



# Diabetic Retinopathy

Retinopathy is one of the most common and most serious eye complications. It's actually the leading cause of preventable blindness.

Many people with diabetes can prevent retinopathy with healthy blood glucose (blood sugar) management, maintaining an **A1C of less than 7 percent** and working on their overall **time-in-range** goals.

The good news is that retinopathy is usually very treatable, especially if you catch it in the earliest stages during your annual eye exam.

## WHAT IS DIABETIC RETINOPATHY?

Retinopathy is a microvascular complication of diabetes involving the small blood vessels throughout the retina in the back of each eye. Retina tissue is highly sensitive to light and filled with millions of cells called **rods and cones**. These cells send visual information to your brain through the optic nerve, giving you the ability to see. Keeping your retinas healthy means saving your vision.

## WHAT CAUSES DIABETIC RETINOPATHY?

Retinopathy is usually caused by persistently high blood glucose (blood sugar) levels. Damage to your eyes begins when glucose blocks blood vessels that go to your retina. While genetics and metabolic abnormalities can lead to retinopathy, it's less common.

**Maintain an optimal A1C of less than 7 percent** for the best possible prevention of diabetes-related eye complications.

## SYMPTOMS OF DIABETIC RETINOPATHY

There are often no symptoms in the earliest stages of retinopathy, which is why it's so important to schedule annual eye exams. Some people may experience symptoms that include:

- Blurred vision
- Distorted vision
- Impaired colors
- Seeing floaters
- Loss of vision

**Remember, you can have retinopathy even if you aren't experiencing any of these symptoms.**

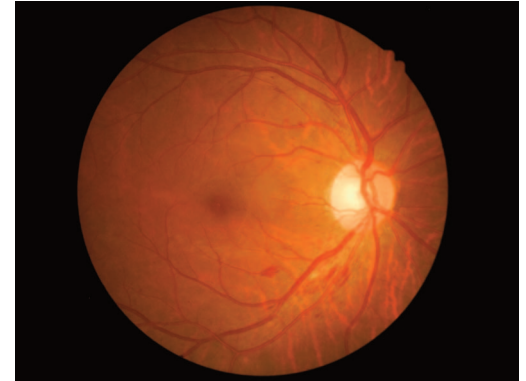
**Your annual eye exam is the best way to detect retinopathy** in the earliest stages. For many, it may be possible to reverse the damage of early or moderate retinopathy. In later stages of retinopathy, you may develop floaters in your vision — which also increase your risk of developing other eye conditions. These are caused by blood leaking from swollen blood vessels in the retina. While the floaters might come and go, this does not mean your retinopathy has improved. Instead, it simply means the blood from that blood vessel was absorbed into the tissue of your eye. Eventually, floaters can worsen to the point of permanent vision loss.

## STAGES OF DIABETIC RETINOPATHY

There are two categories of retinopathy:

- **Non-proliferative retinopathy (NPDR):** There is no presence of abnormal blood vessel growth within the affected retina tissue.
- **Proliferative retinopathy (PDR):** There is a presence of abnormal cell growth within the cells of the affected retina tissue.

If you are diagnosed with retinopathy, your eye doctor will define it as [Mild, Moderate or Severe Non-Proliferative Diabetic Retinopathy, or Proliferative Diabetic Retinopathy.](#)



## TREATING DIABETIC RETINOPATHY

With any treatment method, it's important to also work with your diabetes health care team to improve your overall blood glucose (blood sugar) management, your A1C and your blood pressure levels. Achieving and maintaining healthy blood glucose levels will reduce your risk of experiencing further damage to the blood vessels in your eyes.

Your eyecare team will recommend treatment based on the status of your retinopathy, which may include:

- **Injectable medications:** Stops new abnormal blood vessels from growing and helps protect you from future vision loss.
- **Laser therapy:** Reduces the size of abnormal vessels, helping to protect you from future vision loss.
- **Vitrectomy:** Small incisions in the eye to remove the gel inside the eye, including any blood and scar tissue from the affected retina.

Remember to take good care of your eyes by taking good care of your diabetes with the support of your health care team, including your eye doctor, diabetes care provider and diabetes care and education specialist.

### SOURCE:

American Diabetes Association; June 2023. This article is for informational purposes only and does not constitute medical advice. Always seek the advice of your physician or other qualified health provider with any questions you may have regarding a medical condition.