

Diabetic Eye Exam (Diabetic Retinopathy)



If you have diabetes, you probably know that your body can't use or store sugar properly. When your blood sugar gets too high, it can damage the blood vessels in your eyes. This damage may lead to diabetic retinopathy. In fact, the longer someone has diabetes, the more likely he is to have retinopathy.

In later stages, the disease may lead to new blood vessel growth over the retina. The new blood vessels can cause scar tissue to develop, which can pull the retina away from the back of the eye. This is known as retinal detachment, and it can lead to blindness if untreated.

In addition, abnormal blood vessels can grow on the iris, which can lead to glaucoma.

People with diabetes are 25 times more likely to lose vision than those who are not diabetic, according to the American Academy of Ophthalmology.

Diabetic Retinopathy Symptoms and Signs

Everyone who has diabetes is at risk for developing diabetic retinopathy, but not all diabetics do develop it. In its early stages, you may not notice any change in your vision, but it can lead to the later, sight-threatening form of the disease.

Floaters can be a sign of diabetic retinopathy. Sometimes difficulty reading or doing close work can indicate that fluid is collecting in the macula, the most light-sensitive part of the retina. This fluid build-up is called macular edema.

Another sign is double vision, which occurs when the nerves controlling the eye muscles are affected. If you experience any of these signs, see your eye doctor immediately. Otherwise, diabetics should see their eye doctor at least once a year for a dilated eye exam.

Your eye doctor may diagnose retinopathy using a special test called fluorescein angiography. In this test, dye is injected into the body and then gradually appears within the retina due to blood flow. Your eye care practitioner will photograph the retina with the illuminated dye. Evaluating these pictures tells your doctor how far the disease has progressed.

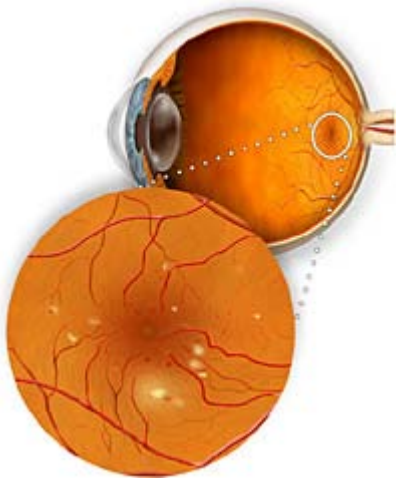
What Causes Diabetic Retinopathy?

Changes in blood-sugar levels increase your risk of diabetic retinopathy, as does long-term diabetes. Generally, diabetics don't develop diabetic retinopathy until they have had diabetes for at least 10 years, but it is not wise to wait that long to have an eye exam. As soon as you've been diagnosed with diabetes, you need to have a dilated eye exam at least once a year.

High blood sugar can damage blood vessels in the retina, and when they are damaged, they can leak fluid or bleed. This causes the retina to swell and form deposits. This is an early form of diabetic retinopathy called nonproliferative or background retinopathy.

In a later stage, called proliferative retinopathy, new blood vessels grow on the surface of the retina. These new blood vessels can lead to serious vision problems because they can break and bleed into the vitreous, the clear, jelly-like substance that fills the center of the eye. Proliferative retinopathy is a much more serious form of the disease and can lead to blindness.

(continued)



Left: Background diabetic retinopathy is an early sign of damage to the retina at the back of the eye, where blood vessels begin to weaken and leak. The leakage causes accumulations of yellowish proteins and fatty substances.

Right: In the late stages of diabetic retinopathy, you may have blind spots and/or [floaters](#).



Fortunately, you can significantly reduce your risk of developing diabetic retinopathy by using common sense and taking good care of yourself.

- Keep your blood sugar under good control.
- Monitor your blood pressure and keep it under good control, or seek appropriate care.
- Maintain a healthy diet.
- Exercise regularly.
- Follow your doctor's instructions to the letter.

Diabetic Retinopathy Treatment

According to the American Academy of Ophthalmology, 95 percent of those with significant diabetic retinopathy can avoid substantial vision loss if they are treated in time. The possibility of early detection is why it is so important for diabetics to have a dilated eye exam at least once a year.

Want to learn more? Please call Dr. Lothes at (614) 841-9300 to set-up an examination and consultation.