

# Should I have a CVS?

The decision to have a CVS is personal, based on your beliefs and concerns. The doctors and genetic counselors at Desert Perinatal Associates can help answer any further questions so you can make a decision that is right for you and your family.

## After the CVS

We recommend that you avoid the following activities for 24 to 48 hours after the procedure:

- Heavy lifting (greater than 20 pounds)
- Shopping
- Exercise
- Housecleaning
- Sexual intercourse
- Tampon use
- Bath tubs and swimming pools

If you experience any of the following symptoms following the procedure, please call us promptly:

- Water leaking from your vagina
- Vaginal bleeding (light spotting is normal after a transcervical CVS)
- Excessive uterine cramping (some mild cramping is normal)
- Fever
- Persistent pain in the lower abdominal area

We have a physician on call 24 hours a day, 7 days a week. Call (702) 341-6610.

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A  
helpful  
guide  
to  
CVS

[ chorionic villi sampling ]

With every pregnancy, there is a 3-5% risk for a birth defect to occur. For many of these problems, there is no known cause. However, some birth defects are caused by chromosome number problems.

Typically, every cell in our body has 23 pairs of chromosomes, for a total of 46. If there is an extra chromosome, it can cause certain birth defects. Three copies of chromosome number 21 result in Down syndrome, a common form of mental retardation. Rarer chromosome number problems include Trisomy 18 and Trisomy 13, which are associated with severe mental retardation and birth defects.

## What is chorionic villi sampling?

Chorionic villi sampling, known as CVS, involves taking a small tissue sample, or biopsy, of the developing placenta. CVS is used to diagnose or rule out chromosomal and genetic birth defects. The timing of the test is usually between 10 to 13 weeks of pregnancy, which is established by the last menstrual period or an early dating ultrasound.

## Who is offered CVS?

The American College of Obstetrics and Gynecology has recently recommended that all pregnant women be offered screening and diagnostic testing options in order to learn more about their risk for certain birth defects. These options include serum screening, ultrasound, CVS, and amniocentesis.

### COMMON INDICATIONS FOR CVS INCLUDE:

**MATERNAL AGE** – The risk of having a child with a chromosome number problem increases with age. CVS is offered to women who are 35 years or older at the time of delivery.

**POSITIVE SCREEN RESULT** – A First Trimester Screen may indicate an increased risk for a chromosome problem. CVS may be offered to rule out or diagnose these conditions.

**ABNORMAL ULTRASOUND** – When certain markers or birth defects are seen on first trimester ultrasound, it could indicate an increased risk for a chromosome problem or genetic condition. CVS may be offered to determine a possible cause for these ultrasound findings.

**PREVIOUSLY AFFECTED PREGNANCY** – If a chromosome problem or genetic disease was diagnosed in a child or a previous pregnancy, the mother may be offered CVS for any future pregnancies.

**FAMILY HISTORY** – A couple may be offered CVS if the fetus is at risk of inheriting a genetic condition based on their family history. However, prenatal diagnosis for certain genetic conditions may not be available.



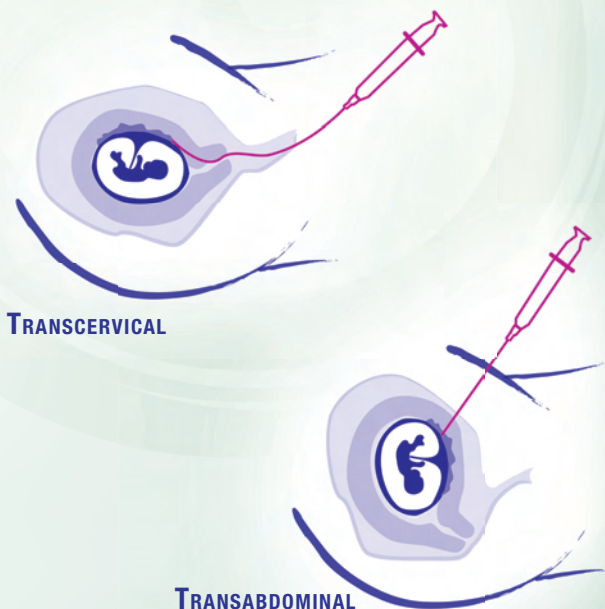
## How is CVS performed?

Before the procedure, the doctor looks with ultrasound (sonogram) to see the uterus and the position of the placenta. Depending on the position of the placenta, one of two approaches for CVS will be chosen:

- **TRANSCERVICAL:** this is performed by placing a vaginal speculum, followed by passage of a thin tube through the cervix, to reach the chorionic villi (placental tissue).
- **TRANSABDOMINAL:** this is performed by inserting a thin needle through the woman's abdomen and into the uterus to reach the chorionic villi.

With either method, gentle suction is then applied to the tube or the needle to remove a small sample of chorionic villi. After the procedure, ultrasound is used to check the heartbeat of the fetus.

Some women say CVS does not hurt, while others feel pressure and cramping. In some cases, CVS cannot be performed due to infection, unusually shaped uterus, or placental position. If CVS is not possible, an amniocentesis can be performed about 4 to 6 weeks later in the pregnancy.



## How long do the results take?

Results are generally available in 7 to 10 days, and in some cases, preliminary results may be available sooner.

## Is it a reliable test?

The placenta and the fetus originate from the same fertilized egg cell, so, in most cases, the cells of the placenta contain the same genetic material (chromosomes) as the fetus. The CVS is a very good test for diagnosing chromosome abnormalities – with an accuracy rate of 99%. However, in about 1% of cases, the results may be difficult to interpret. If this happens, a follow-up amniocentesis may be indicated. In these instances the placental cells from the CVS sample may contain a mixture of normal and abnormal cells. There is also a 1 in 1000 chance that the fetus may have a chromosome abnormality even though the CVS results are normal. It is also possible that some maternal cells are present in the sample and may interfere with the results. A genetic counselor is available if you have any questions about your CVS results.

## What cannot be tested with CVS?

CVS cannot test for spina bifida and anencephaly, known as neural tube defects. It is recommended that women having CVS also have a blood test called maternal serum alpha-fetoprotein (MSAFP) at about 16 to 18 weeks of pregnancy. This test identifies most pregnancies at risk for open neural tube defects.

Some birth defects have no known cause and further diagnostic testing may not be available during pregnancy. Examples include autism, isolated heart defects and cleft lip. Every pregnancy has a background risk for birth defects of 3 to 5%.

## What are the risks?

There is a small risk for miscarriage following CVS. This risk is approximately 1 in 100 to 1 in 200. It should be noted that some miscarriages occur spontaneously and are unrelated to the CVS procedure.

Possible complications following CVS include fluid leakage from the vagina, spotting or bleeding, severe cramping and premature labor, or infection. Every precaution is taken to minimize these complications. Physician experience is also important in decreasing the risk of miscarriage. The physicians at Desert Perinatal Associates who perform CVS are experienced with the procedure.