

NOTE: Refer to module outline for goal, objectives, class outline, equipment, resources required and references.

If this is the first class:

- Welcome participants to class.
- Housekeeping: bathroom, breaks, length of session, ground rules/respect.
- Have each couple or individual pair up with another couple or individual and introduce themselves to each other. (Consider including name, due date, HCP, something they are looking forward to, something they are nervous about and/or anything they would like to share about the pregnancy). Then have the pairs or individuals introduce each other to the rest of the group.
- Provide the choice of prenatal handout (depending on your organization, this may be Healthy Beginnings or A Healthy Start for Baby and Me) for each expectant mother.
- Provide a list of community resources.
- It is best to advise participants during the first session that you have a duty to report any concerns about the safety or well-being of a child (including the witnessing of abuse of the mother) to child protective services. (This is only applicable if there are children in the home already.)

Suggested Activity/Icebreaker:

Have participants list the topics/questions they would like to address related to prenatal care. Write them on a flip chart and ensure topics have been covered by the end of the session. It is suggested that this be done in sub-groups as it will help participants know each other and will likely provide additional topics.



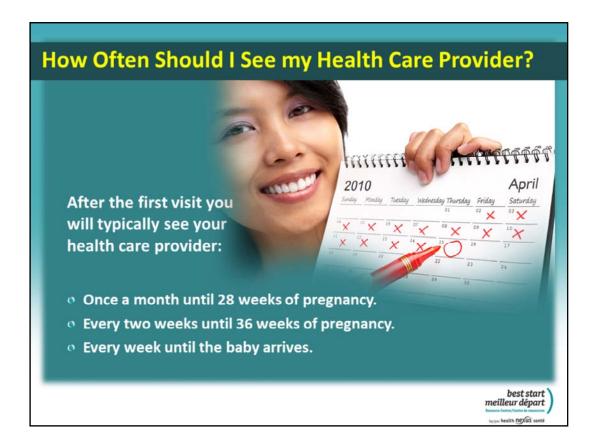
- It is important to begin prenatal care as early as possible in the pregnancy. It may help reduce possibility of preterm labour.
- A checkup before conceiving will help you prepare for pregnancy. Early and regular prenatal care will help you have a healthy pregnancy and baby.
- Prenatal care includes regular visits with a health care provider, and may also include various tests and procedures to monitor the health and well-being of mother and baby.
- Health care providers are interested in both the physical and emotional well-being of the mother and partner during pregnancy.
- There are benefits to including the partner/support person in prenatal care. (Caution to prenatal educator: This may not be appropriate in abusive situations, so, word carefully.)
- Expectant parents have the opportunity to speak with the health care provider about their concerns and the changes that are occurring. They can ask questions, share what is important to them and be involved in making all decisions about their care.
- Health care providers will identify community services that may provide support. These include: hospital or birthing centre, prenatal education, public health, social services, etc.



- The woman has a choice of health care providers.
- A health care provider is someone who provides health services, such as an obstetrician, family doctor, registered midwife, or nurse practitioner.
- Routine prenatal care delivered by any of these health care providers is covered by the Ontario Health Insurance Plan (OHIP). The availability of prenatal health care providers depends on where a mother lives and the health status of the mother and baby.
- Family doctors provide care to pregnant women, babies, and families and some also deliver babies.
- Obstetricians offer care to pregnant women and deliver babies, but do not look after babies.
- Registered midwives provide care for women with low risk pregnancies and birth. You
 may choose to give birth in the hospital or birth centre or at home. Registered
 midwives provide care to mothers and babies for six weeks after birth.
- Nurse Practitioners provide care for women with low risk pregnancies, babies, and families.
- Nurse practitioners do not normally deliver babies, but may do so in isolated communities.
- In some cases, the prenatal care may be started by a family doctor and then transferred to an obstetrician at approximately 32 weeks (mainly in large centers such as GTA).



