

# Chorionic Villus Sampling CVS

The Royal Women's Hospital Fact Sheet / [www.thewomens.org.au](http://www.thewomens.org.au)



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## What is Chorionic Villus Sampling (CVS)?

Chorionic villus sampling (CVS) is a test that checks the pregnancy for genetic abnormalities. The pregnancy can be tested by taking a small sample of the developing placenta. The sample is collected using a slender needle which is inserted through your abdomen and into the placental tissue. The tissue (chorionic villi) is then examined in a laboratory.

CVS is a specific test for particular abnormalities, such as Down Syndrome or Cystic Fibrosis. It is commonly performed between 10 and 12 weeks of pregnancy.

## Who is offered CVS?

- Women who are 37 years and over at the estimated time of delivery. This is because as the age of the woman increases the chance of her having a baby with a chromosomal abnormality also increases.
- Women who have had a prenatal screening test (such as first trimester screening, maternal serum screening or ultrasound) that has shown an increased risk for birth defect.
- Women who have already had a child with a problem such as Down syndrome or Cystic Fibrosis.
- Women who are known to have a pregnancy at risk of an hereditary condition that might be passed on to their baby.

## What will happen on the day of the test?

- First you will have an ultrasound scan to check there is only one baby and to confirm the age of the baby and the position of the placenta.
- You need to have a moderately full bladder before the scan.
- After your abdomen is cleaned with antiseptic solution, the CVS site is injected with local anaesthetic.
- A slender needle is inserted through your abdomen wall until it reaches the placenta. The path of the needle is followed carefully on the ultrasound screen.
- A finer needle is threaded through the first needle, and a syringe on the end of the fine needle is used to draw up very small fragments of placental tissue.
- The tissue is examined to make sure that it is the right kind of tissue and samples are taken until there is enough to perform the test. This takes about two minutes or so.

- You may feel a strange dragging or drawing sensation in your pelvis – this is normal, and no cause for alarm.
- Once the sample is taken, the needle is removed and the baby is checked again using the ultrasound scan. You can leave the room immediately to get dressed.
- After sitting quietly for 30 minutes or so you may go home.

While most women are quite capable of driving themselves, where possible it is suggested that someone accompany you so that you can be driven home. We normally recommend that you take it quietly for the rest of the day and possibly the next day as well, although there is no reason to go to bed.

The placental sample is sent to a laboratory and grown in culture. When enough cells have grown, the chromosomes are individually examined to make sure the number, appearance and size are correct. The results are usually sent to your doctor within two weeks.

## What complications may occur?

Most women experience some discomfort during the procedure but it is not severe. Following the procedure if you have any excessive pain or loss of blood or fluid you should contact either the Emergency Department on (03) 8345 3636 or your own doctor.

The test, like any other, may fail either because an inadequate sample is obtained or because the laboratory cannot produce a result.

The risk of miscarriage in women who have undergone this procedure is estimated at 1 in 100. While CVS has a slightly higher risk of disturbing the pregnancy than amniocentesis, its advantage is that the result is available six to seven weeks earlier in the pregnancy. If a termination is necessary it is a safer procedure in early pregnancy.

## Summary

The most common reason for doing CVS is to exclude Down syndrome and other chromosome abnormalities in patients who are 37 years of age and over. It is important to appreciate that no test, even the combination of a CVS and a careful ultrasound scan at 18 weeks guarantees that the baby is normal in every respect.

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