HEALTH BASICS

Cervix

The cervix is the lower part of the uterus that opens into the vagina.

WHAT IT IS
Lower part of the uterus opening into the vagina

WHERE IT COMES UP
Pelvic exams, cervical screening, pregnancy, labour, and test results

WHY IT MATTERS
Regulates passage and changes during pregnancy and birth

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Primary care clinician, gynaecology service, or sexual health clinic

HOW IT IS CHECKED
Speculum examination, cervical screening, colposcopy, or ultrasound

Overview

The cervix is the lowest part of the uterus, also called the womb. It connects the main body of the uterus to the vagina. It is usually a few centimetres long, although its shape and position can change with age, pregnancy, childbirth, and hormonal changes.

A narrow passage through the cervix is called the cervical canal. The opening into the uterus is the internal os. The opening that can be seen from the vagina is the external os. "Os" simply means opening.

The cervix is an organ, not a disease or diagnosis. You may hear about it during cervical screening, a pelvic examination, pregnancy care, contraception procedures, fertility assessment, or tests for unusual bleeding or discharge.

People who have a uterus usually have a cervix unless it was removed during surgery. Some hysterectomies remove both the uterus and cervix, while others leave the cervix in place. Your operation record can confirm which procedure you had.

How it works

The cervix forms a passage between the uterus and vagina. Menstrual blood travels through this passage. Sperm may pass through it toward the uterus and fallopian tubes.

Glands in the cervix produce cervical mucus. The amount and texture of this mucus respond to hormones. Near ovulation, it often becomes thinner and more slippery, which can help sperm move through the cervix. At other times, it is usually thicker.

The outside of the cervix is covered mainly by flat cells called squamous cells. The cervical canal contains glandular cells, which produce mucus. The area where these cell types meet is called the transformation zone. Its location changes over time and is important because most cervical cell changes linked to human papillomavirus, or HPV, begin there.

During pregnancy, the cervix normally remains closed and firm while the pregnancy develops. Mucus in the cervical canal helps form a protective barrier. Near and during labour, the cervix softens, shortens and opens. Shortening is called effacement, while opening is called dilation.

A clinician can see the cervix by gently placing a speculum in the vagina. A speculum is an instrument that holds the vaginal walls apart. Depending on the reason for the examination, the clinician may collect cells, take swabs, or look for visible changes.

Why it matters for your health

Cervical screening checks for HPV or abnormal cervical cells that could develop into cancer over time. Depending on the screening programme, the laboratory may test first for high-risk types of HPV, examine cervical cells, or do both.

An abnormal screening result does not mean that you have cervical cancer. Many results show HPV infection or minor cell changes that can be monitored or assessed further. A procedure called colposcopy uses magnification to examine the cervix more closely. A small tissue sample, called a biopsy, may be taken if needed.

Cervical screening does not check for all gynaecological cancers. It does not screen the ovaries, and it is not designed to investigate symptoms such as bleeding between periods. Symptoms need their own assessment even if your latest screening result was normal.

The cervix also matters during fertility treatment, pregnancy and birth. For example, cervical mucus can affect sperm passage, and ultrasound can measure cervical length during pregnancy when there is a clinical reason to do so.

Procedures involving the cervix include inserting some types of contraception, taking a biopsy, treating abnormal cells, or helping manage a narrowed cervical opening.

What can go wrong

Several conditions can affect the cervix. Their symptoms can overlap, and some cause no symptoms.

Cervicitis means inflammation of the cervix. It can be caused by sexually transmitted infections such as chlamydia or gonorrhoea, although infections are not the only cause. It may lead to unusual discharge, bleeding after sex, or bleeding between periods.

Cervical ectropion occurs when glandular cells from inside the cervical canal are present on the outer surface. It is common with hormonal changes, including pregnancy or use of combined hormonal contraception. It is not cancer, but the delicate cells may bleed more easily.

Cervical polyps are small growths on or within the cervix. Most are not cancerous. They may be discovered during an examination or investigated because of bleeding or discharge.

Cervical stenosis means the cervical canal has become unusually narrow or closed. It can occur after menopause, surgery, or treatment to the cervix. It may affect menstrual flow or make procedures through the cervix more difficult.

Cervical insufficiency is a pregnancy-related condition in which the cervix begins to shorten or open too early without typical labour contractions. It is assessed and managed through maternity care.

Cervical intraepithelial neoplasia , often shortened to CIN, describes abnormal cells on the cervix. CIN is not cancer, but some higher-grade changes can become cancer if they are not monitored or treated. Persistent infection with certain high-risk HPV types is the main cause of these changes.

Cervical cancer develops when abnormal cervical cells become cancerous. Screening aims to find high-risk HPV or cell changes before cancer develops.

What you can do

Check whether you are due for cervical screening under the programme where you live. Timing is based on factors such as age, previous results, immune health, treatment history, and whether you still have a cervix. Screening may still be relevant if you are not sexually active now or have had same-sex partners.

If you have had a hysterectomy, ask whether your cervix was removed and whether you need further screening. Keep a record of previous screening results, colposcopies, biopsies, and treatments. These details can affect future follow-up.

Ask whether HPV vaccination is appropriate for you under your local programme. Vaccination protects against important HPV types, but it does not replace recommended cervical screening.

Arrange a routine appointment if you have bleeding after sex, bleeding between periods, unusual discharge, pain during sex, or any bleeding after menopause. These signs often have causes other than cancer, but they should be assessed rather than waiting for the next screening invitation.

Seek urgent maternity advice if you are pregnant and have bleeding, leaking fluid, regular painful contractions before your expected delivery date, or new pelvic pressure. Use emergency services for severe bleeding, fainting, severe pelvic or abdominal pain, or symptoms that make you feel seriously unwell.

You can ask for explanations, a different speculum size, breaks during an examination, or a chaperone. Tell the clinician about pain, anxiety, past trauma, vaginal dryness, or previous difficulty with examinations so the visit can be adapted where possible.

Common questions

Can I feel my cervix?

Some people can feel the cervix by placing a clean finger high in the vagina. It may feel firm and rounded, with a small central dip. Its height and texture can change during the menstrual cycle. Self-examination cannot replace screening or a clinical assessment.

Is a cervical screening test the same as a pelvic examination?

No. A pelvic examination is a broader examination of the reproductive organs. Cervical screening involves collecting a sample from the cervix to test for HPV, abnormal cells, or both. A person may have one without the other.

Does cervical screening hurt?

Some people feel pressure or brief discomfort, while others find it painful. You can ask the clinician to stop at any time. A smaller speculum, a different position, more time, or treatment for vaginal dryness may help.

Can someone without a cervix get cervical cancer?

Cervical cancer begins in the cervix, so it cannot develop after the cervix has been completely removed. However, follow-up testing may still be advised after certain abnormal results, cancer treatment, or surgery. Confirm your individual plan with the service holding your records.

Does HPV mean a partner has been unfaithful?

No. HPV can remain in the body without being detected for years, so a positive result usually cannot show when it was acquired or from whom.

Sources

- National Cancer Institute - Cervical Cancer Screening
- American College of Obstetricians and Gynecologists - Cervical Cancer Screening
- Centers for Disease Control and Prevention - Urethritis and Cervicitis, STI Treatment Guidelines
- World Health Organization - Cervical cancer
- NHS - Cervical screening
- NHS - Colposcopy