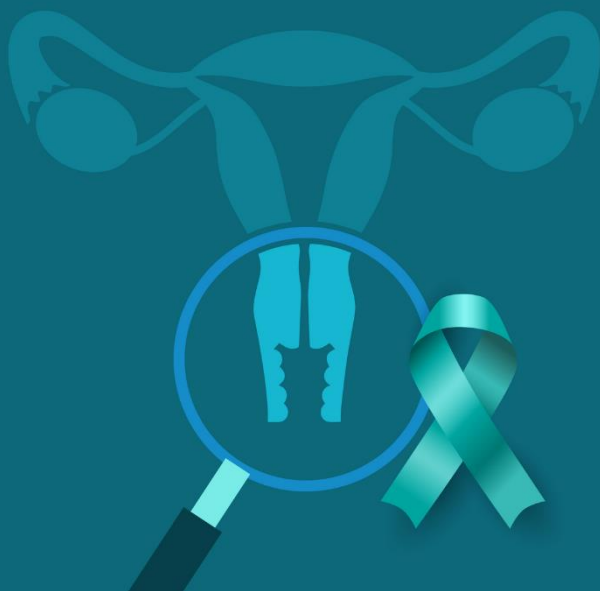


# CERVICAL CANCER SCREENING

Information regarding population-based screening  
for cervical cancer in Iceland



Embætti landlæknis

# Cervical cancer screening

Women aged 23-64 receive regular invitation for cervical screening. Cervical cancer is caused by an HPV virus infection (Human Papilloma Virus) and is therefore not linked to genetics. In this brochure you can read more about the HPV virus, its effects and how the screening process works.

Information on when you received an invitation letter and when you should undergo cervical screening can be found on the site: [heilsuvera.is](https://heilsuvera.is) (My Pages -> Medical record / Screening history).

Women aged 23-29 are invited to screening every 3 years and women aged 30-64 every 5 years.

Results are received within four weeks. Screening at a healthcare centre costs 500 ISK.

All results from the screenings are sent electronically to you through Heilsuvera.is and Island.is - My Pages

## LGBTQIA+

Invitations to a screening for cervical cancer are sent to individuals defined as female in Registers Iceland (Þjóðskrá). Individuals who do not define themselves as female in the Registers Iceland but have a cervix need to monitor themselves when it is time to attend next screening.

If there is uncertainty regarding whether and when to attend a screening, individuals are welcome to contact the staff of the [Cancer Screening Coordination Centre](#) to get information.

# What is screening?

Screening is a test for asymptomatic, healthy individuals. In this way, diseases can be detected at an early stage, their incidence can be reduced, and life expectancy can be increased. With this, the chance of serious diseases decreases, the need for intervention decreases and treatment is often milder.

## Cervical cancer screening

Cervical cancer is caused by the HPV virus, which can be detected by a cervical smear. An HPV infection does not cause symptoms, so it is important to attend screening regularly.

Even if you have had regular screenings and received normal results, it is important to see a gynaecologist if you develop symptoms from your female organs, regardless of when you were last screened.

Possible symptoms may include breakthrough bleeding, bleeding after sex, pain in the lower abdomen or a change in discharge

# How cervical screening is performed

A smear is taken from the surface of the cervix with a small soft brush. For majority of individuals the sampling is painless, but some may experience mild discomfort.

Screening is carried out by midwives and nurses at healthcare centres throughout the country. Please note that a screening is not the same as a full examination by a gynaecologist. It is therefore important to consult a doctor in case of symptoms, instead of booking a screening.

A smear can also be taken by a gynecologist.

## Pregnancy and sampling

It is generally recommended not to get a screening until 6-8 weeks after childbirth. However, if a long time has passed since the last sampling, a sample can be taken. There are brushes designed for taking a sample from pregnant women. In case of a follow-up sampling, you should always consult a healthcare professional before booking an appointment.

