

Diabetic Retinopathy

An Eye Disease That Affects People With Diabetes

Diabetic Retinopathy

Diabetic retinopathy is a complication (problem) of diabetes that can damage your retina. If left untreated, diabetic retinopathy can lead to blindness.

According to the National Eye Institute, about half of all Americans diagnosed with diabetes have this complication.

Diabetic retinopathy occurs when diabetes damages blood vessels in the retina.

In the early stages of this eye disease, retinal blood vessels leak. As diabetic retinopathy progresses, it enters a stage called proliferative retinopathy.

Weak blood vessels grow on the retina and in the vitreous humor (a clear, jelly-like fluid) in the space between the lens and retina. They can bleed, cloud vision and destroy the retina.

Those at Risk for Diabetic Retinopathy

All people with diabetes, both type 1 and type 2 diabetes, are at risk for this eye disease. The longer you have diabetes, the more likely it is that you will develop diabetic retinopathy.

It is important that you schedule an eye exam with an eye doctor at least once a year.

Be sure to see an eye doctor right away if your:

- vision changes in only one eye
- vision changes last more than a few days
- vision changes happen at the same time you have changes in your blood glucose.

Signs of Diabetic Retinopathy

- **early stages** — often there are no warning signs and no pain. High blood glucose may cause blurry vision that comes and goes during the day.
- **advanced stages** — new blood vessels forming may bleed and block vision. It may take months to years for the blood to clear. Sometimes it does not clear.

Detecting Diabetic Retinopathy

Your eye care provider will look inside your eye for early signs of the disease.

Your provider will check your retina for signs of:

- leaking blood vessels
- swelling
- damaged nerve tissue
- changes in the blood vessels.

Treating Diabetic Retinopathy

There are two treatments for this eye disease: laser surgery and vitrectomy. These procedures do not cure diabetic retinopathy.

- Laser surgery is used to treat severe macular edema and proliferative retinopathy.
 - For macular edema, a laser beam seals leaking blood vessels. The procedure is used to stabilize your vision.
 - For proliferative retinopathy, a laser beam destroys abnormal blood vessels in the back of your eye. Some side vision is lost to save the rest of your sight. You may need more than one laser treatment.
- Vitrectomy is surgery to remove vitreous humor that has a lot of blood in it. The vitreous is replaced with a clear salt solution. Vitreous is mostly water, so you won't notice a difference with the salt solution.

**Information adapted from the
National Eye Institute of the
National Institutes of Health.**