- Ask if each participant has a health care provider. If not, mention resources listed in slide.
- Different health care providers follow different models of care:
 - o The medical model tends to see pregnancy as a medical condition with inherent risks which require intervention. The woman may be a more passive participant in her care.
 - The midwifery-led model tends to see pregnancy as a normal life stage, which requires intervention only
 if complications arise. The woman is an active participant in her care.
- Research shows that the provider effect (i.e. The model of care the provider practices) is one of the biggest indicators of the care that the woman will receive, regardless of her wishes.
- If, during your pregnancy, you find that your health care provider is not the best match for you, it may be because their model of care does not match your needs. You may or may not have the option to change health care providers (depending on the availability of health care providers in your area) but you have the right to try. It also will depend on your health and the health of your unborn baby.
- When choosing a health care provider, it is important to choose someone who shares your beliefs about pregnancy, labour, birth and breastfeeding. You can find out about a health care provider's beliefs and model of care by asking specific questions, such as:
 - o How much time do you have for me during prenatal visits? What happens during these visits?
 - O What are my options about where I give birth?
 - What happens when a typical client of yours goes into labour? Could you walk me through the process?
 (You want to get an idea of typical practices.)
 - o Who else will be involved in my care?
- Other things you will want to consider:
 - o Is the person easy to talk to and understand?
 - o Do they listen to you and answer your questions?
 - o Can you get to their offices easily?
 - o Can you call them by phone?
 - o Will they provide care for your baby?
 - Do you prefer a male or female health care provider? (Emphasize that in many communities, you may not have a choice in this matter.)
 - o What do other mothers say about their health care provider?



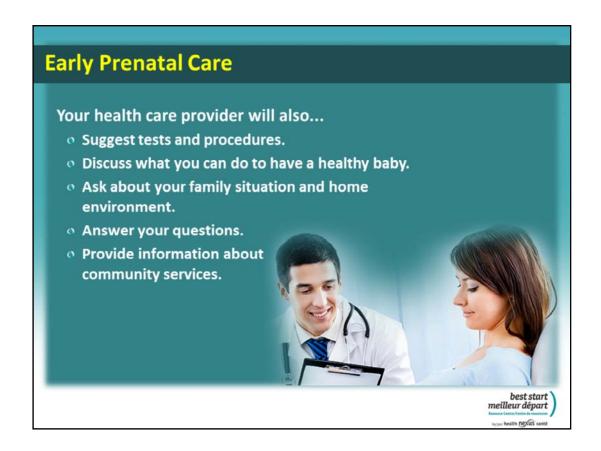
- Regular prenatal check-ups ensure that mother and baby receive the best possible care and monitoring during pregnancy.
- The first health care provider appointment is scheduled once the pregnancy is confirmed (usually through a home pregnancy test).
- Encourage the partner/support person to attend prenatal appointments in order to become familiar with the caregiver and to discuss his/her role in pregnancy, labour and birth.
- Health care providers are able to answer questions, discuss concerns, and link mothers to helpful community services.



- It helps to be prepared before your prenatal visits by writing down questions ahead of time and bringing them with you.
- Your partner or support person can help you keep track of what was said and/or done during the visit.
- Explain the concept of informed choice: Women are active decision-makers in the care they receive; health care providers give information to help women make informed decisions.
- Understanding why assessments and interventions may be needed during your
 pregnancy can help you make decisions that are best for you and your baby. You may
 find it helpful to discuss the following with your health care provider:
 - o **B** What are the **b**enefits? How will this help by baby and/or me?
 - o **R** What are the risks? How will this affect my baby and/or me?
 - o A Are there any alternative?
 - o I What your intuition or inner voice is telling you
 - N What if you say no or not right now? You may need time to think a decision through
- More information about making informed decisions can be found at https://www.healthunit.com/making-info rmed-decisions
- A birth plan is a tool that can be used to communicate your preferences during pregnancy, labour and birth. Some health care providers may provide a standardized birth plan that can be personalized. You may choose to create your own, based on what is important to you. Find out what routine practices there are at your place of birth. Discuss these with your health care provider as you share your preferences.

Early Prenatal Care Your health care provider will... Ask you about your health before pregnancy. Take your medical & family history. Discuss use of medications. Calculate your estimated date of birth. Give you a physical exam. Ask about your lifestyle and your partner's (nutrition, smoking, alcohol, etc.). Ask questions about your emotional health.

