

Cervical Screening

Cervical screening aims to monitor the health of the cervix, or the neck of the womb. Many changes can occur in the cells in this sensitive area, caused by a variety of factors. Most minor changes are benign, but some can indicate a risk of cancer. Although the function of the test is not to diagnose cervical cancer, it can pick up on early signs which might later develop into cancer and help to prevent it in time. Over 1000 lives are saved every year through regular screening.

Research has shown that over 99% of cervical cancers occur as a result of the sexually transmitted virus HPV (human papilloma virus). This virus is very common, and often goes unnoticed, but if it recurs in a persistent manner it can lead to the pre-cancerous condition CIN (cervical intraepithelial neoplasia). Cervical screening can identify changes caused by HPV, and it is therefore important that women attend regular screening. For more information on these pre-cancerous viruses, see our related factsheet, 'Human Papilloma Virus'.

Who should be offered cervical screening?

The NHS Cervical Screening Programme in England invites all women aged between 25 and 64 for regular tests, approximately one every three to five years¹. There is no obligation to accept these invitations, and you may want to ask for more information and, if necessary, additional support. However, it is important to consider that regular screening detects up to 80% of cervical abnormalities, which may then be treated in time to prevent cervical cancer.

If you have ever had sex, including lesbian sex, you run the risk of contracting HPV, and should have regular cervical screening. However, if you have never been sexually active it is very unlikely that you will develop cervical cancer, and therefore you might decide to decline the invitation to cervical screening.

¹ There are minor differences in the functioning of NHS screening services in Scotland and Wales. For region-specific information consult www.nhs24.com for Scotland, and www.wales.nhs.uk for Wales.

If you are pregnant and have not been screened in the last three years you will be invited for a test as part of ante-natal care. The test will not interfere with your pregnancy.

Following the menopause cervical cells may still undergo change, and you should continue to have regular screening. If you have had a hysterectomy you should ask your doctor for advice on the continuation of cervical screening. In the case of a hysterectomy in which the womb was removed but not the cervix, abnormal cervical cells may yet develop and you should continue to have regular screening. If the cervix was also removed, you may be invited to have an examination of the vagina, referred to as a 'vault smear'.

Liquid Based Cytology (LBC)

LBC is a recently developed screening method that is now being introduced everywhere in the NHS. It is already the primary method for cervical screening in Scotland and Wales, and should be the standard method used in England by 2008. LBC will replace its precursor, the Smear Test, or the Pap Smear², which has been used for cervical screening in Britain since the mid-1960s.

LBC is similar to the Smear Test in many ways. Both methods take a small sample of cells from the lining of the cervix, which is then sent to a laboratory to be examined under a microscope. The Smear Test used a small spatula to gather the cell sample, which was then 'smeared' onto a slide for examination. Liquid Based Cytology replaces the spatula with a small brush, and deposits the collected cells in a preservative fluid in a small container.

LBC has some advantages over the Smear Test. It allows the laboratory to separate out mucus and blood before the cells are deposited onto the slide, which makes the test more accurate and means that fewer women have to come for a re-test. It also enables the laboratory to test for other sexually transmitted infections at the same time, including **Chlamydia**.

² 'Pap' refers to George Papnicolau (1883-1962) who developed the method of analysis for samples of cervical cells.



Taking the test

You must arrange to be tested at a time when your period is not due. It is also recommended that you do not have sex in the 24 hours before the test, as sperm, lubricant, and the chemicals used in barrier or spermicidal contraception, can affect the test results. You can request the presence of a friend or a chaperone during the test.

Before the test, you should feel sure that you understand why you have been asked to take a cervical screening test, and what the test is looking for. Feel free to ask any questions and to discuss any concerns you might have, for examples, abnormal bleeding or vaginal discharge.

The test may be a little uncomfortable, but it should not be painful. However, if at any point during the examination you feel uncomfortable or in pain, you should inform the doctor or nurse straight away, and you have the right to ask for the test to stop. A good practitioner will explain every step of the procedure but do not hesitate to ask any questions.

You will be asked to remove your underclothes (skirts may be left on), and to position yourself on a couch. The doctor or nurse will hold open the walls of the vagina with a device called a speculum, so that the cervix can be seen. Then, a small spatula or brush will be inserted to gather a sample of cells. The speculum is removed and the test is over.

