

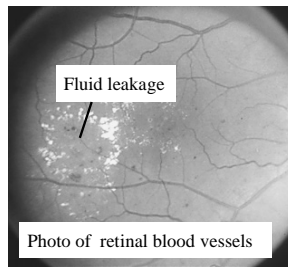
## Is Treatment Available?

Diabetic retinopathy does not always require treatment. Very often, the condition does not meet the requirements for treatment and close monitoring by one of our Optometric Physicians is all that is necessary. Treatment is necessary if the retina exhibits swelling from leaking blood vessels or abnormal blood vessels are found on examination. The decision to treat diabetic retinopathy is not based on how a patient sees or how the eyes feel. Based on numerous nationwide scientific studies, very specific criteria are followed to determine when to proceed with treatment.

Our Optometric Physicians follow these criteria when evaluating diabetics and use them for determining a plan of action. If necessary, a retinal specialist will be consulted for treatment. It is important to note that the treatments are very effective at stabilizing the condition, but rarely improve vision. Good blood sugar control is the best way to protect the eyesight.

## How Is Diabetic Retinopathy Treated?

Diabetic retinopathy has two forms which require treatment: macular edema and proliferative disease. Macular edema is swelling of the



*Macular edema*

retina caused by leaking blood vessels and is treated with laser.

Proliferative disease is characterized by the existence of abnormal, new blood vessels growing on the

retina. This is usually treated with laser, although in a different manner than macular edema. If the new vessels bleed inside the eye creating a vitreous hemorrhage, or a retinal detachment occurs, eye surgery may be required to remove the blood or fix the retinal detachment. These procedures are usually successful in slowing the damage from diabetes, but good blood sugar control is still the best way to preserve good vision.

---

**DRS. NABERHAUS, LOCKE,  
LEON, BOYLE & BURNS**

**OPTOMETRIC PHYSICIANS**



# Diabetic Retinopathy

**BREVARD  
VISION  
CARE**

---

DRS. NABERHAUS, LOCKE,  
LEON, BOYLE & BURNS

OPTOMETRIC PHYSICIANS

TELEPHONE:  
MELBOURNE – 725-4755  
SUNTREE - 752-0100

## What is Diabetic Eye Disease?

Diabetic eye disease refers to a group of eye problems that people with diabetes may face as a complication of this disease. All can cause severe loss of vision and blindness. Diabetic eye disease may include:

**Diabetic Retinopathy**-damage to the blood vessels in the retina.

**Cataract**-clouding of the eye's lens

**Glaucoma**-increased fluid pressure inside the eye that leads to optic nerve damage and vision loss.

## What is the Most Common Diabetic Eye Disease?

Diabetic retinopathy is the leading cause of blindness in American adults. It is caused by changes in the blood vessels of the retina. In some people with diabetic retinopathy, retinal blood vessels may swell and leak fluid. In other people, abnormal new blood vessels grow on the surface of the retina. These changes may result in vision loss or blindness.

## What Are Its Symptoms?

Often there are no symptoms in the early stages of diabetic retinopathy. Vision may not change until the disease becomes severe. Typically, there is no pain associated with the disease.

Blurred vision may occur when the macula (the part of the retina that provides sharp, central vision) swells from the leaking fluid. This condition is called macular edema. If new vessels have grown on the retina, they can bleed into the eye, blocking vision. But, even in advanced cases, the disease may progress without symptoms. That's why regular eye examinations for people with diabetes are so important.

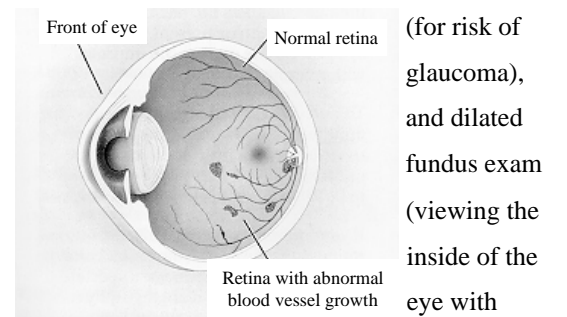
## Who is Most Likely to Get Diabetic Retinopathy?

Diabetic retinopathy can occur in anyone with diabetes; however, certain risk factors are known to raise the risk. The longer one is diabetic, the greater the chances of developing diabetic retinopathy. Diabetics who use insulin have a higher probability of getting diabetic retinopathy. Poor blood sugar control contributes to the development of diabetic retinopathy. It is estimated that half of all those with diabetes

will develop some degree of diabetic retinopathy during their lifetimes. The effects of diabetes on the eyes are a microcosm of the effects in the rest of the body, and these effects are long-term and cumulative.

## How is it Detected?

Diabetic retinopathy can only be detected through a thorough, dilated eye examination. An evaluation of visual acuity, intraocular pressure



(for risk of glaucoma), and dilated fundus exam (viewing the inside of the eye with lights and special magnifying lenses), along with assessment of pertinent health history are all necessary to properly diagnose the existence and severity of diabetic retinopathy.

Once the diagnosis of diabetic retinopathy is made, specific clinical criteria are used to determine the necessity of treatment. When appropriate, laser procedures or eye surgery may be necessary to slow the damage to the tissues of the eye.