



## Diabetes and your eyes

There are approximately 3 million Canadians living with diabetes (one third of whom are unaware they have diabetes). Diabetic eye disease refers to a group of sight threatening eye problems that people with diabetes are at risk for developing. Diabetes can cause changes in nearsightedness, farsightedness and premature presbyopia (the inability to focus on close objects). It can result in cataracts, glaucoma, and paralysis of the nerves that control the eye muscles or pupil and in decreased corneal sensitivity. The most serious eye problem associated with diabetes is diabetic retinopathy. People with diabetic retinopathy are 25 to 29 times more likely than the general population to become legally blind.

### What is diabetic retinopathy?

Retinopathy develops when blood vessels in the retina, the light absorbing membrane at the back of the eye, undergo changes that may make them fragile and leak fluid and/or hemorrhage. As time passes, these changes, may also cause the growth of abnormal new blood vessels on the surface of the retina. These vessels are fragile and rupture easily, bleeding into the eye and blocking vision. In addition, the formation of scar tissue on the surface of the retina can shrink and detach the retina.

### What are the symptoms of diabetic retinopathy?

For many people, even with severe retinopathy, there are no early symptoms. There is no pain, no blurred vision and no redness or irritation of the eye. Many individuals do not develop any noticeable visual loss until the disease has advanced into its end stage proliferative form. However, some diabetics may notice changes in their central vision caused by abnormally leaky blood vessels in the central retina or macular area. This condition is called macular edema.

## **Are there treatments available?**

Vision loss from diabetic retinopathy is best treated if caught in time before damage causes permanent effects. In an eye examination, your optometrist can diagnose potential vision threatening changes in your eye that may be treated to prevent blindness. The exam will include dilating eye drops and usually retinal photos to document and aid in visualizing any progressive changes. If necessary, your optometrist will arrange for treatment by a specialized ophthalmologist. Treatment most often includes some form of laser therapy that aims to slow the growth and development of new blood vessels and scar tissue. There are also many new and cutting edge treatments available today.

## **What can you do?**

- Have your eyes examined at least once a year if you are diabetic and more frequently if recommended by your eye care practitioner
- Take any prescribed medication as instructed
- Follow a low glycemic diet
- Exercise regularly