Sometimes the doctor or nurse will also perform a pelvic examination to check the health of the womb. S/he will place a gentle pressure on your abdomen with one hand and feel for any abnormalities by placing two fingers inside the vagina. Again, if you feel any pain or discomfort, or want to make any enquiries, you should not hesitate.

After the test

It is normal to experience spotting (slight bleeding) following a smear, so do not be worried by this. However, if you undergo any discomfort or heavy bleeding you should consult your doctor.

The Results

Like many screening procedures, the test is not 100% effective, and some abnormalities may go undetected. This can be because the abnormal cells look very similar to the other cells, because the sample failed to pick up any abnormal cells, or because the person reading the slide failed to recognise the abnormality. Sometimes test results are declared 'unsatisfactory' because the slide was poorly prepared or difficult to read. In such cases, the test needs to be repeated and the patient will be called back.

If you are called back for a second test you should not panic: only very rarely does this indicate the possibility of cancer. If a second test does detect abnormalities, known as dyskaryosis, a further examination may be needed. Small changes often sort themselves out without treatment, but dyskaryosis can be treated, and treatments are nearly 100% effective.

Colposcopy

If your second screening test shows abnormalities in the cervical cells (a condition referred to as **Dyskaryosis**) you will be referred to a clinic for a further examination, called a colposcopy, in order to decide whether you need treatment. The examination is very simple, and similar to a smear or LBC test. Again, the vaginal walls are held open with a speculum, but instead of taking a sample of the cells, the doctor examines the cells from a distance using an instrument called a colposcope, which is like a pair of binoculars with a light source. No part of the instrument goes inside you. In some clinics, you can choose to follow this examination on a video screen.

The doctor will then need to dab different liquids onto your cervix to highlight any abnormal cells. The liquids cause the tissue of any abnormal cells to change colour. Diluted vinegar can be used, which turns abnormal cells white, or iodine, which turns healthy cells brown.

If abnormal tissue is identified, the doctor may want to take a **biopsy**, or cell sample. The sample is tiny, the size of a match head, but you may be given a local anaesthetic to make this more comfortable.

After a biopsy you may bleed for a day or two. It is fine to use either sanitary towels or tampons.

Treatment

If you do need treatment after a colposcopy you will be treated as an out-patient. After treatment it is important to make sure that the cervix remains healthy, so you will be asked to attend annual smear tests for the next four or five years.

For more information, see our related fact-sheets: Cervical Cancer, and Cervical Viruses.

This factsheet has been produced by Women's Health Concern and reviewed by members of our Medical Advisory Panel.

It is for your information and advice and should be used in consultation with your own medical practitioner. **Review date: November 2007.**

Useful contacts

Cancer Backup

Tel: 0808 800 1234

Website: www.cancerbackup.org.uk

NHS Cervical Screening Programme

Website: www.cancerscreening.nhs.uk/cervical/

The Colposcopy Site

Website: www.colposcopy.org.uk

Glossary

Biopsy A minor procedure in which a sample of cells about the size of a match-head is taken from the affected tissue for further examination.

Chlamydia A very common, treatable sexually transmitted disease that affects the fallopian tubes, and if left untreated can lead to infertility.

CIN (Cervical Intraepithelial Neoplasia) Abnormal changes in the cells of the cervix.

Dyskaryosis The term used to refer to abnormalities in the cervical cells.

HPV (Human Papilloma Virus) A very common sexually transmitted virus of which some subtypes can lead to cervical cancer.

LBC (Liquid Based Cytology) A method of cervical screening that takes a small sample of cells from the lining of the cervix using a small brush and desposits them in a preservative fluid for examination.

The Smear Test A method of cervical screening that takes a small sample of cells from the lining of the cervix using a small spatula and 'smears' them onto a slide for examination.

Speculum A small tool used to open the vaginal walls to facilitate cervical examination.

Sources

International Agency for Research on Cancer (IARC)

www.iarc.fr

Cancer Backup

www.cancerbackup.org.uk

Cancer Research UK

www.cancerresearchuk.org

NHS direct

www.nhsdirect.nhs.uk

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