

Patient Information

Fetal Medicine Unit

Women and Children's Services

Chorionic Villus Sampling (CVS) and Amniocentesis information for parents

This leaflet aims to answer some of the questions you may have about Chorionic Villus Sampling (CVS) or Amniocentesis test. It is important to discuss this test with your doctor or midwife before you decide whether to have it or not.

1. Who this information is for

You are reading this information because you have been offered a CVS or amniocentesis test. It can help to talk through possible results and outcomes with your doctor or midwife before deciding whether or not to have one of these tests.

The decision is yours.

We offer you a CVS or amniocentesis if:

- there were unexpected findings at the time of your ultrasound scan
- you have a higher chance screening-test result for Down's syndrome or Edwards' syndrome and Patau's syndrome
- you have had a previous pregnancy/baby with a genetic condition
- you or your baby's father have a family history of another genetic condition, such as sickle cell disease, thalassaemia major or cystic fibrosis



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2. It is your decision

This information should support, but not replace, the discussions you have with your healthcare professional. Your healthcare professional will help you make the decision that is right for you and support you in that decision.

They should give you enough time to talk through your options. You can ask for more information and do not have to decide straight away. It is your decision. You can choose to have:

- no further testing
- an invasive test (CVS or amniocentesis)

Your healthcare professional should discuss with you:

- the conditions that CVS or amniocentesis can detect
- the chance of miscarriage from CVS or amniocentesis
- which test (CVS or amniocentesis) would be more appropriate for you
- how we test CVS or amniocentesis samples in the laboratory, the possible results of those tests and their reliability
- the chance that we will need to offer you a repeat diagnostic test
- when and how you get the results of a CVS or amniocentesis test
- your options if you have a test and your baby is found to have a chromosomal or genetic condition

3. If you decide to have the test

If you decide to have a CVS or amniocentesis, we suggest you bring someone with you, but you should not bring children. It is safe to eat and drink as normal before and after the procedure. Both procedures usually take around 10 – 15 minutes to perform. Your appointment may be longer to allow time to discuss the procedure beforehand and to rest afterwards.

4. Chorionic villus sampling (CVS)

If you have a CVS, we take a tiny sample of tissue from the placenta (placental tissue) for testing. The sample contains some of your baby's cells which contain genetic information (DNA).

CVS is usually done from weeks 11 to 14 of pregnancy but can also be done later. If the doctor decides it is not safe to do the procedure at a

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particular time, they may offer you another appointment 7 to 14 days later when the placenta will be larger and easier to reach.

CVS can be performed through the abdomen (transabdominal or through the tummy) or uncommonly through the cervix (transcervical or through the neck of the womb). The transabdominal method is the most common and is performed in this hospital. We clean your abdomen (tummy) with antiseptic solution and use a local anaesthetic injection to numb a small area. We insert a fine needle through your abdomen and into your uterus (womb) to take the sample. We use an ultrasound probe to guide the direction of the needle. After taking the needle out, your baby is observed for a short time on ultrasound.

The sample from the placenta is sent to the laboratory in two parts. The first part gives a rapid result in about 3 days to confirm if your baby has Downs, Edwards or Patau's syndrome. If any of these 3 syndromes are confirmed then you will be informed and your doctor will discuss your options with you in the fetal medicine unit. If any of these 3 syndromes are not confirmed but the scan has shown any unexpected finding then the laboratory does further testing on the second part of the sample, the results of which are reported in 2-3 weeks (called microarray). We recommend waiting for this period before making a decision whether to continue or end your pregnancy.

Sometimes the CVS results show an uncommon condition called confined placental mosaicism (CPM) in which the DNA in the placenta is not the same as the baby's. In this case the doctor will recommend you have Amniocentesis which means taking a sample of fluid around the baby after 15 weeks gestation (described below).

5. Amniocentesis

If you have an amniocentesis, we take a small amount of amniotic fluid (the water around your baby inside your uterus) for testing. The sample contains some of the baby's cells, which contain genetic information.

