

Fetal Ultrasound

Your health care provider may request that you have one or more fetal ultrasound scans during your pregnancy. These ultrasound scans provide important medical information that will help you and your health care provider create the best care plan for you and your baby.

What is a fetal ultrasound?

A fetal ultrasound scan is a painless medical procedure, ordered by your physician, midwife or nurse practitioner. It uses sound waves to make a live picture of your baby in the womb that can be seen on a monitor. Ultrasounds are done with a hand held instrument called a transducer. The transducer gives off sound waves that the human ear cannot hear. The sound waves bounce off the baby and then the ultrasound machine detects the sound waves and turns them into an image.

These images are used to determine the health and well-being of your baby. A doctor, with expertise in interpreting ultrasound, reviews the images and sends a written report to your health care provider who requested the ultrasound.

How is the fetal ultrasound done?

There are 2 ways to do a fetal ultrasound:

1. A transabdominal ultrasound is done by moving a transducer over your belly
2. An endovaginal (EV), or transvaginal, ultrasound is done by gently placing a narrow transducer in your vagina

The endovaginal scan provides a better view of the lower part of your uterus. However, you may choose not to have this type of ultrasound scan even if your health care provider recommended one.

Most often, medical ultrasounds are 2 dimensional (2D). This creates a flat image rather than a 3 dimensional (3D) image.

Are fetal ultrasounds safe?

Medical 2D ultrasound has been used in pregnancy for over 50 years. Many studies have been done to determine if a medical ultrasound is safe. There is no clear evidence to suggest it is dangerous for either you or your baby. Ultrasound is not an X-ray and does not use ionizing radiation.

All ultrasound scans are ordered by a doctor, midwife or nurse practitioner. They must be done by properly trained people who have special knowledge and skill in fetal ultrasound.

What can I do to prepare for my appointment?

When you book your ultrasound, you will be given instructions on how to prepare for your appointment. For example, you may be asked to come to your ultrasound appointment with a full bladder.

At what stage of my pregnancy should I have a fetal ultrasound?

Your physician, midwife or nurse practitioner can order an ultrasound at any time during your pregnancy, based on your medical needs. Most often it will be recommended that you have an ultrasound during your first and second trimesters.

What information will a fetal ultrasound provide?

The scan will show different information depending on when the ultrasound is performed during your pregnancy, and the reason your health care provider has requested it.

In general, a fetal ultrasound scan may:

- Look at the size and growth of your baby
- Look to see if your baby is developing normally or if there are any major physical concerns
- Check on the amount of amniotic fluid around your baby
- Show what position your baby is in
- Help investigate any concerns your health care provider might have about your uterus, ovaries, placenta or cervix

First Trimester (up to 14 weeks)

An ultrasound done during the first trimester is the best time to:

- Determine how far along you are in your pregnancy
- Estimate your due date
- Help determine if there is more than one baby and if they share a placenta and/or the amniotic sac (the bag of fluid inside the womb where a baby develops)

You may be eligible for prenatal genetic screening. Some women are eligible for an ultrasound to perform a nuchal translucency (NT) measurement. This type of ultrasound may be done along with blood tests to determine your baby's chance of having Down syndrome (DS), Trisomy 18 or an open neural tube defect. Please talk to your health care provider to learn more about your prenatal genetic screening options.

Second Trimester (15 to 27 weeks)

An ultrasound between 18 and 22 weeks into your pregnancy is often called the detailed or level 2 ultrasound. It is the best time to look at the anatomy of your baby and try to see if there are any birth defects. The shape and size of your baby's structures are examined, but the ultrasound cannot always tell how well those structures are working.

The best time to look for ultrasound "markers" is 18 to 22 weeks into your pregnancy. Markers are not birth defects. They are most often normal variations in growth and development. Markers might suggest a more serious problem such as Down syndrome or Trisomy 18. Your health care provider may offer further testing and information if markers are seen. Most babies that have an ultrasound "marker" are completely healthy and well.

Having a completely normal ultrasound does not guarantee a completely healthy baby.

Third Trimester (after 27 weeks)

Your health care provider may ask you to have one or more third trimester ultrasounds if they are concerned about:

- Your baby's size, growth or position
- The amount of amniotic fluid around your baby
- The location of your placenta
- The length of your cervix

Can I find out the sex of my baby?

During the 18 to 22 week second trimester scan, the genitals (sex organs) of your baby are usually examined as part of the detailed look at your baby's anatomy. If the position of your baby allows for the genitalia to be clearly seen, the sex (male or female) will be listed on the final report. If you want to know the sex, the health care provider who ordered the test can tell you.

The sonographer performing the ultrasound is not able to give you detailed information about what they see on the ultrasound, including the sex of your baby. Only your physician, midwife or nurse practitioner can provide the results of the scan. If you do not want to know the sex of your baby, let your health care provider and the

sonographer know. Be aware that the ultrasound is not always correct in determining the sex of your baby.

You cannot have an ultrasound exam booked or a routine exam extended for the sole purpose of identifying the sex of the baby.

What factors might limit the information that I get from an ultrasound?

Some factors that may limit what information you get from your ultrasound. They include:

- If you are overweight or obese
- A very small or big baby
- A low amount of fluid around the baby
- What position the baby is in

Can I get pictures from the ultrasound?

Some clinics that perform medically indicated 2D ultrasound scans do provide photos. When you check in for your ultrasound, ask about this possibility, and the cost.

Some clinics offer and perform 3D ultrasounds for keepsake or entertainment purposes only. Providing medical information is not the main purpose of these ultrasounds.

Ultrasound scans, including fetal ultrasounds, are medical procedures and should only be used when there is a medical reason to do so. Health Canada, the Society of Obstetricians and Gynaecologists of Canada, the Canadian Association of Radiologists, the College of Physicians and Surgeons of BC, and the International Society of Ultrasound and Gynecology recommend ultrasounds for medical purposes only and not for non-medical (keepsake) purposes.

For More Information

For more information on fetal ultrasounds, visit:

- The Society of Obstetricians and Gynaecologists of Canada – Ultrasound in Pregnancy
www.pregnancyinfo.ca/your-pregnancy/routine-tests/
- Health Canada – Fetal Ultrasound for Keepsake Videos
www.canada.ca/en/health-canada/services/health-risks-safety/radiation/medical/ultrasound.html

For information on prenatal genetic screening, visit Perinatal Services BC – Prenatal Genetic Screening Program www.perinatalervicesbc.ca/our-services/screening-programs/prenatal-genetic-screening-program.