- The health care provider gathers specific information that assists in the delivery of individualized prenatal care.
- The health care provider will ask about medical history, genetic history, previous pregnancies, immunization, lifestyle, etc.
- It is important for the mother to be direct and honest about her health history and lifestyle.
- The first few visits may be longer than the rest.
- The estimated date of birth is calculated by counting 9 calendar months plus 7 days from the first day of the last menstrual period.
- About 85% of babies are born a week before or after their estimated due date (generally after), whereas only about 4% arrive on their actual due date.
- The physical examination may include a repeat pregnancy test, internal exam and Pap test, breast exam, blood pressure monitoring, weight assessment, urine testing, additional blood work etc.
- Assessment of emotional health is important, since pregnancy brings many changes and feelings.
- Hormonal changes affect mood throughout pregnancy, but are more apparent between the 6th and 10th week and again during the third trimester when mother is preparing for birth.
- One in ten women suffer from depression during pregnancy.
- It is important for the mother to discuss her feelings at prenatal visits.



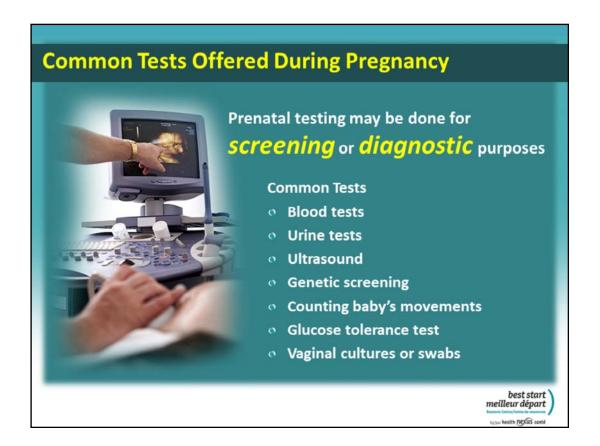
- Refer to subsequent slides for information about routine prenatal tests and procedures.
- Information about cultural/ethnic background and traditions helps the health care provider to personalize prenatal care.
- Some cultural groups may be at higher risk for certain genetic disorders (e.g., sickle-cell anemia for people of African descent or thalassemia for people of Mediterranean descent).
- Newcomers may have been exposed to specific health risks, which are endemic to their land of origin (e.g., hepatitis B in Asian-born mothers).

Note to Facilitator: do not discuss woman abuse in a mixed group setting where the partner is present.

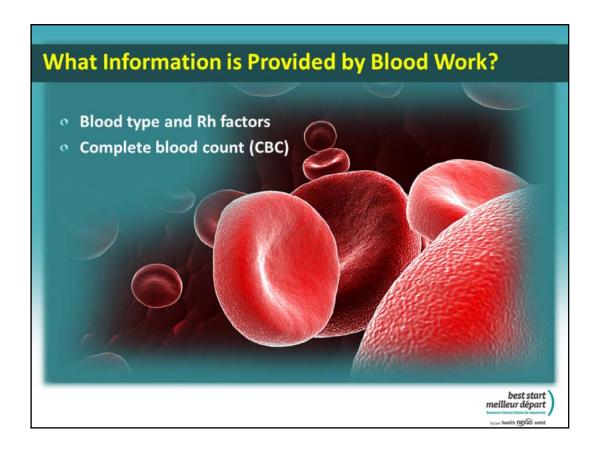
- About 40% of woman abuse starts during a woman's first pregnancy.
- Abuse can be physical, emotional, sexual, financial, etc. and harms mother and baby in some way.
- Physical abuse may cause the baby to be born too early or too small.
- Women can confide in their health care provider to access supports and services.



- Urine testing is done to screen for presence of glucose (sugar) and proteins. The validity of the urine test to detect glucose is currently under question. Talk to your health care provider about this so you can make an informed decision about this and other routine tests.
- The presence of glucose may indicate gestational diabetes.
- The presence of proteins may indicate pregnancy induced hypertension (preeclampsia) or infection.
- A urinalysis is also helpful in diagnosing a urinary tract infection, which may increase the risk of preterm labour.
- Blood pressure is monitored at every visit to screen for high blood pressure, which may indicate pregnancy-induced hypertension.
- Maternal weight is generally assessed at every visit to ensure appropriate weight gain and to discuss nutritional intake.
- Fundal height is measured at each visit to assess for the baby's growth and gestational age by measuring the top of the pubic bone to the top of the uterus (fundus).
- The measurement should increase as the pregnancy progresses.
- Between 18-30 weeks, the height of the fundus in cm is close to the age of the baby in weeks.
- Fetal Heart Rate can be detected after the 10-12 weeks of gestation and is an indicator of the baby's well being.
- Once the fetus is big enough, the health care provider will palpate the uterus to determine the baby's position.



