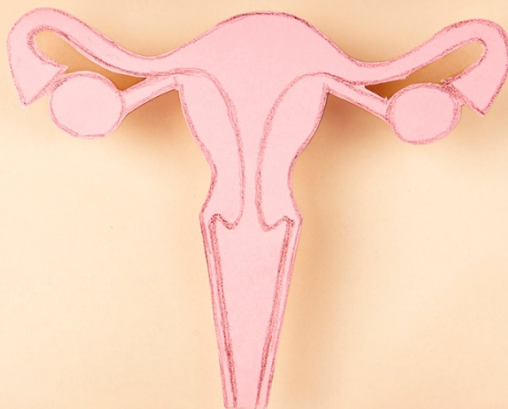


SCREENING FOR ABNORMAL CELLS IN THE CERVIX



Screening for abnormal cells

Abnormal cells in the cervix may occur in women of any age. Also in younger women.

Women aged 23 to 29 are invited to take a screening test every three years.

Women aged 30 to 64 are invited to take a screening test every five years.

If you are not sure when your last screening was, you can seek information about your most recent screening on www.heilsuvera.is (view your electronic medical file) or obtain information from your healthcare centre.

© The Directorate of Health, 2021.

ISBN 978-9935-9481-3-7

These guidelines are based on Danish guidelines, *UNDERSØGELSE for celleforandringer i LIVMODERHALSEN*, issued by the Danish Health Authority (Sundhedsstyrelsen), 2018.

Photos: Istockphoto and Møllers Grafisk tegnestue / Hans Møller.

Screening invitation

- You have the option of undergoing a screening test to see if you have any abnormal cells in your cervix.
- Abnormal cells are not cancer, but such changes can however cause cancer with time.
- You will not feel it if there are any abnormal cells, its asymptomatic.

Abnormal cells can cause cervical cancer. However, when such changes are detected and treated in time it is possible to prevent them from causing cervical cancer.

As a result, we invite you to undergo cervical screening at your local healthcare centre or with your gynaecologist

Further information on how to book an appointment can be found on the site:

<https://www.heilsugaeslan.is/serthjonusta/samhaefingarstod-krabbameinsskimana/>.

You may cancel your participation if you do not want to receive information about the screening program. Even if you decide not to participate, you will still have the option to undergo screening and have a sample taken if you so request or have need for such services.

HPV

- The main cause of cervical cancer is the HPV virus.
- The HPV virus is sexually transmitted.
- Condoms provide a degree of protection against infection.
- Many years may pass from infection to cervical cancer

There is no treatment for the HPV virus, and there are no symptoms. This means that few women actually know that they are infected. In most cases, the HPV virus disappears on its own over a period of 8–18 months. Such infection may, however, in some cases lead to abnormal cells that can cause cervical cancer later. There are certain aspects that increase the risk, such as smoking.

VACCINATION AGAINST THE HPV VIRUS

- The HPV virus or warts virus belongs to a large group of viruses. Some of the viruses are transmitted through sexual intercourse and are e.g. the cause of cervical cancer.
- Vaccination is effective if administered before you have sexual intercourse for the first time and are not already infected with the virus for which the vaccination is intended. You can still have use of the vaccine even if you have had sexual intercourse.
- Vaccination does not provide full protection against cervical cancer. It is still important to undergo screening for cell changes in the cervix even if you have received vaccination against the HPV virus.
- Girls reaching the age of 12 are invited to have HPV vaccination as a part of general vaccinations for children.

Abnormal cells

- screening samples will show whether cell changes in the cervix are due to the HPV virus.

When cells “change”, they will have an abnormal appearance when viewed under a microscope. As a rule, abnormal cells are caused by inflammation which will often disappear on its own. Abnormal cells, however, can be a precursor to cervical cancer.

- Abnormal cells are not cancer and do not cause cancer in all cases. The progression from abnormal cells to cervical cancer can take up to 10–15 years, although in some cases, this will occur within a few years.
- Always seek the opinion of a physician if you experience any abdominal symptoms, such as irregular menstruation, abdominal pain or changes to vaginal discharge, irrespective of whether you underwent screening or not.

Facts about cervical cancer

- The HPV virus, transmitted through sexual intercourse, are the cause of cervical cancer in 99% of cases.
- Both younger and older women can be infected.
- You can minimise the risk of cervical cancer by undergoing regular screening. Cell changes can cause cervical cancer. Cancer cells destroy the normal tissue that surrounds them. The cancer may subsequently be able migrate to other organs. The further the illness has progressed, the more difficult it is to treat it.

Women who undergo regular screening are at less risk of developing cervical cancer, because it is possible to diagnose abnormal cells before they cause cancer.

