One of the possible long-term complications of diabetes is retinopathy, which affects the eyes.

Diabetic retinopathy is the leading cause of blindness in the working age population. This information sheet will help you find out more about how and why having diabetes can affect your eyes and what you can do to protect them.

What is retinopathy?
Retinopathy causes changes to the retina (the seeing part at the back of the eye). To see, light must be able to pass through to the retina without anything getting in the way. Retinopathy is caused when the blood vessels in the retina become blocked, leaky or grow haphazardly. This damage gets in the way of the light passing through to the retina and, if left untreated, can damage vision.

Types of retinopathy
There are three types of retinopathy, depending on how advanced the condition is.

1. **Background retinopathy** – describes the earliest visible signs of change to the retina. Background retinopathy will not initially affect your eyesight, unless it occurs at the macula (see maculopathy below). However, background retinopathy can progress to other more serious forms of retinopathy, so it should be carefully monitored by your diabetes healthcare team.

2. **Proliferative (spreading) retinopathy** – describes large areas of the retina not getting a proper blood supply, which can affect your vision.

3. **Maculopathy** – is the name given to changes occurring around the macula. The macula is the centre of your retina and is the part of the eye used for close, detailed work. People with maculopathy usually have some loss of vision and it can cause blindness.

How do I know if I have retinopathy?
In the early stages retinopathy has no obvious symptoms, so you may not know you have it until it is advanced. Each person’s experience of symptoms at this stage can be different. Some people describe the following:

- seeing dark ‘floaters’ or spider-like shapes
- seeing blots and patches
- having blurred vision – as if looking through a layer of fluid not quite as clear as water.

**Early detection of retinopathy is key.** The sooner any problems are detected and treated the more successful treatment is likely to be. To make sure retinopathy is detected early you should have your eyes screened once a year.

How is it screened?
Retinopathy screening is different to having a sight test. People with diabetes are entitled to free annual
retinal screening. Screening is usually done by taking a photograph of your retina, using special digital camera. For some people the photograph does not work and in this case you may need to visit a specialist for screening.

**How is it treated/cured?**

Retinopathy cannot be cured and treatment cannot restore any sight that has already been lost – but it can prevent further damage.

Retinopathy is treated with laser therapy, which uses small bursts of laser light to seal leaky blood vessels, stopping them from getting worse.

Laser treatment is carried out by an eye specialist and nearly always as an outpatient, allowing you to go home afterwards. For some people, laser treatment alone is not enough and surgery is needed.

**How do I prevent retinopathy?**

The good news is that by keeping blood glucose, blood fat (including cholesterol) and blood pressure levels as near normal as possible (together with following a healthy lifestyle) you can help to protect against retinopathy. It is important to have regular health checks from your diabetes care team to identify any problems early so they can be treated effectively.

**Other eye problems**

People with diabetes may experience other problems with their eyes. There are two other eye problems that are linked with the condition.

- **Blurred sight** – this can be a sign of undiagnosed diabetes and can also be experienced when blood glucose levels are running high. This is because, when blood glucose levels are too high, the lens of your eye absorbs glucose and fluid, making them swell, which causes blurred vision. This is different to retinopathy and will disappear when blood glucose levels return to within normal ranges.

- **Cataracts** – these are the hardening and cloudiness of the lens of the eye. People with diabetes are more likely to develop cataracts and at an earlier age. Cataracts only need treating if they affect eyesight, which is done with an operation to remove the lens and replace it with an implant.

For further reading on this subject you may be interested in our other Diabetes UK resources:

- *Your eyes and diabetes* booklet
- *Understanding diabetes*

On how you can obtain a copy see details below.

For information covering a variety of diabetes-related topics see our full range of information sheets, produced in 20 languages, available by downloading them from our website: www.diabetes.org.uk/language

The Diabetes UK Catalogue describes our full range of books and leaflets. For a copy of our catalogue and any of our leaflets quoted in this information sheet, call Diabetes UK Distribution: 0800 585 088.

For support and information about diabetes please call Diabetes UK Careline: 0845 120 2960 (charged at local rate). A translation service is available. Open Monday to Friday 9am to 5pm.