Royal College of Obstetricians & Gynaecologists

Chorionic Villus Sampling

Consent Advice No. 6b

January 2026

Chorionic Villus Sampling

1. When to use this guidance

This is the first edition of this guidance.

This guidance is for healthcare professionals who care for pregnant women, non-binary and trans people who are offered chorionic villus sampling (CVS), in order to aid the provision of appropriate and balanced information about the potential benefits, risks and alternatives to the procedure.

This guidance is relevant to those aged 16 years and over with mental capacity, and those under 16 years of age who are considered competent*,[1–3] to help make the decisions that are appropriate for them.

Within this document we use the terms woman and women's health. However, it is important to acknowledge that it is not only women for whom it is necessary to access women's health and reproductive services in order to maintain their gynaecological health and reproductive wellbeing. Gynaecological and obstetric services and delivery of care must therefore be appropriate, inclusive and sensitive to the needs of those individuals whose gender identity does not align with the sex they were assigned at birth.

2. How to use this guidance

This guidance should be used by healthcare professionals to support personal informed choices, with reference to the General Medical Council's guidance on *Decision making and consent*[4] and *Intimate examinations and chaperones*,[5] and the following resources on procedures for prenatal diagnosis:

- NHS England *Screening in pregnancy: CVS and amniocentesis information for parents* (www.gov.uk/government/publications/cvs-and-amniocentesis-diagnostic-tests-description-in-brief/nhs-fetal-anomaly-screening-programme-chorionic-villus-sampling-cvs-and-amniocentesis-information-for-parents).[6]
- NHS website (www.nhs.uk/conditions/chorionic-villus-sampling-cvs).
- Antenatal Results & Choices (www.arc-uk.org/tests-explained/chorionic-villus-sampling-cvs).[7]
- RCOG Green-top Guideline No. 8 *Amniocentesis and chorionic villus sampling*.[8]

3. How to provide information

Information about CVS should be provided when prenatal diagnosis is first discussed with the woman to allow them enough time to consider the implications and ask any questions.[6]

Information should be made available in commonly used languages, and large print/Braille versions should be made available for those with impaired vision. Healthcare professionals must make all reasonable efforts to make translators or translation services available to those unable to read and/or understand the information. For non-English speaking users, consent should be obtained with the use of an interpreter or language line. Healthcare professionals should not rely on family members or friends as interpreters.

* If a child (under 16) has sufficient maturity and understanding to make informed decisions about their treatment, they would be considered to meet the requirements of 'Gillick' competency as recognised in England, Wales and Northern Ireland; and described in the Age of Legal Capacity (Scotland) Act 1991. Under these circumstances, the child can consent to their own medical treatment without the need for parental knowledge or expressed permission.

Healthcare professionals are encouraged to consider using visual or other explanatory aids and to signpost to available resources[7] to support the woman's understanding of the risks, taking into account their clinical and personal circumstances, compared with population level risk. Benefits of the proposed option and reasonable alternatives including the option to take no action should be discussed.[4] Women should be signposted to reliable sources of information if testing for specific conditions.

After provision and discussion of all available information, women should be offered time and opportunity to clarify any concerns they may have, before seeking their written consent. B.R.A.I.N. can be a helpful tool to share with the person considering whether or not to have any procedure, in order to make sure informed consent is authentically obtained, that is:

- **B**enefits – What are the benefits of making this decision?
- **R**isks – What are the risks associated with this decision?
- **A**lternatives – Are there any alternatives?
- **I**ntuition – How do I feel? What does my 'gut' tell me?
- **N**othing – What if I decide to do nothing/wait and see? What happens next?

4. Documentation of informed consent

Using the information in the attached consent form, healthcare professionals should explain that the potential risks of CVS, as stated, are summary estimates only, based on available evidence from the RCOG Green-top Guideline No. 8 *Amniocentesis and Chorionic Villus Sampling*.[8] Women should be informed that some of these figures indicate the additional risks related to the procedure over the background (e.g. miscarriage) and some are primarily because of the procedure.

