

Diabetic Retinopathy

Not everyone is aware of the linkage between diabetes and eye health. High blood sugar levels can damage the blood vessels in the back of your eye ([retina](#)), resulting in a complication called [diabetic retinopathy](#) (DR).

Diabetic retinopathy is the leading cause of new cases of preventable blindness in adults.

DR is a general term for disorders of the retina caused by diabetes, which include nonproliferative and proliferative retinopathy and [macular edema](#).

Individuals with diabetes may have increased risk for developing DR due to:

- High blood sugar levels over the long term
- High blood pressure or cholesterol
- Pregnancy
- Tobacco use
- Race/Ethnicity – African American, Hispanic, Native American

There is a **2.5-fold increased risk** of disease progression during pregnancy⁵

Common Symptoms

Early (nonproliferative) retinopathy may not cause symptoms, but as the condition advances, it may become proliferative or result in macular edema.

Individuals with advanced DR might experience:

- Spots or dark strings floating in your vision (floaters)
- Blurred vision
- Fluctuating vision
- Dark or empty areas in your vision
- Vision loss

Macular edema is a complication of diabetic retinopathy where fluid builds up in the macula — the part of the eye responsible for central vision.

Diagnosing DR

DR can be diagnosed using a [dilated eye exam](#). Once diagnosed, additional tests can be performed during subsequent eye exams to monitor disease progression. Since early stages of DR rarely have symptoms, individuals who have diabetes should schedule regular eye exams to monitor for early warning signs of DR.

Treatment Options

There is no cure for diabetic retinopathy. However, early diagnosis will mean treatments are more likely to be helpful.

As DR advances, treatments may include injections into the eye, laser treatment, or surgery to minimize further damage to blood vessels in the eye, slowing progression of the disease.

- **Anti-VEGF injections** directly into the eye can slow or stop damage from DR, including macular edema.
- **Pan-retinal photocoagulation** uses a scatter laser to shrink abnormal blood vessels that have developed over a wider area of the retina.
- **Vitrectomy** is a surgical procedure that removes the vitreous fluid from the middle of the eye, as well as scar tissue on the retina that is impairing vision and replaces it with temporary saline or gas/oil bubble to help repair the eye.

Individuals who experience vision loss due to diabetes may benefit from low vision support services. Refer to the [Living with Impaired Vision](#) section of the SWHR Guide to Women's Eye Health for more information.