

## What kinds of eye problems affect people with diabetes?

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 vision loss or even blindness.

- **Diabetic retinopathy.** This disease, which is specific to those with diabetes, damages blood vessels in the retina. There are no early symptoms. Only an eye exam can identify it. Irreversible vision problems occur if the disease progresses.
- **Cataracts.** Cataracts are the clouding of the eye's lens that causes vision to become blurry. People with diabetes are twice as likely to develop a cataract as those who do not have the disease. In addition, cataracts tend to develop at an earlier age, around middle age, in people with diabetes.
- **Glaucoma.** Glaucoma results from an increase in fluid pressure inside the eye that leads to progressive optic nerve damage and loss of vision. People with diabetes are nearly twice as likely to develop glaucoma as other adults.

## Why is diabetic retinopathy a concern with diabetes?

Diabetic retinopathy is the most serious diabetic eye disease. Nearly half of the millions of Americans with diabetes have some degree of diabetic retinopathy, a leading cause of blindness in American adults.

It is caused by changes in the retina's blood vessels. In some people with diabetic retinopathy, retinal blood vessels may swell and leak fluid. In others, abnormal new blood vessels grow on the surface of the retina. These changes can cause vision loss or blindness.

## Who is most likely to get diabetic retinopathy?

Anyone with diabetes. The longer someone has diabetes, the more likely diabetic retinopathy may develop. In fact nearly three-quarters of all diabetic patients develop microvascular complications such as diabetic retinopathy during their lifetime. Virtually all people who have had type 1 diabetes for 15 years or more have some degree of diabetic retinopathy.

## What are its symptoms?

Many people with diabetic retinopathy don't have early symptoms. There is no pain, no blurred vision and no inflammation of the eyes. In fact, many people don't develop vision problems until the disease has reached an advanced stage. At this point, the vision that has been lost cannot be restored.

With diabetic retinopathy, 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 and does not usually cause pain.

If new vessels have grown on the surface of the retina, they can bleed into the eye and block vision. But even in more advanced cases, the disease may progress a long way without symptoms. That is why regular eye examinations for people with diabetes are so important.

### **How is diabetic retinopathy treated?**

If new vessels have grown on the surface of the retina, your eye care professional may suggest laser treatments, which aim a high-energy beam of light onto the retina to shrink the abnormal vessels. Laser surgery has proven to reduce the risk of severe vision loss from this type of diabetic retinopathy by 60 percent.

If you have macular edema, laser treatment may also be used. In this case, the laser beam is used to seal the leaking blood vessels. However, laser treatment cannot restore vision that has already been lost. That is why early detection of diabetic retinopathy is the best way to prevent vision loss.

### **Can diabetic retinopathy be prevented?**

Not totally, but your risk can be greatly reduced. Excellent control of blood sugar levels slows the onset and progression of retinopathy, and lessens the need for laser treatment for severe retinopathy.

A study found that people with diabetes who kept their blood sugar levels as close to normal as possible had much less eye, kidney and nerve disease. This level of blood sugar control may not be best for everyone, including some elderly patients, children younger than 13 or people with heart disease.

### **How common are the other diabetic eye diseases?**

If you have diabetes, you are also at risk for other diabetic eye diseases. Studies show you are twice as likely to get a cataract as someone who does not have diabetes. Also, cataracts often develop at an earlier age in people with diabetes. Cataracts can be treated by surgery.

Glaucoma may also become a problem. A person with diabetes is nearly twice as likely to develop glaucoma as other adults. And, as with diabetic retinopathy, the longer you have had diabetes, the greater your risk for glaucoma. Glaucoma may be treated with medications, and by laser or other forms of surgery. An annual eye exam is best way for early detection of forms of diabetic eye disease and to prevent vision loss.

### **What can I do to prevent diabetic eye problems?**

- Monitor and control your blood pressure. High blood pressure can damage your eyes. Have your health care provider check your blood pressure at least four times a year. If your blood pressure is higher than 130/80, you may want to check your blood pressure regularly at home with a cuff.
- Get regular eye exams. Even if your sight is fine, you need regular eye exams. You should have your eyes dilated and examined once a year. Keep track of these exams.

Even if you've lost your sight from diabetic eye disease, you still need to have regular eye care. Be sure your doctor checks for cataracts and glaucoma.

- Control your blood sugar as much as possible.
- If you are pregnant and have diabetes, see an eye doctor during your first three months. If you are planning to get pregnant, ask your doctor if you should have an eye exam.
- Don't smoke.
- Adapted from:

[http://eugeneeyecare.com/conditions/Diabetic\\_Eye\\_Disease.html](http://eugeneeyecare.com/conditions/Diabetic_Eye_Disease.html)