Advantages and disadvantages of screening

ADVANTAGES

- **Increased security:** You can minimise the risk of cervical cancer by undergoing regular screening.
- **Diagnosis at an early stage:** Abnormal cells can be identified before they cause cancer.
- **Effective treatment:** Cell changes can be effectively treated through minor treatment. However, once the disease is allowed to develop into cancer, more extensive treatment is required.

DISADVANTAGES

- **Cervical examination:** Few women wish to undergo such examinations. Most women, however, accept cervical examination because they believe it is sensible for the purpose of avoiding serious disease.
- **False test results:** Test results are not reliable in all cases.
- **Overtreatment:** It is still not possible to differentiate between abnormal cells that resolve themselves and cell changes that cause cancer. As a result, treatment is recommended if severe cell changes are discovered in the tissue sample.
- **Anxiety:** The examination itself and the wait for results can cause fear and anxiety. Seek the advice of a midwife or nurse if you experience anxiety.

Sampling procedure

- A midwife/nurse specially trained to do so will be responsible for taking the sample during the cervical examination or a private gynaecologist if you prefer so.

A cell sample is extracted from the mucous membrane. Such sampling is pain-free, although some women find it uncomfortable nevertheless.

The sample is investigated in a laboratory; see next pages.

IF THIS IS YOUR FIRST CERVICAL EXAMINATION

Cervical examinations are also called women's examinations. You lie on your back with your feet in stirrups. Some women feel that the examination crosses certain boundaries. There are, however, a number of things you can do to minimise the discomfort.

- Make sure to urinate before the examination.
- Try to relax as much as possible to minimise muscle tension.
- Tell the examiner if it is your first examination.
- Wear a long blouse so that you don't feel as if you are naked.

Few women want to go for a cervical examination. Many women, however, believe such examination to be an integral part of being a woman – a necessary process during pregnancy, birth, illness and certain preventative measures.



If you are 23–29 years of age

The sample is investigated for abnormal cells and if abnormal cells are present then it will be tested for HPV virus infection.

The cell sample is examined under a microscope in the laboratory. The investigation will then reveal whether there are any abnormal cell

If there are no abnormal cell present: The results will be sent electronically to you through Ísland.is (Mínar síður – Pósthólf). This means that nothing abnormal was discovered. You will automatically receive an invitation for a new examination after three years.

If there are abnormal cells present: The sample will be measured for HPV. If an HPV infection is present, further monitoring will be required and you will receive an electronic message through Ísland.is (Mínar síður – Pósthólf).

If you are 30–59 years of age

- The sample is investigated for HPV virus infection.

If there is no infection, you will receive an invitation for a new screening after 5 years.

If an HPV infection is present, the sample is examined for abnormal cells and the requirement for further monitoring and you will receive an electronic message thereto through Ísland.is (Mínar síður – Pósthólf).

If you are 60–64 years of age

- The sample is investigated for HPV virus infection.

Cell samples from women aged 60–64 are first examined for the HPV virus in cervical cells (the sample is taken during cervical examination in the same manner in younger women).

If no HPV virus is detected in the cell sample, you will not need to attend a repeat screening, as there is less likelihood of the development of cervical cancer.

You will not receive further invitations for screening for cell changes in the cervix.

If the HPV virus is detected, the cell sample will be examined under a microscope to find out whether there are any abnormal cells in the sample. The cell samples examination and HPV investigation provide reliable results as to whether the abnormal cells are of such a nature that they may cause cervical cancer.

All results from screenings can be found on [Ísland.is](https://www.island.is) / Mínar síður. They are also expected to be posted on [Heilsuvera.is](https://www.heilsuvera.is) / Mínar síður.

When examination findings are normal

- You will be notified that the examination findings are normal.

Nothing will happen thereafter until you receive an invitation to attend your next screening.

Keep in mind that there are a number of things you can do to avoid contracting the HPV virus. Condoms provide some protection against the HPV virus and other sexually transmitted diseases.

In rare cases, the test may be considered “unacceptable”. This means that it is not possible to sufficiently examine the sample, and as a result, a new sample will be obtained after 3 months.

When examination findings are abnormal

- Treatment for abnormal cells can prevent cervical cancer.

If you are notified that the HPV virus and abnormal cells have been detected in your sample, you will either receive information for more frequent monitoring or you will receive information that a colposcopy will need to be performed.

If a colposcopy is needed, you will be referred to the Landspítali University Hospital Women’s Department or Akureyri Hospital, where a gynaecologist will examine your cervix with a microscope and will take a tissue sample. If the tissue sample shows evidence of severe cell changes, a cone biopsy is advised.

The cell sample may also lead to the detection of cancer. The treatment will be based on how far the disease has advanced.

How reliable are the findings?

- The results of cell examinations are generally reliable.

As a rule, it takes 10–15 years for abnormal cells to cause cancer. This means that you can rely on the detection of abnormal cells, provided that you undergo regular screening.