Amniocentesis is done after 15 weeks of pregnancy. We clean your abdomen with antiseptic and may or may not use a local anaesthetic injection to numb a small area. We insert a fine needle through your abdomen and into your womb to take the sample. We use an ultrasound probe to guide the direction of the needle.

Uncommonly we may have to re-insert the needle if the first attempt has failed for any reason or rarely we may offer you an appointment to have the amniocentesis done again on another day.

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After taking the needle out, the baby is observed for a short time on ultrasound.

Amniocentesis results are usually available in around 3 days to check for Downs, Edwards and Patau's syndrome and takes 2-3 weeks to check the rest of the chromosomes (called microarray). Amniocentesis is a true reflection of the baby's DNA.

6. Possible risks of CVS and amniocentesis

Most women say that CVS or amniocentesis is uncomfortable rather than painful. Some say it feels something like period pain.

You may feel anxious before and after the test. You may notice some cramping for a few hours afterwards. This is normal. You can take paracetamol for any discomfort. You do not need to rest or stop driving after the procedure.

It is not always possible to get a result from the first CVS or amniocentesis. Up to 6 in 100 women (6%) will be offered a second procedure.

One in 200 women who have a CVS or amniocentesis will miscarry. We do not know why some women miscarry after these procedures. Most miscarriages happen within 3 days of the procedure, but they can happen up to 2 weeks afterwards. There is nothing you can do to prevent a miscarriage after a CVS or amniocentesis.

There is a risk of less than 1 in 1,000 that CVS or amniocentesis will cause a serious infection. You should call your midwife or doctor, or the hospital where you had the test, straight away if you experience any of the following symptoms:

- persistent or severe pain
- a high temperature of 38°C (100.4°F) or more
- chills or shivering
- heavy vaginal bleeding
- discharge of clear fluid from the vagina
- contractions

7. Testing women who are pregnant with twins

You can have a CVS or amniocentesis if you are pregnant with twins.

CVS or amniocentesis in twin pregnancies is more complicated. The doctor may need to insert the needle twice to get samples of placenta or fluid from each baby. With CVS there is a small chance of getting 2 samples from the same baby, which could give misleading results.

The risk of miscarriage when having CVS and amniocentesis with twins is about twice as high as in single pregnancies. If this occurs, it may lead to the miscarriage of both babies.

8. Other considerations

If your blood group is Rh (rhesus) negative, it will be recommended that you have an injection of anti-D immunoglobulin after the procedure to prevent you from developing antibodies against your baby's blood cells.

If you have HIV, hepatitis B or hepatitis C viruses, CVS or amniocentesis might increase the risk that you pass this on to your baby. The specialist team caring for you will be able to offer further advice.

9. Continuing support and care

Deciding whether or not to continue with the pregnancy will be very personal to you. If you decide to continue with your pregnancy, your doctor or midwife will discuss your care and how best to care for your baby during pregnancy and after birth.

If you decide to end your pregnancy, you will be given information about what this involves and how you will be supported. This will include the choices you have about the method of termination.

Whatever decision you make, your healthcare professionals will support you.

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Further information

You can find further information about CVS on the National Screening Committee website www.fetalanomaly.screening.nhs.uk or <http://www.downs-syndrome.org.uk/> or <http://www.arc-uk.org>.

Alternatively, you may contact us on the following numbers if you have any queries or concerns:

Antenatal screening co-ordinators	024 7696 7412
Ann Morcombe/Bernadette Wheatcroft/Maggie Burns	
Fetal Medicine Department	024 7696 6572
Ward 23/Gynaecology Ward	024 7696 7000

The Trust has access to interpreting and translation services. If you need this information in another language or format please contact 024 7696 7000 and we will do our best to meet your needs.

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To give feedback on this leaflet please email feedback@uhcw.nhs.uk

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