What happens at an eye exam?

A retinal screening nurse will:

- review clients' medications and blood glucose targets
- measure visual acuity and eye pressure
- dilate pupils using two eye drops: mydriatic agents Mydfrin and Mydriacyl
- perform punctal occlusion as a precaution, so minimal medication enters into the blood stream or breast milk. (Medication is rated Pregnancy class C: limited research is available regarding safety of drugs during pregnancy).

MANITOBA RETINAL SCREENING VISION PROGRAM

The program provides eye exams for people with Type 1 and Type 2 diabetes. We check for diabetic retinopathy and other eye conditions such as:

- cataract
- glaucoma
- macular degeneration

Normal Vision:

Vision with Diabetic Retinopathy:

Early detection and treatment of diabetic retinopathy can help prevent vision problems and blindness.

RETINAL SCREENING AND PREGNANCY

Information for Health-Care Professionals

MANITOBA RETINAL SCREENING VISION PROGRAM:

PROMOTING VISION HEALTH FOR PEOPLE LIVING WITH DIABETES WITHIN FIRST NATIONS AND NORTHERN COMMUNITIES

What is Diabetic Retinopathy?

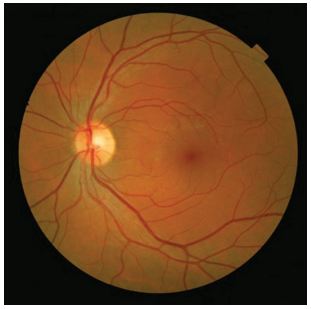
Diabetic retinopathy is a complication of diabetes where high blood glucose levels damage the blood vessels of the eye and cause them to weaken and leak blood – this can lead to **blindness**.

Controlling blood glucose (between 4-8 mmol/L) is also a good way to help prevent diabetic retinopathy.

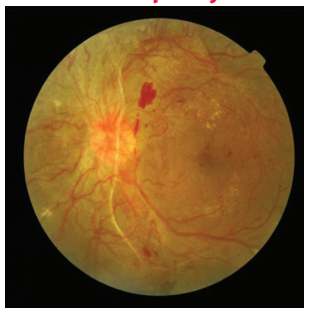
If patients have dilated eye exams prior to conception and/or during the first trimester, retinopathy can be detected and treated.

An ophthalmologist determines the intervals required for subsequent eye exams depending on the results of first trimester exam.

Normal Retina:



Retina with Diabetic Retinopathy:



Why is screening in pregnancy so important?

In pregnancy, and up to one year postpartum, the risk of diabetic retinopathy developing and/or progressing in patients who have existing Type 1 or 2 diabetes is increased.

Hormonal effects from the placenta and an increase in retinal blood flow lead to increased risk in developing diabetic retinopathy.

Risk Factors:

- poor blood glucose control
- hypertension
- duration of diabetes: the longer the duration, the greater the risk
- pre-existing retinopathy before pregnancy

Women with gestational diabetes are not at increased risk of developing diabetic retinopathy.

Women with advanced retinopathy should postpone pregnancy until retinopathy has been treated or stabilized.

How can patients reduce the risk of developing diabetic retinopathy?

- plan pregnancies and have a dilated exam before conception to detect any pre-existing eye disease
- have a dilated eye exam during the first trimester
- follow ophthalmologists' recommendations on subsequent screening during pregnancy and postpartum periods
- obtain optimal blood glucose and blood pressure levels during pregnancy

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