The investigation may, however, return false findings in some cases. They would likely be discovered in your next examination if this happen to you.

Cone biopsy

- When severe abnormal cells are present, they can be removed with a cone biopsy.

Keep in mind, however, that severe abnormal cells are not the same as cancer and resolve themselves in many cases. It is not possible, however, to know in advance what cell changes will resolve themselves and what cell changes will cause cancer after a few years.

As a result, a cone biopsy is recommended if the abnormal cells are severe. During the cone biopsy, the physician will remove a cone-shaped part of the cervix. The surgery is carried out under local anaesthetic in a hospital.

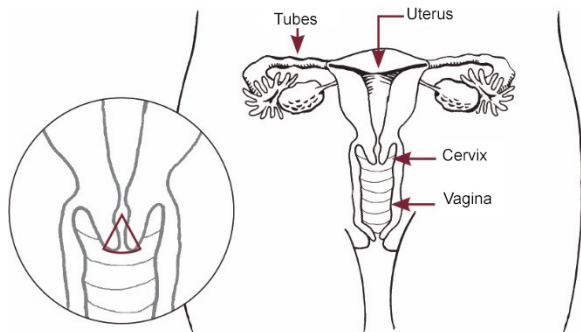
After undergoing a cone biopsy, you can still become pregnant and have children if you chose to do so. There is, however, a slight increase in the risk of premature birth.

Rare side effects after a cone biopsy include severe bleeding and the narrowing of the cervix.

Cone biopsies cure severe cell changes in most women.

You will undergo another test for the HPV virus and cell changes 6 months after the cone biopsy. If both samples are normal and it is clear that all changes have been removed during the surgery, you will be offered regular screening in the future and do not need further monitoring. In other cases, you will be sent a message to come for a follow-up.

During the cone biopsy, the physician will remove a cone-shaped part of the cervix.



Further information on the examination and cell changes.

Menstruation at the same time as the screening is booked.

You must call the healthcare centre and book another appointment if you are menstruating when the cell sample is to be taken. The sample cannot be examined if there is too much blood.

Pregnancy when the screening is booked.

Cervical samples should not be taken during pregnancy. If you are pregnant when you receive a screening appointment, you should postpone the appointment until 8 weeks after birth.

Other guidelines apply to women who are being monitored due to abnormal cells.

Abnormal cells.

Abnormal cells are not cancer but can, as time progresses, cause cancer. Abnormal cells in the cervix are caused by infections due to certain types of the HPV virus.

Pregnancy after abnormal cells

Abnormal cells do not have an effect on your ability to become pregnant and have children. In addition, cone biopsies should not have an effect. Very few women have trouble becoming pregnant and having children after having undergone a cone biopsy. There is, however, a slight increase in the risk of premature birth.

New abnormal cells

Women may see a return of abnormal cells even if they have undergone a cone biopsy. There may be a relapse if not all

abnormal cells are removed in the cone biopsy. In addition, new abnormal cells may occur. Both of the above are rare.

Risk factors

The HPV virus is sexually transmitted. There may be a gap of several years from the time of infection to the detection of abnormal cells.

This is how you minimise the risk - of becoming infected with the HPV virus and possibly contracting cervical cancer.

It is well known that early sexual contact and many partners increase the risk of HPV virus infection, which causes cervical cancer. Such infection can also be present in women who have sexual intercourse with very few partners. Smoking increases the risk of HPV developing into cervical cancer.

- Use a condom when having sex with a new partner.
- Do not smoke.
- Attend regular screenings.

In addition, it is important that you see a physician if you experience any abdominal symptoms, e.g. unexpected bleeding, pain or changes to vaginal discharge.

Genital warts and cell changes

Genital warts cause neither abnormal cells nor cancer. Genital warts are caused by another strain of the HPV virus, which is benign. Genital warts are also trans-mitted by sexual intercourse.

Screening statistics

Incidences of cervical cancer have fallen considerably since the 1960s. Such achievement is for the most part due to screening, making it possible to detect abnormal cells at an early stage.

Cancer statistics 2015–2019 in Iceland

- Each year, an average 19 women are diagnosed with cervical cancer.
- Each year, an average of 6 women die from cervical cancer.
- The incidence of the disease is highest in the group aged 35–39, while the average age when the disease is diagnosed is 46 years.
- Approximately 25–50 of every 100 cases of the most severe premalignant changes cause cancer if no treatment is administered.

QUESTIONS AND INFORMATION

If you have any questions regarding the cervical examination, you can ask your physician or contact the following websites:

www.heilsuvera.is • Healthcare centre and the Directorate of Health.

www.heilsugaeslan.is • Co-ordination Centre for Cancer Screening

www.krabb.is • The Icelandic Cancer Society