- **Screening tests** are used to determine if mother and baby are at higher risk than the general population for a particular condition (e.g., maternal serum screen). Women who screen positive may choose to have a diagnostic test.
- **Diagnostic tests** are used to confirm potential health issues in either the mother or baby (e.g., amniocentesis). Tests done in early pregnancy include blood tests, urine tests and ultrasounds. They may also include testing for HIV.
- Tests done in later pregnancy may include the glucose tolerance test (to detect gestational diabetes), fetal kick counts (to determine fetal activity) and Group B Streptococcus.
- Fetal movement counting is not routinely done only if the health care provider feels there may be a problem. A non-stress test may be offered in the later part of the pregnancy.
- While the health care provider may recommend some tests, it is up to the pregnant woman whether or not to proceed.
- No screening test is 100% accurate.
- No single test can identify every possible condition.
- Families should expect enough information about tests to make informed choices. What information does a person need to make an informed choice? (i.e., benefits, limitations, risks for mother and baby, alternatives to test.)
- The health care provider considers all test results in assessing the overall health of mother and baby.



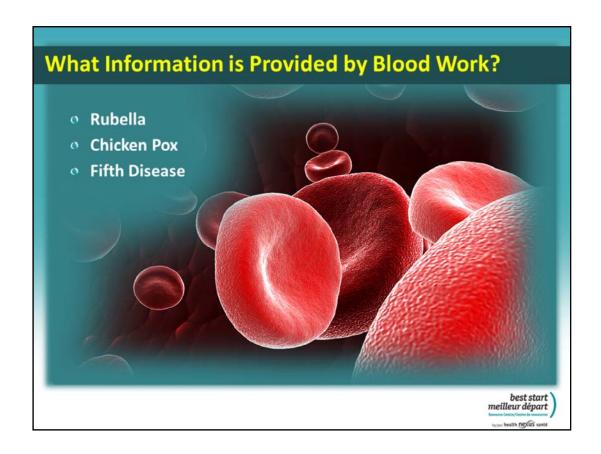
- Blood work helps the health care provider determine or assess risks to mother's health and baby's health.
- The number of blood tests ordered depends on mother's medical history.

Blood Type and Rh Factor

- Mother's blood type is required in case of a required blood transfusion and to determine the risk of blood incompatibility with the baby's blood.
- There are four different blood types: O, A, B, and AB (O is most common, "universal donor").
- Blood type is further assessed to determine if mother is 'Rh positive' or 'Rh negative".
- If mother is Rh negative and baby is Rh positive, their blood types are incompatible which could lead to complications.
- Only 15% of mothers are Rh negative which means the mother does <u>not</u> have the Rh factor in her blood.
- If mother is Rh negative an injection of Rhogam (a blood product that protects baby from the mother's antibodies) is recommended between 28th and 32nd weeks of gestation.
- Rhogam may also be given after the birth of the baby depending on the baby's blood type.

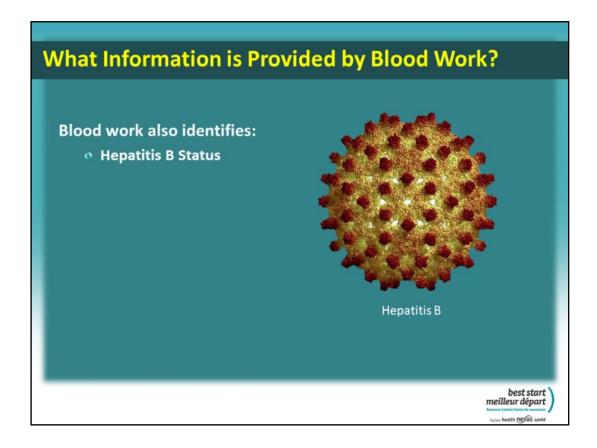
Complete Blood Count

- Determines the concentration of red blood cells, white blood cells, and platelets.
- A pregnant woman with a low hemoglobin level has anemia or is at risk of having anemia (depending on how low). This in turn can lead to preterm and low birth weight.



