Fimlab

1 February

Screening for cervical cancer – service description

HPV infection
HPV infection is very common. Approximately 70–80% of Finnish women get an HPV infection at some point in their lives. 15–25% of young women are HPV-positive. Usually, the infection lasts from six months to two years, after which the virus disappears. However, recovery from the infection does not protect you against future infections. In some cases, the virus remains permanently in the mucous membrane of the external uterine orifice without causing any cell changes. Some permanent infections evolve into a precancerous growth, and a small portion of these growths develop into cancer.

HPV viruses are divided into high-risk and low-risk types. Both low-risk and high-risk types of HPV can be found in cases of mild cell changes, but serious precancerous changes are always related to a high-risk HPV infection. High-risk types of HPV infection are present in nearly all cases of cervical cancer. A so-called high-risk HPV test helps detect a prolonged high-risk HPV infection before the development of microscopic early changes.

Identification of cell changes
Cervical cancer develops through precancerous growths. Cervical cancer can be easily controlled by screening, because the cancer development process takes years and its early stages can be detected microscopically. Cell changes indicating the early stages of cervical cancer are detected in a Pap test using a microscope. This allows the development of cancer to be prevented through treatment.

SCREENING

Under the national decree on screening and the Health Care Act, municipalities are obliged to organise a mass cervical cancer screening for women aged between 30 and 65 every five years. Some municipalities also call women aged 25 to participate in mass screening.

The organisation of cervical cancer screenings began in Finland in the mid-1960s. Screening has proven to be an effective means of combating cervical cancer. Screening prevents over 200 cancer deaths and approximately 500 cancer cases every year. Cervical cancer is the second most common women's cancer in the world, but only the 18th most common in Finland thanks to regular screening. However, in order to maintain the low national level of cervical cancer, the screening participation rate must remain high.

In 2016, the diagnostics of precancerous changes of cervical cancer and the national guidelines concerning treatment (Current Care Guidelines) were updated. According to the national guidelines, a high-risk HPV test from a Pap smear specimen is the primary screening method for women who have turned 30.

For more information about national screening, visit the website of the Finnish Cancer Registry.

FIMLAB'S SCREENING SERVICE

Participation in cervical cancer screening
Fimlab receives information of persons entitled to participate in mass screening from the Finnish Cancer Registry's Mass Screening Registry. The selection of persons for the screening is based on their home municipality information in the Mass Screening Registry on the first day of the screening year. The same selection method is used throughout Finland, which helps ensure that every person to be screened is invited to the screening. The invitation is sent by

the organiser of the screening in the participant's home municipality recorded in the Mass Screening Registry, even if the participant has moved to another municipality during the screening year.

Fimlab calls the persons to be screened for the screening by a personal letter of invitation. Invitations are sent from January to September. If a person's address is not available in the Mass Screening Registry (e.g. non-disclosure for personal safety reasons), no invitation can be sent. Do not book a sampling appointment before you have received an invitation by post or electronically in the OmaPosti service. If you are in the age range for cervical cancer screening and have not received an invitation by the end of September, please contact Fila's customer service (tel. 03 311 74445, 8 a.m.–4 p.m.).

The invitation prompts you to book a Pap test appointment (gynaecological screening sample). Gynaecological samples are taken at several Fimlab service points. In the online booking system, you can choose the appointment time and location best suited to you.

The sample for screening should be taken within approximately one month of the invitation. If no sample is taken within this time period, Fimlab will send you a reminder invitation for screening. The aim of this flexible procedure is to ensure that as many persons entitled to the screening as possible would utilise the service. Please note that the invitation only remains valid until the end of the invitation year and you must participate in the screening by the end of the January of the year following the invitation year at the latest.

The invitation sent by post and the enclosed preliminary information form act as a referral to laboratory testing. It is recommended to bring the completed preliminary information form along to the sampling appointment. The preliminary information helps carry out the test and support the interpretation of the results.

The sample is taken by a competent sampler trained for the task. The sample is tested primarily for an HPV infection. If the test is positive, the same sample container will be used for cytological examination. The screening is also recommended for women who have had hysterectomy. In such cases, the sample is collected from the vagina. It is not recommended to carry out the sampling during menstruation. The sample collection may involve slight pain and discharge.

A normal pregnancy is not an obstacle to sampling up to week 35. If you know that you have a risk of premature labour, consult your child health clinic before booking an appointment. A sample can be taken approximately 1–2 months after childbirth. If, due to pregnancy and childbirth, the sampling is postponed to the year following the invitation year, the sampling is no longer included in the screening service.

The screening is offered free of charge.

RESULTS

Fimlab usually sends the screening test results to the participants within one month of the sampling. If your result calls for further investigation, Fimlab will automatically refer you to a further care unit, determined by your home municipality, for further investigation and inform you of this in the letter containing your result.

Types of results:

- **Normal cytological finding** (NILM= Negative for Intraepithelial Lesion or Malignancy and/or HPV- investigation negative) The most common screening result among healthy population is a normal cytological finding or a negative high-risk HPV test result. In line

with the Mass Screening Registry's guidelines, the test result follows the Bethesda classification.

- **Advice to consult a physician**
  If a high-risk HPV infection is discovered, an exfoliative cytology sample is also examined. Even if changes indicating a malignant tumour in the cervix are not detected in the exfoliative cytology sample, there may still be changes for which the patient is encouraged to consult a physician. In such cases, the result letter will include a test result report intended for the physician's evaluation. If the sample contains microbes (trichomonas, actinomyces or herpes), drug therapy may be necessary. However, most microbes cannot be detected from a Pap smear. If you suspect an infection, please consult a gynaecologist or your health centre's personal doctor for further examination and care. For example, microbiological examinations are always necessary to detect a chlamydia infection.

- **Second sample in 18–24 months**
  The HPV test result was positive without any cell changes or cellular atypia indicating HPV (ASC-US= atypical squamous cells of undetermined significance). HPV infections and minor cell changes tend to heal without treatment. In that case, it is enough to take a new HPV test and collect a new exfoliative cytology sample in 18–24 months. The invitation to a check-up is sent 18 months after the primary sampling results within the scope of the screening programme.

- **Need for further investigation**
  Sometimes the result letter reports cell changes which call for further investigation to verify the test results. Such Bethesda-classified results include:

LSIL	= Squamous intraepithelial lesion (SIL), low grade
ASC-H	= Atypical squamous cells, cannot exclude HSIL (ASC-H)
HSIL	= Squamous intraepithelial lesion (SIL), high grade.

  The most common further tests are colposcopy carried out by a gynaecologist and collection of biopsy specimen for tissue examination. The results of these investigations enable the need for treatment or monitoring to be determined.

  Significant cell changes can be a result of an HPV-induced infection or other chronic infection. Further investigation is necessary in order to exclude the possibility of early stages of cervical cancer or, if a precancerous growth is detected, to treat the patient in the early stage.

  The further care unit sends the invitation for further investigation by post.

COMPILATION OF STATISTICS

Fimlab sends a report of information obtained through screening tests and further investigations to the Mass Screening Registry of the Finnish Cancer Registry, which compiles data of all screening activities in Finland. The data is used to, for example, conduct statistical research and assess the effectiveness of mass screening. The collection of data in the Finnish Cancer Registry is based on the law.

In addition, a summary of screening tests is delivered to the municipalities which have subscribed to the service. Personal test results are not disclosed to municipalities.