## Periods and sampling

It is not advisable to take a sample during your period, as there is an increased risk of an invalid result and a need to repeat the sampling.

# What causes cervical cancer

Cervical cancer is caused by persistent HPV infection (*Human Papilloma Virus*). HPV is transmitted sexually from person to person or through other skin-to-skin contact.

For most individuals who have a healthy immune system, the HPV virus will clear up within two years. In cases when the immune system does not get rid of the virus, it stays in the body for longer and may cause abnormal cells. These changes are not cancer but could develop into cancer in the future if not monitored or left untreated when necessary (see section on abnormal cells).

## HPV (*Human Papilloma Virus*)

HPV is a virus that is transmitted between people. There are over 200 types of HPV, but about 15 types can potentially cause abnormal cells and cervical cancer. They are so-called high-risk HPV and are screened for in cervical screenings.

Those types are transmitted during sexual intercourse and contact between genital areas. Therefore, an HPV infection is classified as a sexually transmitted disease. It is believed that 80% of all people who have sex with another individual become infected with HPV at some point in their lives. The highest probability of infection is before the age of 25, as changing partners is more frequent at that age. Therefore, women aged 23-29 are invited to screening every 3 years and women aged 30-64 every 5 years.

An HPV infection is asymptomatic, so individuals do not know if they are infected. That is why it is important to attend screening regularly.

## Abnormal cells

In a cervical smear, evidence of abnormal cells can be detected, which means that the appearance of the cells is abnormal. Cells can be abnormal at various stages, but the most common cause is an inflammatory response, which in most cases resolves on its own.

Regardless of the stage at which abnormal cells are detected, it is important to attend follow-up to monitor it and intervene if necessary. It is impossible to tell which abnormal cells will resolve on their own and which will become cancer. Therefore, it is important to follow the recommended monitoring.

Abnormal cells in a cervix are caused by an HPV infection that has persisted for a long time. Abnormal cells do not develop into cancer unless the HPV virus is present. It usually takes around 10 years or more from infection for cancer to develop. The Directorate of Health's guidelines for screening for cervical cancer use this information as reference when determining the length of time between screenings.

Abnormal cells are not cancer but are usually asymptomatic and therefore it is important to attend regular screenings

## Prevention of infection

There is no treatment for an HPV infection, but it is possible to reduce the chance of infection:

- **by vaccination.** Vaccination is also the best prevention.
- **by using a condom.** However, condoms do not provide 100% protection as the virus can be found in the skin area around the genitals.
- **by washing the skin areas** (especially the hands) **and aids** after sex.
- **by not smoking.** Smoking weakens the immune system and can increase the likelihood of persistent viral infections.

## Vaccination against HPV

Vaccination began in Iceland in the autumn of 2011 for 12-year-old girls with the vaccine Cervarix, which provides protection against the HPV types that cause about 70% of all cervical cancers.

In autumn 2023, vaccination began for all children at the age of 12 with the vaccine Gardasil 9, which provides protection against HPV types that cause 90% of all cervical cancers.

Since the vaccines do not provide protection against all types of the HPV virus that can cause cervical cancer, it is important to continue attending regular screenings.

## Screening results

Results from screening samples are received electronically within four weeks at [heilsuvera.is](https://heilsuvera.is) og [island.is](https://island.is).

It states the result of the sample examination and when it is recommended to undergo the next sampling or examination.

Recommendations for the next sampling depend on the results of the sampling, but previous results are also taken into consideration. Recommendations may include re-screening after 3 or 5 years, depending on age, or surveillance according to screening guidelines from [The Directorate of Health](#).

Monitoring can consist of attending a new sampling after 6 or 12 months or recommending a further examination by a gynaecologist.

# Further examination

If screening results warrant further investigation, this usually includes a colposcopy. If abnormal cells are detected that require treatment, a conization is usually recommended.