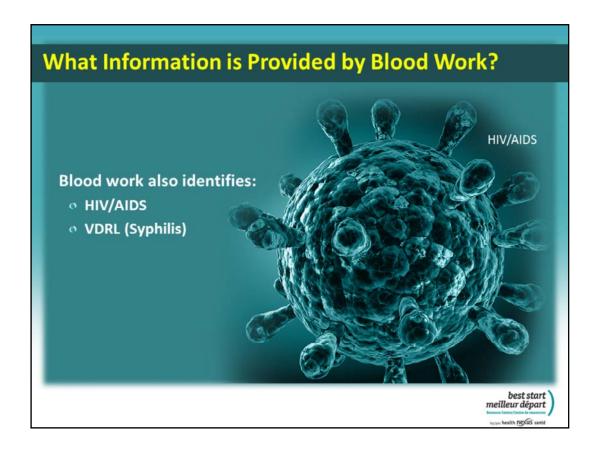
Rubella (German Measles), Chicken Pox (varicella) and Fifth Disease

- German measles and chicken pox can cause serious birth defects if contracted during pregnancy.
- Fifth disease may cause anemia or a miscarriage.
- Many women have either received vaccination for German measles or have acquired natural immunity through exposure to varicella and to fifth disease earlier in life.
- The blood test will help see if the immunization is still valid.
- These diseases are not a concern if you were immunized prior to pregnancy.
- Discuss your risks with your health care provider if you have not received vaccination against rubella or chicken pox. There is currently no vaccine for fifth disease.
- Consider vaccination after your baby has been born.



Hepatitis B

- Hepatitis B is a viral infection that causes liver inflammation; 1 in 250 people have hepatitis B.
- Many people are chronic carriers of hepatitis B and do not know they have it.
- Risk factors for contracting hepatitis B include:
 - Receiving a blood transfusion or blood products.
 - Having multiple sexual partners.
 - Being born in Asia.
 - Using IV drugs and sharing needles.
 - Handling blood and blood products.
- Mothers with hepatitis B may not have any symptoms. Hepatitis B may cause spontaneous abortion (miscarriage) or preterm birth.
- If undetected in mother, baby will have a 50% chance of becoming infected and becoming a chronic carrier.
- "The good news is that babies born to mothers who test positive for hepatitis B can be treated soon after birth. They will receive both the hepatitis B immune globulin and the hepatitis B vaccine. With treatment, 95% of these babies will not be infected, nor will they become carriers." (Healthy Beginnings 4th edition, page 58).



HIV/AIDS

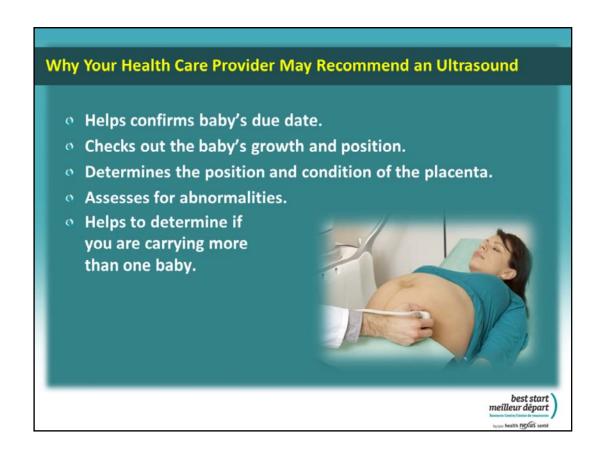
- HIV (Human Immunodeficiency Virus) is found in an infected person's blood, vaginal fluids, breast milk, and semen.
- This virus affects the mother's or baby's immune system and can lead to AIDS.
- The onset of symptoms may take more than five years, so many mothers may not know that they have contracted this disease.
- A mother may transmit this virus in utero, during childbirth, or while breastfeeding.
- If a mother is HIV positive, medication and treatments exist that can help to decrease the transmission to baby.
- Babies born to confirmed HIV positive mothers can also receive treatment for the first six weeks of life that will greatly reduce the transmission rate.
- An untreated pregnant woman who is HIV-positive has a *one-in-four* chance of passing the infection to her baby. However, the risk of transmission can be reduced to around 1% if the expectant mother takes antiretroviral drugs during pregnancy and birth, and if the baby receives treatment after birth. **That's why it is so important to be tested for HIV during pregnancy.**
- HIV testing is a not routinely done... pregnant women can decide. All pregnant women in Canada are offered HIV testing.
- Contact the local health unit for information about anonymous testing and counseling for HIV (Ontario AIDS Hotline: 1-800-668-2437).

