

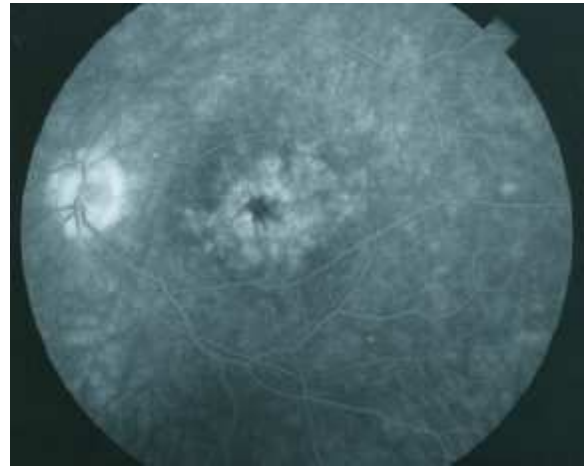


## Diabetes can affect sight

If you have diabetes mellitus, your body does not use and store sugar properly. High blood-sugar levels can damage blood vessels in the retina, the nerve layer at the back of the eye that senses light and helps to send images to the brain. The damage to retinal vessels is referred to as diabetic retinopathy.

### Types of diabetic retinopathy

There are two types of diabetic retinopathy: nonproliferative diabetic retinopathy (NPDR) and proliferative diabetic retinopathy (PDR). NPDR, commonly known as background retinopathy, is an early stage of diabetic retinopathy. In this stage, tiny blood vessels within the retina leak blood or fluid. The leaking fluid causes the retina to swell or to form deposits called exudates. Many people with diabetes have mild NPDR, which usually does not affect their vision. When vision is affected it is the result of macular edema and/or macular ischemia.



PDR is present when abnormal new vessels (neovascularization) begin growing on the surface of the retina or optic nerve. The main cause of PDR is widespread closure of retinal blood vessels, preventing adequate blood flow. The retina responds by growing new blood vessels in an attempt to supply blood to the area where the original vessels closed.

### Diabetic retinopathy diagnosed?

A medical eye examination is the only way to find changes inside your eye. An ophthalmologist (EyeMD) can often diagnose and treat serious retinopathy before you are aware of any vision problems. The ophthalmologist dilates your pupil and looks inside of the eye with an ophthalmoscope.

### How is diabetic retinopathy treated?

The best treatment is to prevent the development of retinopathy as much as possible. Strict control of your blood sugar will significantly reduce the long-term risk of vision loss from diabetic retinopathy. If high blood pressure and kidney problems are present, they need to be treated.



Laser surgery is often recommended for people with macular edema, PDR and neovascular glaucoma.

### **Vision loss is largely preventable**

If you have diabetes, it is important to know that today, with improved methods of diagnosis and treatment, only a small percentage of people who develop retinopathy have serious vision problems. Early detection of diabetic retinopathy is the best protection against loss of vision. You can significantly lower your risk of vision loss by maintaining strict control of your blood sugar and visiting your ophthalmologist regularly.

### **When to schedule and examination**

People with diabetes should schedule examinations at least once a year. More frequent medical eye examinations may be necessary after the diagnosis of diabetic retinopathy. Pregnant women with diabetes should schedule an appointment in the first trimester because retinopathy can progress quickly during pregnancy.

You should have your eyes checked promptly if you have visual changes that:

- Affect only one eye
- Last more than a few days
- Are not associated with a change in blood sugar.

When you are first diagnosed with diabetes, you should have your eyes checked:

- Within five years of the diagnosis if you are 30 years old or younger
- Within a few months of the diagnosis if you are older than 30 years