4.1 Details of the procedure

Women must be informed that CVS involves taking a tissue sample from the placenta, by passing a needle into the placenta which can be carried out through the abdomen (transabdominal) or through the cervix (transcervical), although the former is usually performed in the UK. Women opting to have CVS must be informed that it can be offered from 10^{+0} weeks of gestation, but to reduce the risk of technical challenges, it is usually performed from 11^{+0} weeks of gestation, with an upper limit of 14^{+6} weeks of gestation.[8] They must also be informed about the prerequisites, anticipated duration, precautions and recovery following the procedure. They should be made aware that the procedure is carried out under continuous ultrasound guidance, using Local Safety Standards for Invasive Procedures (LocSSIPs).[9]

Local turnaround times for the results and how they will be communicated should also be stated.

4.2 Specific circumstances

Women having a twin or higher order multiple pregnancy who are considering CVS must be informed that it is recommended that it is carried out in tertiary fetal medicine centres, by an operator with the skill to carry out a selective feticide, if subsequently decided, and they should receive individualised counselling about the risks and benefits.

Women should be informed that invasive testing such as CVS should be delayed until their blood-borne virus status is known. For women living with human immunodeficiency virus (HIV), CVS can be offered if they are on highly active antiretroviral therapy and if the viral load is undetectable.[10]

The risk of vertical transmission should be discussed with women who have hepatitis B or C virus. There is no clear evidence of increased vertical transmission with either strain of the virus, although 'e' antigen positive state (associated only with type B), or a high viral load, may potentially increase this risk.[11] Seeking specialist input to optimise their condition should be discussed.

4.3 Tests on the placental sample

Women must be informed that the placental sample will be processed, tested and that any of the remaining genetic material extracted will be stored in the genetics laboratory, to be available for any further testing should the need arise. It must also be explained that storage and disposal of samples will be in accordance with recommended laboratory protocols, compliant with the Human Tissue Act 2004.[12] They must also be informed that parental blood samples might be required at the time of CVS (according to the indication for the test) to help with interpretation of the results.

It should be explained that genetic testing of the cells from the CVS sample will be guided by the specific indication for the CVS; the analysis may be limited to rapid testing for specified chromosomes, more detailed testing for submicroscopic chromosomal rearrangements (copy number variations) or individual genetic mutations. Where applicable, information regarding the need for any additional consent for detailed genomic tests and the turnaround times for the results should be provided. Rare possibilities of no result or an unexpected result should be discussed. Women should also be informed that if the results do not indicate any chromosomal/genetic condition, this does not completely rule out the possibility of any condition.

Women should be made aware that there is a chance of finding variations limited to the placenta and not present in the fetus, known as confined placental mosaicism (CPM).[13] To establish this, further tests including an amniocentesis might be advised. Women must be informed that they would be advised to wait for more specific tests on cultured cells from the sample to confirm any variations identified on rapid testing, especially when there are no structural fetal anomalies,[8] or if the sample was insufficient to yield results on rapid testing.

4.4 Results of prenatal diagnosis and choices

Women should be informed that CVS can provide information that may help them to make choices about their pregnancy, birth and neonatal care.

Women should be made aware that tests done on the placental sample may not come back with a definite diagnosis and may bring unexpected or uncertain information. They should also be informed that if the results do not indicate any chromosomal/genetic condition, this does not completely rule out the possibility of any condition.

Signposting to the relevant organisations with guidance or helplines to support decision making, if available, is recommended if testing for any specific conditions.

4.5 Alternatives

The following alternatives and their potential risks and benefits compared with CVS should be discussed with the woman.

- No further testing.
- Non-invasive prenatal diagnostic (NIPD) testing, using cell-free fetal DNA (cffDNA) from maternal blood samples, can be offered as an alternative for invasive procedures for some genetic disorders if the pregnancy meets the eligibility criteria in the National Genomic Test Directory.[14,15]
- Amniocentesis can be offered at or after 15^{+0} weeks of gestation, with the advantage of the results not being affected by CPM.
- Postnatal testing of cord blood or neonatal sampling can be offered if the woman accepts that potentially useful information will be unavailable to optimise care during pregnancy, birth, and in the immediate care of the baby.

