

Diabetic Retinopathy

What is diabetic retinopathy?

Diabetic retinopathy is a problem with the blood vessels in the retina. The retina is the lining at the back of the eye that senses light coming into the eye. The retina has tiny blood vessels that are easily damaged by high blood sugar and high blood pressure. Diabetic retinopathy is the most common cause of permanent blindness from diabetes.

What is the cause?

High blood sugar levels damage small blood vessels. The weakened blood vessels may break and leak fluid and blood. If the condition worsens, some of the blood vessels close off. This prevents oxygen from getting to the retina. If the retina cannot get oxygen, it tries to grow new blood vessels. These new blood vessels, however, are abnormal and can bleed, cause cloudy vision, and form scar tissue. This scar tissue can pull on the retina, causing a retinal detachment and possible loss of vision.

The longer you have had diabetes and the worse your blood sugar control is, the more likely you are to have retinopathy.

What are the symptoms?

At first, diabetic retinopathy may not cause symptoms. As the problem gets worse, you may have:

- blurred vision
- floaters, which are black spots or cobweb-like shapes
- temporary or permanent blindness

How is it diagnosed?

We will look at your eyes with a special light to see inside your eyes and look for signs of retinopathy. Additional testing such as fundus photographs, fluorescein angiography, OCT testing, or other tests may be ordered to evaluate your retina functioning.

How is it treated?

Early treatment before the retina has been badly damaged can reduce vision loss from this disease. To treat retinopathy, an eye surgeon may use a laser to seal leaking blood vessels and help reduce the growth of abnormal blood vessels. These laser treatments are usually done in the office after numbing the eye with drops or shots.

If you have had bleeding into the clear gel that fills the inside of the eye, you may need a procedure to remove the gel and any traction tissue in a procedure called a vitrectomy. The gel will be replaced with a clear fluid.

Medicine may be injected in and around the eye to decrease the growth of new blood vessels or to treat edema or leakage.

Be sure to ask us if these treatments might help you.

How long will the effects last?

As long as you have diabetes, there is a chance you will have retinopathy. However, careful control of your blood sugar level, blood pressure, and cholesterol will help delay and possibly prevent vision loss.

You may need to be treated more than once for retinopathy. Have your eyes checked regularly to make sure you get treatment when you need it.

Retinopathy can cause the retina to become detached. This means the retina is pulled away from the back of the eye. If this happens, you need to see us for urgent treatment to reduce the chance of permanent vision loss. Call your provider right away if you start seeing dark spots, floaters, or light flashes or your vision is blocked, blurred, or distorted.

How can I take care of myself?

Follow your provider's recommendations and these guidelines:

- If you have type-2 diabetes, you should have annual visits to your eye care provider starting the year that you are diagnosed. If you have type-1 diabetes, annual eye check-ups should start within 5 years of diagnosis if you are under 30, and right away if you are over 30. If you have eye changes due to diabetes, your eye care provider may recommend more frequent visits. Ask your provider how often your eyes should be checked.
- Tell your provider right away if you have any change in your vision.
- Talk to your healthcare provider about the treatment of your diabetes, blood pressure, and cholesterol. Ask your provider for the results of your hemoglobin A1C test. This blood test shows how well your sugar has been controlled in the last 2 to 3 months.

What can be done to help prevent diabetic retinopathy?

To help prevent diabetic retinopathy, follow these guidelines:

- Control your blood sugar.
- Control your blood pressure.
- Control your cholesterol levels.
- Follow your diet and healthcare plan for your diabetes so you have fewer complications.
- Get regular eye exams.