ASK FOR THE SCREENING COUNSELLOR
AT ONE OF THE FOLLOWING LOCATIONS

Hamilton
Hamilton Health Sciences
Regional Prenatal Diagnosis Service
4B Clinic, McMaster Campus
1200 Main Street West
Hamilton ON L8N 3T5
(905) 521-2100 ext 76247

Kingston
Division of Medical Genetics
Kingston General Hospital
20 Barrie Street
Kingston ON K7L 3J6
(613) 533-6310

London
Medical Genetics Program of Southwestern Ontario
London Health Sciences Centre
80 Commissioners Road East
London ON N6A 3W9
(519) 685-8140

Mississauga
Genetics Clinic
General Valley Hospital
2200 Eglinton Avenue West
Mississauga ON L5M 2N1
(905) 813-4104

North Bay
North Bay Parry Sound District Health Unit
Genetics Program
681 Commercial Street
North Bay ON P1B 4E7
(705) 471-1400

North York
Maternal Serum Screening Program
Department of Genetics
North York General Hospital
4001 Leslie Street
Toronto ON M2K 1E1
(416) 756-6055

Oshawa
Clinical Genetics
Lakeridge Health Oshawa
1 Hospital Court
Oshawa ON L1G 2B9
(905) 433-2733 Fax (905) 721-4757

Ottawa
Eastern Ontario Regional Genetics Program
Children's Hospital of Eastern Ontario
401 Smyth Road
Ottawa ON K1H 8L1
(613) 737-7600 ext 2138

Peterborough
Genetics Program
Peterborough County-City Health Unit
10 Hospital Drive
Peterborough ON K9J 7M1
(705) 743-1000

Sault Ste. Marie
Algoma Public Health
Genetics Counselling
63 East Street, Unit 1
Sault Ste. Marie ON P6A 3C4
(705) 541-7057 Fax (705) 599-5953

Sudbury
Sudbury Genetic Counselling Services
Sudbury Regional Hospital
41 Pineview Lake Road
Sudbury ON P3E 5J1
(705) 675-4786 Fax (705) 523-7178

Thunder Bay
Northwestern Ontario Regional Genetics Program
Thunder Bay District Health Unit
999 Balmoreal Street
Thunder Bay ON P7B 6E7
(807) 625-5924 Fax (807) 623-4341

Timmins
Porcupine Health Unit
223 Third Avenue, Suite 103
Timmins ON P4N 1E2
(705) 267-1181 Fax (705) 268-4443

Toronto
Prenatal Diagnosis Program
Mount Sinai Hospital
700 University Avenue
Ontario Hydro Building, Third Floor
Toronto ON M5G 1Z9
(416) 586-4946

Windsor
Windsor-Essex County Health Unit
Genetics Services
1005 Ouellette Avenue
Windsor ON N9A 1J8
(519) 258-2146 Fax (519) 258-8431

York
Genetics Clinic
York General Hospital
10 Trench Street
Richmond Hill ON L4C 4Z3
(905) 883-1212 ext 7579 Fax (905) 883-2231

For additional information see http://www.lhsc.on.ca/programs/mgcs/mss/about.htm
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Are you pregnant?

Integrated Prenatal Screening (IPS)
it's your choice
Prenatal Screening

Every pregnant woman hopes for a healthy baby. Although most babies are healthy, it’s normal to wonder about your baby. This pamphlet describes a prenatal screening test called IPS (Integrated Prenatal Screening). A screening test does not tell for sure whether or not your baby is healthy. It can tell if you have a lower or higher chance than usual of having a baby with one of three problems: Down syndrome, trisomy 18 or an open neural tube defect. It’s your choice whether you want to have IPS. Talk to your health care provider before deciding if IPS is right for you.

What is Down Syndrome?

All people with Down syndrome have mental handicap and some have physical handicaps. They are also more likely to have medical problems. Each person with Down syndrome is different and there is no way to know how serious the mental handicap will be. There is no cure for Down syndrome but resources are available to help persons with Down syndrome and their families.

Any woman of any age can have a baby with Down syndrome. However, the chance increases with a woman’s age. For example, a woman who is 40 has a higher chance of having a baby with Down syndrome than a woman who is 20.

What is Trisomy 18?

Babies with trisomy 18 have serious physical and mental handicaps. Most do not survive beyond one year of age. The chance of having a baby with trisomy 18 also increases with a woman’s age.

What Are Open Neural Tube Defects?

