

Chorionic Villus Sampling (CVS)

What is a CVS test?

In this test, a sample of cells from the developing placenta (chorionic villi) are taken for genetic testing.

CVS is most commonly done to look for:

- Missing or extra chromosomes. (Down syndrome is caused by an extra copy of chromosome 21).
- A particular genetic problem (if the developing pregnancy is at risk for a certain problem).

CVS does **not** test for all birth defects. It does **not** rule out the possibility of all genetic abnormalities or developmental disability.

What are the risks of CVS?

There is a small risk of miscarriage. The risk is about 1 in 500, or about 0.2 percent. This is **in addition** to the usual 2 to 3 percent risk of miscarriage in any early pregnancy.

A large number of studies throughout the world have been done to determine the safety of CVS. None has shown a risk for birth defects that is greater than expected in the general population.

Is this test required?

No. This is an *optional* test. It is up to you to decide if the test could provide helpful information, and if the risk of the test is acceptable.

Is there an alternative to CVS?

CVS is the only diagnostic genetic test that can be done safely between 10 weeks and 13 weeks, 6 days in pregnancy. Amniocentesis can be done safely at or beyond 15 weeks in pregnancy.

Some patients will choose to have a screening test instead of CVS or amniocentesis. Screening tests can identify those at risk for a condition but are **not** 100% accurate.

How will the test feel?

CVS is done through the abdomen (with a needle through the skin). There is usually some cramping or pressure while the needle is in the uterus.

What should I expect after CVS?

- Cramping is very common. It is usually mild and goes away within a few hours. You may take Acetaminophen (Tylenol), if needed.

Do I need to limit my activities?

- Avoid strenuous activities for the rest of the day after the CVS is done. This includes heavy lifting, jogging or other exercise.

How long do results take?

This depends on the type of test ordered.

- An early test for Down syndrome, Trisomy 18, Trisomy 13 and sex chromosomes (“FISH” study) usually has a result within 2 to 4 days.
- We will complete a full chromosome test if the early test result is not normal. This test usually has a result in 7 to 14 days.
- We will complete a microarray test if the early test result is normal. The test usually has a result in 7 to 10 days.
- Specialized genetic testing can take longer.

A genetic counselor will call you as soon as the results are available. If you had more than one test ordered, you will get a call with each result as it is available.

How accurate is CVS?

CVS tests cells from the developing placenta. In 99 percent of cases, the cells in the placenta match the cells in the developing baby exactly.

In 1 percent of cases, there are abnormal cells in the placenta that do not match those in the fetus. When this happens, there would be a mixture of normal cells and abnormal cells (called placental mosaicism). If this is seen in your CVS, we will offer an amniocentesis to test fluid from the amniotic sac (bag of fluid around the baby). This can confirm if there are also abnormal cells in the baby.

Other Reminders

- If your blood type is Rh negative you should receive a RhoGAM shot after the CVS. If you do not, notify us immediately.
- You may consider having additional routine screening, such as a comprehensive anatomy ultrasound (sometimes called a level 2 ultrasound). This is done with a Maternal-Fetal Medicine specialist at 18 to 20 weeks in the pregnancy to evaluate for birth defects.

When should I seek medical help?

You should call your care regular obstetric (OB) care provider if you have:

- Heavy bleeding (like a period, or more) beyond the day of the test.
- Clear fluid (like water) leaking from your vagina.
- Severe abdominal (belly) pain.
- Flu-like symptoms within two weeks of the test. These include chills, muscle aches or a fever over 100.4°F (38°C) (under the tongue).