

Diabetes and Eye Care (Preventing Diabetic Retinopathy)

Diabetes is the single largest cause of blindness in Canada. People with diabetes are more likely to develop cataracts at a younger age and are twice as likely to develop glaucoma, but diabetes' effect on the retina is the main threat to vision.

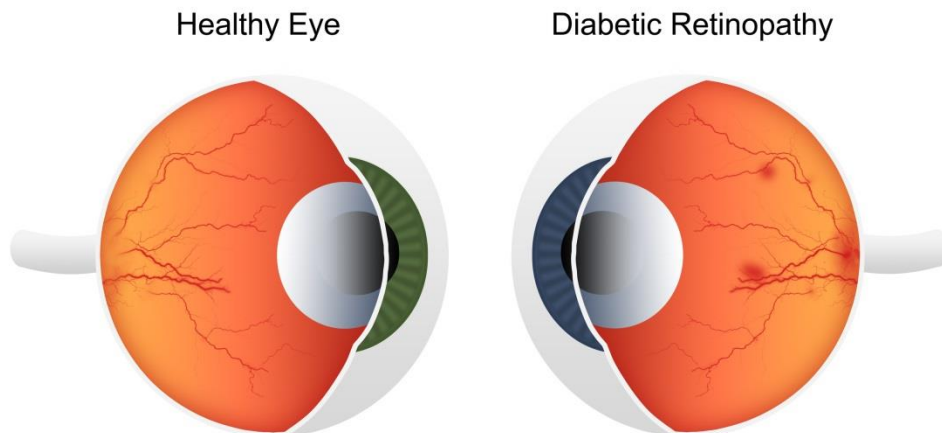


Photo ref: <http://sugarhighsugarlow.com/tag/diabetic-retinopathy/>

Diabetes causes changes in the tiny blood vessels in the inner layer of the eye called the retina. In the early stages, the blood vessels in the retina weaken and begin to leak, forming small, dot-like bleeding. These leaking vessels often lead to swelling in the retina and decreased vision. At this stage, vision may be normal or it may have started to blur or change. About one in four people with diabetes experience this problem.

As this problem continues, the reduced blood flow to the retina limits the oxygen the retina gets. Blood vessels become blocked or closed, and parts of the retina die. New, abnormal, blood vessels grow to replace the old ones and these delicate new vessels break and bleed easily. Blood may leak into the retina and fluid, causing “floaters” or spots that appear to drift in front of the eyes, along with decreased vision. This can lead to severe visual loss or blindness. In the later phases of the disease, continued abnormal vessel growth and scar tissue may cause retinal detachment and glaucoma.

Same Scene Viewed By A Person With:



Normal Vision



Diabetic Retinopathy

Photo ref: <http://www.krishnavision.com/the-eye/diabetes/diabetic-retinopathy>

Who should be screened?

All people with diabetes (both type 1 and type 2) are at risk for diabetic retinopathy.

No treatment is needed for very early stages, although if things continue to develop, the recommended treatment is laser therapy, which helps to shrink the abnormal blood vessels. Treatment works better before the fragile, new blood vessels start to bleed, but even if bleeding has started, treatment may still be possible.

How do I know if I have retinopathy?

In early stages there may be no symptoms, which is why it is important to have regular eye exams. Symptoms, if present, can include:

- Blurred vision
- Flashes of light in the field of vision
- Sudden loss of vision
- Blotches or spots in vision

How can I prevent eye damage caused by diabetes?

The good news is that there are steps you can take to catch this complication early and prevent its progress:

- Visit your optometrist at least once per year. Your optometrist may recommend you visit more or less frequently depending on your situation.
- Maintain optimal blood glucose levels, blood pressure and blood cholesterol.
- Know your A1C (a test of your average blood glucose level over three months). Most people with diabetes should aim for a target of 7.0 or less. Talk to your healthcare team about what your target should be.

To reduce the impact of eye damage, people with diabetes should:

- Manage their levels of blood glucose (sugar), blood pressure and blood cholesterol
- Maintain appropriate levels of blood glucose (sugar) levels
- Go for routine eye examinations (many problems can be treated with greater success when caught early).