Open neural tube defects happen when the skull or spine does not develop properly early in pregnancy. There are two kinds of open neural tube defects - spina bifida and anencephaly.

Spina bifida is an opening in the bones around the spinal cord. The opening can be anywhere along the spine and it’s usually not covered by skin. Spina bifida causes physical handicap and sometimes also mental handicap. The amount of physical handicap depends on the size and location of the opening. It's not always possible to predict if there will be mental handicap. There is no cure for spina bifida, but often the problems caused by spina bifida can be helped by surgery and other treatments.

When a baby has anencephaly, the brain and skull do not develop completely. Babies with anencephaly will be stillborn or die shortly after birth.

One to two babies out of every thousand born in Ontario have a neural tube defect. The chance of having a baby with a neural tube defect does not increase with a woman’s age.

Can Prenatal Screening Find Other Problems?

Prenatal screening is not designed to find other problems. Occasionally the result of your prenatal screen can tell your health care provider about the possibility of other problems. If this happens, you will receive more information from your health care provider. In some situations, your health care provider will refer you for genetic counselling.
**What is Integrated Prenatal Screening (IPS)?**

IPS is a prenatal screen that uses an early ultrasound and two blood tests to give your chance of having a baby with Down syndrome, trisomy 18 and an open neural tube defect in this pregnancy. IPS replaces MSS (Maternal Serum Screening) if you see your health care provider early in pregnancy.

**How is IPS done?**

You make an appointment with your health care provider as early as possible to discuss IPS.

If you decide to have IPS, your health care provider arranges an ultrasound between 11 weeks and 13 weeks + 6 days of pregnancy. The ultrasound is used to check the age of the baby and to measure the nuchal translucency (NT). The NT is the thickness of the skin at the back of the neck of the developing baby.

Next, you have a blood test to measure the level of a protein that’s in the blood of every pregnant woman. This is also done between 11 weeks and 13 weeks + 6 days of pregnancy and usually after the ultrasound. It can even be done on the same day.

You have a second blood test at 15-20 weeks of pregnancy, ideally at 15-16 weeks for the earliest possible result.

An IPS result is sent to your health care provider only after the ultrasound AND both blood tests are done.

**What does a ‘Screen Positive’ result mean?**

About 4 in 100 women will have a 'screen positive' result. If your result is 'screen positive', the chance that your baby might have Down syndrome, trisomy 18 or an open neural tube defect is higher than usual. A 'screen positive' result can cause worry. However, most women with a screen positive result do not have a baby with Down syndrome, trisomy 18 or an open neural tube defect.

**What happens if the result is ‘Screen Positive’?**

If your result is 'screen positive', deciding what to do next can be difficult. Your health care provider will discuss your result with you. You may also be referred to a genetic counsellor. Both can explain your result and tell you about your choices for more testing. Only more testing can tell you if your baby really has Down syndrome, trisomy 18 or an open neural tube defect.

**Do I want more testing?**

If your result is 'screen positive', you can choose whether you want more testing to find out if the baby really has any one of these problems.

The tests offered depend upon your IPS result. If IPS shows an increased chance of Down syndrome or trisomy 18, you will be offered amniocentesis. During amniocentesis, a small amount of fluid is taken from the area around the baby and tested for Down syndrome and trisomy 18. Amniocentesis will cause a miscarriage in about one out of every 200 women who have it.
If IPS shows an increased chance of an open neural tube defect, you will be offered another ultrasound to look at the head and spine of the baby. There is no risk to you or your baby from ultrasound. Occasionally, amniocentesis is also offered to measure the level of a protein in the fluid around the baby. The results of these tests can tell you if the baby has an open neural tube defect.

Most times, ultrasound and amniocentesis will show that your baby does not have Down syndrome, trisomy 18 or an open neural tube defect.

**What if the extra test tells me that the baby has Down syndrome, trisomy 18 or a neural tube defect?**

Your health care provider and/or genetic counsellor will discuss this with you in detail. Some people choose to continue their pregnancies, while others choose to end their pregnancies.

**What does a ‘Screen Negative’ result mean?**

If the nuchal translucency measurement and the levels of the proteins in the blood are in the usual range, then the result is called ‘screen negative’. Further testing is not offered.

About 96 in 100 women will have a screen negative result. Although most women with a screen negative result will have normal babies, *IPS can miss a small number of babies with Down syndrome, trisomy 18 or an open neural tube defect.*

If you have questions or are interested in having IPS, speak with your health care provider as early as possible in your pregnancy.