All of the above, except amniocentesis, avoid the additional risks of an invasive procedure during pregnancy.

4.6 Post procedure care

Women who are rhesus D (RhD) negative serotype must be informed that an anti-D injection will be offered after CVS in case their fetus is RhD positive to reduce the risk of maternal sensitisation. This will not be necessary if the woman has already had non-invasive prenatal testing to confirm that their fetus is RhD negative.

Women should be offered written information about the procedure[6] and given contact details for the team who organise appointments and provide test results. They should be told when their results are likely to be made available. They should also be advised about when to seek help and who to contact for advice if they experience any symptoms suggestive of complications following their procedure. They should be advised about pain relief (if required).

References

1. House of Lords in Gillick v West Norfolk and Wisbech Area Health Authority, 1985.
2. The Northern Ireland Executive Department of Health. Consent guides for healthcare professionals. Seeking consent: Working with children [www.health-ni.gov.uk/publications/consent-guides-healthcare-professionals]. Accessed 14 Jan 2026.
3. Age of Legal Capacity (Scotland) Act 1991, section 2 [www.legislation.gov.uk/ukpga/1991/50/section/2]. Accessed 14 Jan 2026.
4. General Medical Council. Decision making and consent [www.gmc-uk.org/professional-standards/professional-standards-for-doctors/decision-making-and-consent]. Accessed 14 Jan 2026.
5. General Medical Council. Intimate examinations and chaperones [www.gmc-uk.org/professional-standards/professional-standards-for-doctors/intimate-examinations-and-chaperones]. Accessed 14 Jan 2026.
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7. Antenatal Results and Choices [www.arc-uk.org]. Accessed 14 Jan 2026.
8. Navaratnam K, Alfirevic Z; on behalf of the Royal College of Obstetricians and Gynaecologists. Amniocentesis and chorionic villus sampling. Green-top Guideline No. 8. *BJOG* 2022;129:e1–e15.
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10. Byrne L, Short C-E, Bamford A, Bradshaw D, Cheserem E, Clarke E, et al. BHIVA guidelines on the management of HIV in pregnancy and the postpartum period 2025. *HIV Med* 2025;26:1757–1880.
11. Veronese P, Dodi I, Esposito S, Indolfi G. Prevention of vertical transmission of hepatitis B virus infection. *World J Gastroenterol* 2021;27:4182–4193.
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14. NHS England. National genomic test directory [www.england.nhs.uk/publication/national-genomic-test-directories/]. Accessed 14 Jan 2026.
15. NHS England. National Genomics Education Programme – GeNotes. Non-invasive prenatal diagnosis (NIPD) [www.genomicseducation.hee.nhs.uk/genotes/knowledge-hub/non-invasive-prenatal-diagnosis-nipd]. Accessed 14 Jan 2026.

Consent form for chorionic villus sampling

Patient identifier:

Name of proposed procedure: Chorionic villus sampling (CVS)

Indication:

Anaesthesia: Transabdominal CVS is usually performed with the use of local anaesthesia to numb the entry area into your abdomen. This will be discussed with you by the healthcare professional who will perform the procedure.

Statement of health professional (to be filled in by healthcare professional with appropriate knowledge of the procedure):

I have explained the above procedure, specifically, I have explained that:

- The transabdominal procedure involves obtaining a small tissue sample from your placenta by passing a thin needle through your abdomen into your uterus (womb).
- The transcervical procedure involves obtaining a small tissue sample from your placenta by passing a thin tube or small forceps through your vagina and cervix (neck of the womb).
- The procedure will be carried out under continuous ultrasound guidance using an aseptic technique.
- The sample will be sent for testing which involves: **QF-PCR*** / **Karyotyping** / **Chromosomal microarray** / other (specify details) ..... for which further detailed consent may be required. (circle all applicable)
- A blood sample from the biological parent(s) may need to be sent with the placental sample or afterwards: **Yes** / **No** (delete as appropriate)