VDRI

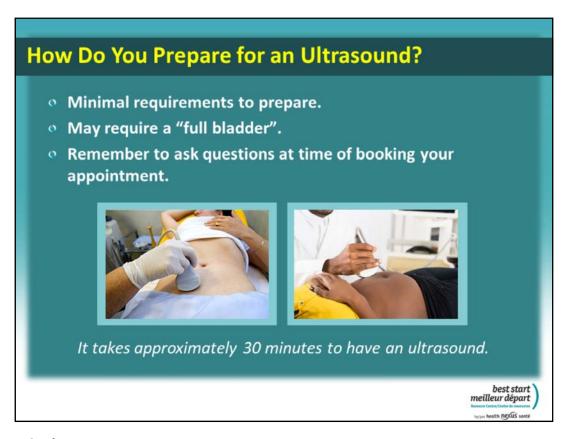
- A test to determine if the mother has been exposed to a sexually transmitted infection syphilis.
- If left untreated may lead to preterm labour and health complications for baby.



- High-frequency sound waves are sent through a transducer/probe either through the abdomen or vagina.
- An ultrasound does not hurt. Expect to feel some pressure on your belly while the technician moves the probe.
- The waves echo back from the structures of the baby, the placenta, and the mother's internal organs to form a picture.
- Health care providers order ultrasounds to confirm the due date, conduct measurements on the baby and to investigate concerns.
- Expectant parents often enjoy seeing the baby's heart beating, the fingers and toes, movement, etc.
- There is minimal risk to the fetus for the 1-2 ultrasounds recommended in pregnancy, however the risks of having more are unknown.
- Your health care provider should explain why they are recommending more than the normal 1-2 ultrasounds in pregnancy.
- Doing ultrasounds for non-medical reasons is not recommended. This includes taking extra time to identify the sex of baby or souvenir videos.



- For dating purposes, a first trimester ultrasound should be offered, ideally between 8 and 14 weeks, to all women, as it is a more accurate assessment of gestational age than the last menstrual period. (Butt, Lim, 2014)
- Ultrasounds estimate the age of the baby by taking measurements of specific structures such as the skull, femur, or crown-rump length. At 18-20 weeks, there is still a margin of error of 10-14 days on either side, which is why an earlier ultrasound is preferred for accuracy.
- The SOGC recommends that a second trimester ultrasound should be offered to all pregnant women to screen for congenital anomalies, at around 18-22 weeks' gestation. (Wilson, 2014)
- Ultrasounds can be scheduled at anytime during pregnancy.
- Some women will have more than one ultrasound during their pregnancy.
- The timing of ultrasounds depends on the reason your health care provider has ordered the test.
- Ultrasounds help to examine the developing baby's organs.
- Ultrasounds assess levels of amniotic fluid.
- Results are immediate and visual.
- The results are normally provided by your health care provider at your next scheduled visit and not by the technician at the time of testing.



- Instructions vary depending on the type of ultrasound ordered.
- The full bladder helps sound waves travel through the skin and tissues to get the best image of the baby. A full bladder pushes the uterus higher and allows for better visualization. Improvements in technology are now reducing the need for a full bladder.
- Appropriate preparation instructions will be given at the time of booking.
- Discuss local ultrasound services and choices.

What are Examples of Genetic Screening Tests?

- Prenatal genetic screening may test for higher risk of:
 - Down Syndrome
 - o Trisomy 18
 - Open neural tube defects
- Example: Integrated Prenatal Screening
 - First blood sample at 11-14 weeks
 - Ultrasound at 11-14 weeks
 - Second blood sample at 15-20 weeks
 - o Results available by 16-21 weeks

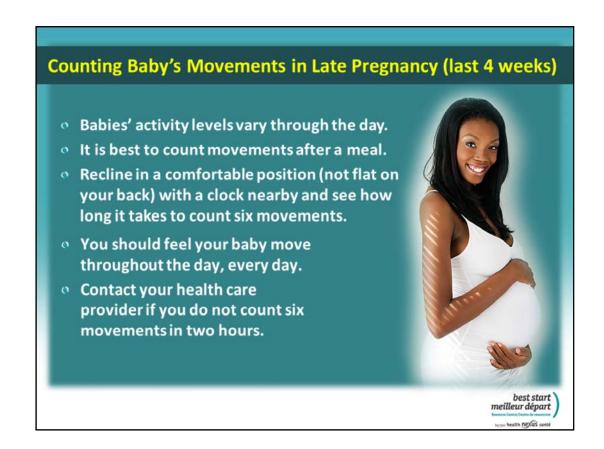
It is your choice whether or not to have prenatal screening.



