



# About Common Eye Disorders and Diseases

KEY POINTS

- Refractive errors are the most frequent eye problems in the United States.
- Diabetic retinopathy is the leading cause of blindness in American adults.
- Amblyopia is the most common cause of vision impairment in children.



## Overview

The leading causes of blindness and low vision in the United States are primarily age-related eye diseases. Those diseases include age-related macular degeneration, cataract, diabetic retinopathy, and glaucoma. Other common eye disorders include amblyopia and strabismus.

## Types

### Refractive errors

Refractive errors are the most frequent eye problems in the United States. They include:

- Myopia (nearsightedness)
- Hyperopia (farsightedness)
- Astigmatism (distorted vision at all distances)
- Presbyopia that occurs between age 40–50 years (loss of the ability to focus up close, inability to read words in a book, need to hold newspaper farther away to see clearly)

Refractive errors can be corrected by eyeglasses, contact lenses, or in some cases surgery. The National Eye Institute states that proper refractive correction could improve vision among 150 million Americans.

### Age-related macular degeneration

Age-related macular degeneration (AMD) results in damaged sharp and central vision. Central vision is needed for seeing objects clearly and for reading and driving. AMD affects the macula, the central part of the retina that allows the eye to see fine details.

#### There are two forms of AMD—wet and dry.

With **wet AMD**, abnormal blood vessels behind the retina start to grow under the macula, leading to blood and fluid leakage. Bleeding, leaking, and scarring causes damage and leads to rapid central vision loss. An early symptom of wet AMD is that straight lines appear wavy.

With **dry AMD**, the macula thins over time as part of the aging process, gradually blurring central vision. The dry form is more common and accounts for 70–90% of cases of AMD. It progresses more slowly than the wet form. Over time, as less of the macula functions, central vision is gradually lost in the affected eye. Dry AMD generally affects both eyes. One of the most common early signs of dry AMD is drusen.

**Drusen** are tiny yellow or white deposits under the retina often found in people 60 years and older. Small drusen are normal and don't cause vision loss. Having many large drusen raises the risk of developing advanced dry AMD or wet AMD.

About 1.8 million Americans aged 40 years and older are affected by AMD. An additional 7.3 million with large drusen are at high risk of developing AMD. AMD is the leading cause of permanent impairment of reading and fine or close-up vision among people aged 65 years and older.



Vision loss with AMD

#### Keep Reading:

[About Age-Related Macular Degeneration](#)

## Cataract

Cataract is a clouding of the eye's lens. It's the leading cause of blindness worldwide and the **leading cause of vision loss** in the United States.

Cataracts can occur at any age and can be present at birth. Removing cataracts is a widely available treatment. However, access barriers such as insurance coverage, treatment costs, patient choice, or lack of awareness prevent many people from receiving the proper treatment. An estimated 20.5 million (17.2%) Americans aged 40 years and older have cataract in one or both eyes, and 6.1 million (5.1%) have had their lens removed by surgery.



Vision loss with cataract

## Diabetic retinopathy

Diabetic retinopathy (DR) is the **leading cause of blindness** in American adults. With DR, there is progressive damage to the blood vessels of the retina, the light-sensitive tissue at the back of the eye that is necessary for good vision. DR progresses through four stages:

1. Mild nonproliferative retinopathy (tiny areas of swelling called microaneurysms occur)
2. Moderate nonproliferative retinopathy (blockage in some retinal vessels)
3. Severe nonproliferative retinopathy (more vessels are blocked, leading to growing new blood vessels)
4. Proliferative retinopathy (most advanced stage)

Diabetic retinopathy usually affects both eyes.

The risks of DR can be reduced through management of blood sugar, blood pressure, and cholesterol. Early diagnosis of DR and timely treatment reduce the risk of vision loss. However, as many as 50% of patients are not getting their eyes examined or are diagnosed too late for treatment to be effective. An estimated 4.1 million Americans have retinopathy and 899,000 have vision-threatening retinopathy.

## Glaucoma

Glaucoma is a group of diseases that can damage the eye's optic nerve and result in vision loss and blindness. Glaucoma occurs when the normal fluid pressure inside the eyes slowly rises. However, recent findings show that glaucoma can occur with normal eye pressure. With early treatment, you can often protect your eyes against serious vision loss.

There are two major categories: open angle and closed angle glaucoma.

Open angle is a chronic condition that progress slowly over a long period of time. Usually a person with glaucoma doesn't notice vision loss until the disease is very advanced. This is why glaucoma is called "sneak thief of sight."

Angle closure can appear suddenly and is painful. Visual loss can progress quickly. However, pain and discomfort typically lead patients to seek medical attention before permanent damage occurs.



Vision loss with glaucoma

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[About Glaucoma](#)

## Amblyopia

Amblyopia, also referred to as "lazy eye," is the **most common cause of vision impairment** in children. With amblyopia, the vision in one eye is reduced because the eye and the brain are not working together properly. The eye itself looks normal, but it is not being used normally because the brain is favoring the other eye.

Conditions leading to amblyopia include:

- Strabismus, an imbalance in the positioning of the two eyes
- Being more nearsighted, farsighted, or astigmatic (distorted vision at all distances) in one eye than the other eye
- Other eye conditions such as cataract (this is rare)

Unless it is successfully treated in early childhood, amblyopia usually lasts into adulthood. It's the most common cause of permanent one-eye vision impairment among children and young and middle-aged adults. An estimated 2%–3% of the population suffers from amblyopia.

Keep Reading:

[Keep an Eye on Your Child's Vision](#)

## Strabismus

Strabismus involves an imbalance in the positioning of the two eyes. Strabismus can cause the eyes to cross in (esotropia) or turn out (exotropia).

Strabismus is caused by a lack of coordination between the eyes. As a result, the eyes look in different directions and do not focus simultaneously on a single point.

In most cases of strabismus in children, the cause is unknown. In more than half of these cases, the problem is present at or shortly after birth (congenital strabismus). When the two eyes fail to focus on the same image, there is reduced or absent depth perception and the brain may learn to ignore the input from one eye, causing permanent vision loss in that eye.

### SOURCES

CONTENT SOURCE:

[National Center for Chronic Disease Prevention and Health Promotion \(NCCDPHP\); Diabetes](#)