Below is a table showing the chance of experiencing certain complications when having CVS performed by an appropriately trained healthcare professional. **These numbers are estimates only and the chance of experiencing a complication will also depend on the individual situation.**

		Frequency/occurrence
Chance of procedure-related complications	**Miscarriage (if < 24^{+0} weeks pregnant)**	1 in 200 over the background chance
	Confined placental mosaicism (genetic variation present only in the placenta)	1–2 in 100
	Severe infection	Rare†
	Maternal cell contamination	1–2 in 100
	Unable to give rapid result	2 in 100
	Failed cell culture	0.5–1 in 100 (higher in third trimester, up to 1 in 10)
	Second or repeat procedure advised	Up to 6 in 100
	Injury to the baby	Rare†
	Maternal organ injury	Rare†

* QF-PCR, quantitative fluorescent-polymerase chain reaction.

† Rare is defined as affecting between 1 in 1000 and 1 in 10 000.

I have discussed the chance of complications taking into account their personal circumstances, and plans for the future (specify details): ☐

I have discussed the alternatives, and their potential benefits and limitations compared with CVS (not having the procedure, non-invasive prenatal diagnostic testing of cell-free fetal DNA [cffDNA] in maternal blood [where applicable], testing after birth and amniocentesis): ☐

I have discussed the procedures that may become necessary (tick as appropriate if agreed by the patient):

- Repeat procedure if the sample is insufficient or no results from the sample ☐
- Additional consent for more detailed genetic testing ☐

The following resources have been provided:

- NHS England: Screening in pregnancy: CVS and amniocentesis information for parents
- Antenatal Results & Choices: www.arc-uk.org/tests-explained/chorionic-villus-sampling-cvs
- Other (specify details):

.....

I confirm that ..... **has been offered the time and opportunity to ask further questions about the information provided.**

Healthcare professional:

Signed ..... Date .....

Name (PRINT) .....

GMC/NMC number .....

Job title .....

Contact details (if the patient wishes to discuss options or ask further questions later):

.....

Patient:

I do / do not agree* to the procedure described, including the procedures, treatments or examinations which may become necessary.

I do / do not agree* for trainees/students to be present during the procedure.

I do / do not agree* for trainees/students to examine me during the procedure.

I understand that I will be awake, and local anaesthetic is used during the procedure. Yes / No*

Signed ..... Date .....

Name (PRINT) .....

(*please delete as appropriate)

Statement of interpreter (where appropriate):

I have interpreted the information above to the patient to the best of my ability and in a way in which I believe they can understand.

Signed ..... Date .....

Name (PRINT) .....

Contact details .....

Confirmation of consent on the day of the procedure (to be completed by a healthcare professional and the patient).

I agree to the procedure described above.

I understand that you cannot guarantee that a particular person will perform the procedure. The person will, however, have appropriate experience.

I understand that the procedure will / will not* involve local anaesthesia.

Healthcare professional:

Signed ..... Date .....

Name (PRINT) .....

GMC/NMC number .....

Job title .....

Patient:

I confirm that I still want the procedure/treatment to go ahead.

Signed ..... Date .....

Name (PRINT) .....

(*please delete as appropriate)

This Consent Advice was produced on behalf of the Royal College of Obstetricians and Gynaecologists by the RCOG Patient Safety Committee.

The following individuals and organisations submitted comments at peer review:
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The Patient Safety Committee lead reviewers were: Dr A Gorry FRCOG, London; and Dr EA Khan MRCOG, Milton Keynes.

The Chair of the Patient Safety Committee was: Dr CJ Calderwood FRCOG, Clydebank; and the Vice Chair was: Dr J Elson FRCOG, Nottingham.

The final version is the responsibility of the Patient Safety Committee of the RCOG.

The review process will commence in 2029, unless otherwise indicated.