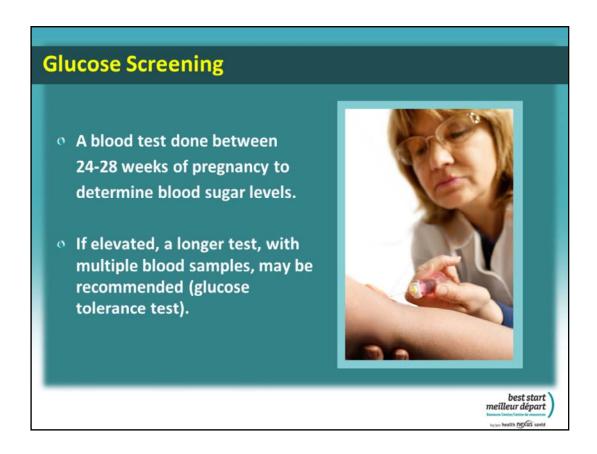
- "90% of pregnancies in Canada result in the birth of a healthy baby" (Healthy Beginnings 4th edition, page 52.).
- Prenatal screening identifies the mother's risk of having a baby born with Down Syndrome, Trisomy 18, and Open Neural Tube Defect (e.g., spina bifida).
- The risk of chromosomal anomalies increases with maternal age.
- However, the chance of having a baby with some kind of birth defect is 2-3% regardless of mothers age (e.g., heart defects, extra toes, etc.).
- It is important to remember that these are screening tests and not diagnostic tests.
- Prenatal screening cannot find every birth defect.
- A screen positive test only means that your baby has a "higher" risk (then the normal population) of being born with a given condition, not that your baby has that condition. To find out for sure, you will be offered a diagnostic test such as amniocentesis or chorionic villus sampling. (Note: this is a good opportunity to explain again the difference between a screening test and an diagnostics test.)
- The health care provider will advise appropriate follow-up if the screen is positive.
- Prenatal screening is now offered to all women, regardless of their age. It is not mandatory; mothers should discuss their options with a health care provider or genetic counselor.
- Refer to local services.



- The non-stress test is not common. It may be done if the mother has passed her due
 date or if she has a chronic disease such as diabetes or high blood pressure or if there
 are other causes for concern such as being involved in a car accident or because fetal
 movements have diminished.
- Two elastic belts, which are attached to the fetal monitor, are positioned around the mother's uterus.
- One belt has a sensor that records baby's movement, while the other belt has a sensor to record baby's heart rate.
- Like a child or adult, the baby's heart rate should increase whenever he/she moves.
- This information is recorded on a test strip and is an indicator of baby's well-being.
- The test may be repeated as necessary throughout late pregnancy. It is rarely done before 34 weeks.



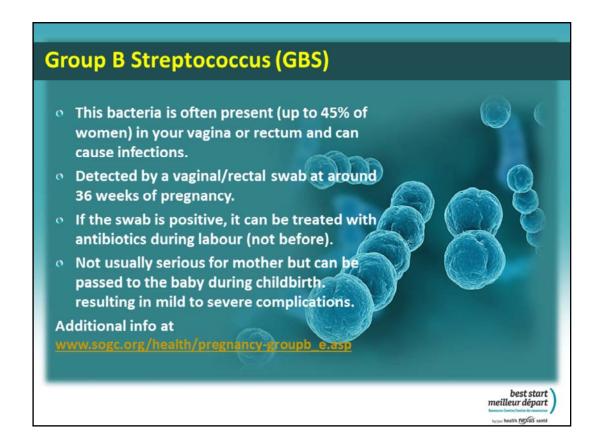
- Babies are active several times during the day, but they also have quiet, restful periods and sleep.
- Clarify that this is just a suggestion, if the woman is concerned. It is not something all women need to do regularly.
- Encourage women to identify what makes their baby more or less active.



