



Diabetes and eye disease (retinopathy)

People with diabetes have an increased risk of developing eye complications which, if left untreated, can lead to poor vision and blindness. Unfortunately there are often no obvious signs or symptoms and everything can seem fine with your vision until the condition is quite advanced. Changes may be very slow but serious vision loss can happen. However, the good news is that 98% of serious vision loss from diabetes can be prevented with regular eye examination and early treatment.

How does diabetes affect your eyes?

Diabetes affects your eyes because the high blood glucose levels associated with the condition can cause the shape of the lens to change which may cause your vision to blur. Blurred vision is often one of the first indicators of diabetes. Blurred vision can also be a warning that your diabetes isn't well managed. The blurriness usually disappears once blood glucose levels are reduced through appropriate treatment.

Risks to your eyes

If high blood glucose levels continue unchecked for a long period of time it can increase the risk of more serious eye problems such as:

- Retinopathy
- Macular oedema
- Cataracts
- Glaucoma

Retinopathy

Retinopathy is damage to the retina and is the most common cause of blindness in Australians aged under 60. The development of retinopathy is strongly related to the length of time you have had diabetes and the degree of blood glucose control.

There are two stages to retinopathy:

Non-proliferative (background)

The longer you have diabetes, the greater the risk of small blood vessels at the back of the eye being damaged by high blood glucose and high blood pressure. This can result in leakage and often progresses to blockage of the vessels that supply the retina with nutrients. This stage is called non-proliferative, or background retinopathy, and there may be no noticeable change in your vision.

Proliferative Without early detection and treatment, non-proliferative diabetic retinopathy can progress and the retina may grow new blood vessels. This advanced stage is called proliferative retinopathy. The new blood vessels are weaker and can bleed onto the retina or the vitreous (the jelly-like centre inside your eye). Vision can be affected, sometimes seriously and suddenly. The growth of new vessels may also lead to developing scar tissue which can cause further



problems such as a retinal detachment. Once these changes occur it is hard to restore any lost vision and the resulting damage can lead to blindness. Sometimes new vessels may grow on the iris and this can lead to neovascular glaucoma (see over).

Cataracts

Changes or problems in the lens can result in clouding and decreased vision, known as cataracts. Although aging is the main risk factor, people with diabetes tend to develop cataracts more quickly and at a younger age.

Glaucoma

Glaucoma is an eye disease in which the optic nerve is damaged. The progression of glaucoma is usually slow. It can affect anyone but appears to be more common in people who have diabetes. People with diabetes may also have a less common form of glaucoma which develops as a complication of severe diabetic retinopathy – this is called neovascular glaucoma.

Macular oedema

Blood vessels in the macula, the central area of the retina, can leak fluid causing swelling. This can result in central vision loss.

Can diabetes-related eye complications be treated?

Most eye complications can be treated successfully if detected early. Early detection and treatment can also prevent eye complications from getting worse. However, treatment generally cannot restore vision once it has been lost. The difficulty with eye complications is that they often have no signs or symptoms until the condition is quite advanced. It is therefore important to undertake regular eye checks.

If there are signs and symptoms are present, they can include:

- Floaters and flashes
- Poor night vision
- Needing brighter light for reading
- Blurry vision
- Halos around lights
- Distortion in vision
- Blocked or dim vision
- Sensitivity to light
- Frequent change in eyeglass prescription

Click here for our [Diabetes and Your Eyes Information Sheet](#)

For more information on eyes and diabetes call Diabetes NSW on 1300 136 588

