectomy can help. The vitreous is a normally clear, gel-like substance that fills the center of the eye. A vitrectomy may be performed to clear blood and debris from the eye or to remove scar tissue that makes it difficult for light to pass through the eye resulting in blurred vision. If you have diabetes, be sure to have an eye exam through dilated pupils every year.

**Retinal detachment.** This happens when the inner and outer layers of the retina become separated. If you notice changes in floaters and/or light flashes in your eye, either all at once or over time, see your eye doctor at once. With surgery or laser treatment, doctors often can reattach the retina and bring back all or part of your eyesight.

2. **Glaucoma** comes primarily from too much fluid pressure building up inside the eye. Some people with low eye pressures can have glaucoma. A recent study has shown that even people with normal pressure can have glaucoma. This is why it is very important to have a visual field test to determine whether there is loss of peripheral (side) vision which can indicate glaucoma. Over time, the disease can damage the optic nerve. This leads to vision loss and blindness. When the optic nerve is damaged, nothing can be done to restore any vision. Loss of vision doesn't happen until there has been a large amount of nerve damage. Most people with glaucoma have no early symptoms or pain from increased pressure. This is why Glaucoma is frequently called the *Sneak Thief of Sight*. You can protect yourself by having regular, dilated eye exams. Treatment may be prescription eye drops, medicines you take by mouth, or surgery. It is extremely important to take your medication as the eye doctor has prescribed.
3. **Cataracts** are cloudy areas in the eye's lens. Normal lenses are clear and let light through. Cataracts keep light from easily passing through the lens. This causes loss of eyesight. Cataracts often form slowly without any symptoms. Some stay small and don't change eyesight very much. Others may become large or thick and harm vision. Cataract surgery is quite common. Your eye doctor can watch for changes in your cataract over time to see if you need surgery. Cataract surgery is successful in 98% of the cases. Sometimes surgery for cataracts is not recommended because of an additional eye condition.
4. **Corneal diseases and conditions** can cause redness, watery eyes, pain, reduced vision, or a halo effect. The cornea is the clear, dome-shaped "window" at the front of the eye. It helps to focus light that goes into the eye. Disease, infection, injury, toxic agents, and other things can harm the cornea. Treatments include changing your eyeglass prescription, using eye drops, or in severe cases, having surgery, including corneal transplantation.
5. **Dry eye** happens when tear glands don't work well. Dry eye can be uncomfortable. It can cause itching, burning, or even some vision loss. Your eye doctor may suggest using a home humidifier or special eye drops (artificial tears). More serious cases of dry eye may need surgery.

## **Low Vision**

**Low vision** affects some people as they age. Low vision means you cannot improve your eyesight with glasses, contact lenses, medicine, or surgery and that your degree of vision loss interferes with your ability to carry out routine daily activities. But you can learn to make use of your remaining vision by seeing an eye doctor who specializes in low vision (called a low vision specialist) who can prescribe specific magnifiers for you and teach you to use lighting that is directly on the object you want to see like a book. You may even benefit from strong prescription glasses.

You may have low vision if you:

1. have trouble seeing well enough to do everyday tasks like reading, cooking, or sewing;
2. can't recognize the faces of friends or family;
3. have trouble reading street signs; or
4. find that lights don't seem as bright as usual.

If you have any of these problems, ask your eye doctor about a low vision examination and vision rehabilitation services. There are many things that can help you make the best use of remaining vision and manage your daily tasks. These include large print reading materials, closed circuit television, audio tapes, electronic reading machines and computers with large print and speech output.

Other simple changes also may help:

1. Write with bold, black felt-tip markers.
2. Use paper with bold lines to help you write in a straight line.
3. Put colored tape on the edge of your steps to help you avoid a fall.
4. Install dark-colored light switches and electrical outlets that you can see easily against light colored walls.
5. Use motion lights that turn on by themselves when you enter a room. These may help you avoid accidents caused by poor lighting.
6. Use telephones, clocks, and watches with large numbers, and put large-print labels on the microwave and stove.

Do your part by taking care of your eyes. Have an annual dilated eye examination and follow

your doctor's instructions. Less than perfect vision does not have to hamper your lifestyle. If your eye doctor says that nothing more can be done for you medically, ask for a referral to a low vision specialist for a low vision evaluation.

## **Resources**

To learn more about eye care contact:

### **The National Eye Institute (NEI)**

2020 Vision Place

Bethesda, MD 20892-3655

Phone: 301-496-5248

Website: [www.nei.nih.gov](http://www.nei.nih.gov)

**The National Institute on Aging (NIA)**, part of the National Institutes of Health (NIH), distributes *Age Pages* and other materials on a wide range of topics related to health and aging. For a list of free publications contact:

### **National Institute on Aging**

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