

Diabetic Retinopathy:

Diabetic retinopathy is a potentially blinding complication of diabetes that damages the eye's retina. It affects nearly half of all Americans diagnosed with diabetes.

At first, you may notice no changes in your vision. But don't let diabetic retinopathy fool you. It could get worse over the years and threaten your vision! With timely treatment, 90% of those with advanced diabetic retinopathy can be saved from going blind.

The National Eye Institute (NEI) is the federal government's lead agency for vision research. The NEI urges all people with diabetes to have an eye examination through dilated pupils at least once a year.

Diabetic retinopathy occurs when diabetes damages the tiny blood vessels in the retina. At this point, most people do not notice any changes in their vision.

The retina is a light-sensitive tissue at the back of the eye. When light enters the eye, the retina changes the light into nerve signals. The retina then sends these signals along the optic nerve to the brain. Without a retina, the eye cannot communicate with the brain, making vision impossible.

Some people develop a condition called macular edema. It occurs when the damaged blood vessels leak fluid and lipids onto the macula (the part of the retina that lets us see detail). The fluid makes the macula swell, blurring vision.

As the disease progresses, it enters its advanced, or proliferative, stage. Fragile, new blood vessels grow along the retina and in the clear, gel-like vitreous that fills the inside of the eye. Without timely treatment, these new blood vessels can bleed, cloud vision, and destroy the retina.

All people with diabetes are at risk, including those with Type I diabetes (juvenile onset) and those with Type II diabetes (adult onset). During pregnancy, diabetic retinopathy may also be a problem for women with diabetes. It is recommended that all pregnant women with diabetes have dilated eye examinations each trimester to protect their vision.

Diabetic retinopathy often has no early warning signs. At some point, though, you may have macular edema. It blurs vision, making it hard to do things like read and drive. In some cases, your vision will get better or worse during the day.

As new blood vessels form at the back of the eye, they can bleed (hemorrhage) and blur vision. The first time this happens it may not be very severe. In most cases, it will leave just a few specks of blood, or spots, floating in your vision. They often go away after a few hours.