- **Gestational diabetes** develops during pregnancy and is caused by changes to the way that glucose (sugar) is metabolized.
- Pregnancy hormones affect the way the mother's body uses insulin.
- Blood sugar levels must be tightly controlled to avoid complications such as an overly large baby (4.5 kg/10 lbs or more), low blood sugar in the baby, jaundice, etc.
- Labour may be induced if the diabetes is affecting placental circulation.

Glucose Tolerance Test

- Determines your ability to handle a large amount of sugar or glucose.
- A blood test is done before drinking a sugary liquid and again one and two hours afterward.



- Group B strep is not to be confused with Group A strep, which is the bacteria responsible for strep throat.
- Up to 45% of women are GBS carriers, which means they have no symptoms.
- Complications to mothers include infection of the uterus, amniotic fluid, or incision site and increased risk of premature rupture of membranes, preterm labour, and caesarean birth.
- Complications to the baby include neonatal sepsis (blood infection), meningitis (infection of fluid surrounding the brain and spinal cord), pneumonia, and death.
- If mother has not been treated, the newborn can still be treated.
- The risk for GBS infection is significantly less for baby as long as the amniotic sac is intact.



Suggested activity: Ms. Wellbeing vs New Mom Activity

Time: 10-15 minutes

Purpose: To brainstorm how to deal with advice from others.

Materials: Flipchart paper and markers, if available, otherwise, paper and pens.

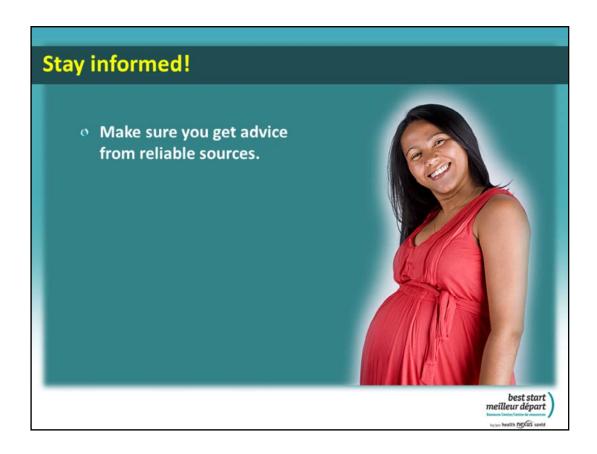
Instructions:

- Divide the group into two.
- One group brainstorms typical advice from "Mrs. Wellbeing". The other half brainstorms strategies
 for how to deal with wrong, unsolicited, overwhelming advice. If a flipchart is available, make notes
 on it or write on paper.
- Role play the situations with volunteers from the groups.

Notes:

The prenatal educator should be ready to counter the wrong information with accurate information. Examples of wrong advice from the participants may include: "You should stop exercising or you'll lose the baby.", "You should not go out in cold weather.", "You shouldn't eat peanuts during pregnancy or it could make your baby allergic to peanuts.", "Don't have baths or you could risk a miscarriage." Use the Prenatal Education Key Messages for Ontario (www.ontarioprenataleducation.ca) to verify the correct information.

*Source: Adapted from Teri Shilling Idea Box for the Creative and Interactive Childbirth Educator.



Suggested activity: Media Watch

Time: 5 minutes to assign, 5-15 minutes to discuss at the next class.

Purpose: To encourage participants to watch the media for current scientific studies and develop the ability to analyse the information.

Materials: Sample magazines, if available.

Instructions:

- Ask participants where they get their prenatal information in the media (magazines, websites, television, etc.).
- Provide examples of information that could be misleading or incomplete (single studies, opinions, commercial source, etc.).
- Encourage participants to look at magazines and newsfeeds related to pregnancy or birth with a critical eye and bring in samples to the next class.
- At the next class, discuss the sources, content and implications.

^{*}Source: Adapted from Teri Shilling Idea Box for the Creative and Interactive Childbirth Educator.



- Pharmacist can provide answers about over-the-counter medications, drugs prescribed by health care providers.
- Motherisk has up to date information that parents can access on-line or by telephone (morning sickness, alcohol and substances, HIV, etc).

The information represents the best practice guidelines at the time of publication.

The content is not officially endorsed by the Government of Ontario.

Consult your health care provider for information specific to your pregnancy.



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