

## What is Prenatal Ultrasound and How does it Work?

Ultrasound (also known as sonogram) is used in pregnancy to examine the developing baby. Ultrasound uses sound waves that reflect off the baby to generate a picture.

### Ultrasound in the First Trimester

In the first trimester of pregnancy the detail that can be seen in ultrasound is limited due to the small size of the baby. Sometimes ultrasound is done early in the pregnancy to confirm the due date, or tell if it is a twin pregnancy. At around 10-14 weeks an optional ultrasound to measure the nuchal translucency can be done. The nuchal translucency is the fluid-filled space at the back of the baby's neck. This measurement is used as a screening tool for Down syndrome and other genetic conditions. It may be done in combination with a blood draw on the mother to help estimate the chances for these conditions.

### Ultrasound in the Second Trimester

Most women will undergo ultrasound in the second trimester of pregnancy – usually between 16-20 weeks. Many look forward to this as an opportunity to determine the sex of the baby, but there is a lot more to it than that! This ultrasound looks at the developing baby from head to toe, to see if there are any signs of birth defects or genetic conditions.

### What does prenatal ultrasound in the Second Trimester test for?

It is important to know that ultrasound cannot detect all genetic conditions or birth defects. No test can guarantee the birth of a healthy baby. Most of the time women will have a normal ultrasound and will leave with some of the first pictures for the baby book.

Sometimes there is a finding on ultrasound that can raise concern; having some background about what is being looked for with ultrasound can help you be prepared. Findings on ultrasound can be put into two categories:

1. Structural abnormalities
2. Minor markers

The severity of structural abnormalities is variable; from minor and treatable to severe. Some examples of structural abnormalities are heart defects, cleft lip and palate, clubfoot, spina bifida, or extra fingers or toes.

A minor marker is a finding on ultrasound that may suggest an increased chance for a certain genetic condition, but by itself does not cause any health concerns. Many times a minor marker is just a variation in normal development.

### What if Ultrasound Identifies a Concern?

If a structural abnormality is seen on ultrasound, a referral to a specialist can be helpful to learn more about what to expect and plan next steps. For instance, if a heart defect is seen on

ultrasound you may be referred to a doctor that specializes in children's hearts to discuss the finding and make a plan for the birth of your baby.

Structural abnormalities and certain minor markers may indicate an increased chance for a genetic condition and you should be offered genetic counseling and further testing such as amniocentesis that may provide you with more information as to whether the baby has a specific genetic condition or not. All further testing is optional.

#### What are the Risks Associated with Prenatal Ultrasound?

Currently, there is no evidence that ultrasound, when used appropriately, is harmful to a developing baby. However, ultrasound should be done only for medical reasons, by qualified health care providers.

#### How to Decide About Prenatal Ultrasound?

Decisions about ultrasound in your pregnancy should be made in consultation with your healthcare provider. See our video, *How to Decide About Prenatal Genetic Testing*, as you consider your testing options.

#### Credits

This video was created by the Washington State Department of Health and Genetic Support Foundation. You can find more information and additional videos about prenatal genetic testing options at: [www.doh.wa.gov](http://www.doh.wa.gov) and [www.geneticsupportfoundation.org](http://www.geneticsupportfoundation.org).

#### Disclaimer

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