## Referrals

When a cervical sample is done at a healthcare centre, the Cancer Screening Coordination Centre sends a referral for a colposcopy at Landspítali Hospital. If a cervical sample is done by a gynaecologist, the doctor is responsible for the woman getting an appointment for a colposcopy.

## Colposcopy

A colposcopy is a microscopic examination of the cervix, performed by a gynaecologist. Biopsies are taken from the areas of the cervix where abnormal cells are suspected and sent for histological diagnosis.

Based on the results of the examination and histological diagnosis, the doctor assesses the need for further monitoring or treatment. The work is carried out according to the instructions and work procedures published by [The Directorate of Health](#). It is the doctor's responsibility to inform about the results of the colposcopy and the recommended follow-up.

## Execution

Colposcopy is performed by gynaecologists who have received special training in the procedure. The examination takes about 15-20 minutes and is like a standard examination by a gynaecologist except that a microscope is used. Anaesthesia or sedation is not required during the examination.

## Pregnancy

Colposcopy is performed despite pregnancy, but the doctor performing the colposcopy assesses whether a biopsy is needed. It is important to notify of pregnancy when a colposcopy is booked.



## Cervical conization

When abnormal cells need to be treated, a cervical conization is usually recommended.

### Execution

A conization is a small operation where a gynaecologist removes a cone shaped piece of tissue from the cervix to remove abnormal cells. The operation is generally performed under local anaesthesia and is performed in a hospital.

### Monitoring

A follow-up cervix sample is taken about 6 months after the conization, regardless of age.

The results of the histological diagnosis of the conization and the evaluation of whether all abnormal cells have been successfully removed indicate the need for further monitoring. The work is carried out according to the instructions from [The Directorate of Health](#).

### Pregnancy

A conization is not performed during pregnancy.

A conization does not affect future pregnancies, but there is a slightly increased risk of preterm birth. The doctor who performs the procedure can provide further information about this.

# Facts about cervical cancer screenings

## Advantages

Attending regular screenings increases safety and reduces the risk of cervical cancer.

By attending regular cervical screenings, it is possible to detect and treat abnormal cells before they develop into cancer.

By attending a cervical screening, you meet a professional who can inform you and thus reduce anxiety.

HPV testing is reliable.

## Disadvantages

Some women experience mild discomfort during sampling but relaxing during the sampling will likely reduce the discomfort.

Cytology can possibly give a false result.

Overtreatment may occur in rare cases. Since it is not possible to predict which cell changes will be reversed and which would possibly develop into cancer, treatment is necessary in both cases.

Some women feel anxious about sampling. It can be helpful talking to the person taking the sample about the reason for the anxiety.

# Decline invitation to screening

If you do not wish to receive invitation to screenings, you must call the [Cancer Screening Coordination Centre](#) and talk to a nurse. You can call 513-6700 on weekdays between 8:30 and 12:00.

If you are not sure whether you should have a screening, e.g. due to previous operations, we advise you to consult your doctor for information and instructions. If needed, you can get advice from a nurse at the Coordination Centre.

## Information about screenings

- In the years 2019-2023, an average of 18 women per year were diagnosed with cervical cancer, and an average of four women died per year during this period.
- The incidence of cervical cancer is highest in the age group 30-34 years.
- The average age of diagnosis is 48 years.
- Cervical screening is based on HPV screening because there will be no cell changes or cancer unless HPV is present.
- For most people, HPV infections clear on their own within two years.

With regular participation in cervical screening, the number of cases of cervical cancer has decreased by 90%

# Where can I get further information?

If you have any questions about cervical cancer screening, you can find information on the following websites:

- Coordination for Cancer Screening ([skimanir.is](http://skimanir.is))
- Heilsuvera.is
- The Directorate of Health
- Landspítali University hospital – Gynaecological Ward

If you cannot find answers to your questions, you can contact the **Cancer Screening Coordination Centre**:

- Tel.: 513 6700
- Email: [krabbameinsskimun@heilsugaeslan.is](mailto:krabbameinsskimun@heilsugaeslan.is)