



Information to children and parents

About the HPV-vaccine in the childhood immunisation programme

Vaccine for preventing cervical cancer - offer to girls in 7th grade

From autumn 2009, all girls in 7th grade will be offered vaccine against human papillomavirus (HPV). As with all vaccines in the national childhood immunisation programme, you can choose to accept this offer or not. The girls should be well informed about the vaccine, and the viewpoint of the girl should be given priority. It might be a good idea to go through this brochure together.

The brochure contains information about cervical cancer, and how the HPV vaccine can protect young girls from cervical cancer later in life. The brochure includes an explanation of how the vaccine is given, and information about possible side effects from the vaccine.

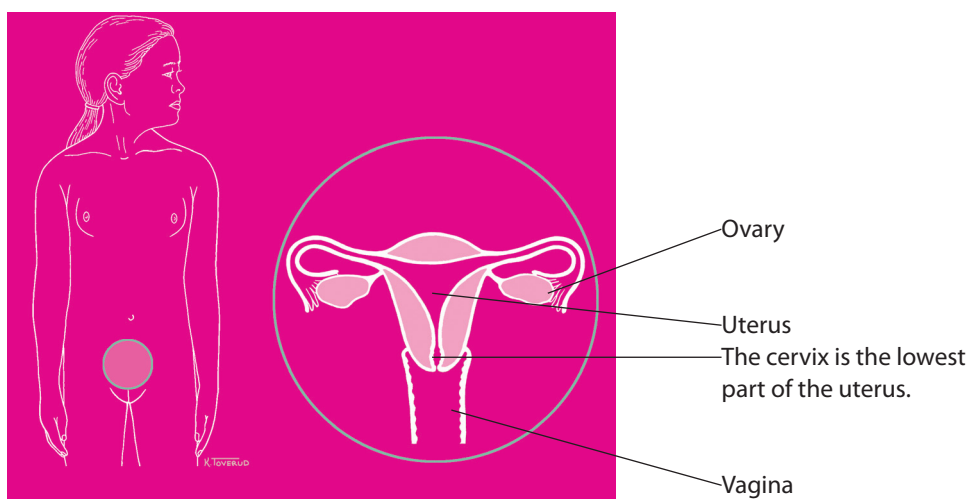
If you want to know more about HPV and the HPV vaccine, please contact your school nurse.

Cervical cancer is caused by a virus

Cervical cancer is caused by a virus called human papillomavirus (HPV). There are many types of HPV virus and each type is allocated its own number. At least 12 HPV types can cause cervical cancer. The two most common types are HPV 16 and HPV 18. In Norway, these two types of virus are the cause of approximately 70 percent of all cervical cancer cases.

HPV is easily sexually transmitted and usually does not cause symptoms. Most people acquire an HPV infection at some point during their life. Most people are infected when young.

Most HPV infections disappear spontaneously. If an infection with a cancer-causing type of HPV becomes chronic, it can develop into moderate or high grade cervical abnormalities (cell changes). Such early stages can subsequently develop into cervical cancer. (See illustration of the cervix)





About cervical cancer Cervical cancer is a serious illness. In Norway, approximately 250-300 women are diagnosed with the disease annually. 75-100 women die annually from this form of cancer.

Development of cervical cancer normally takes 10-30 years. Some women develop the disease at an early age, and just under 40 per cent of those diagnosed are under 45 years.

Each year, approximately 3,000 women undergo surgery because of moderate or high grade cervical abnormalities in order to avoid further development into cancer. Pregnant women, who have previously undergone such surgery, will be at increased risk of abortion or of giving birth prematurely.

About genital warts Some HPV types can cause warts in and around the genitals/anus, but these types are not cancer-causing. Genital warts often disappear, and can also be treated. Almost all cases of genital warts are caused by HPV 6 or 11.

How the HPV vaccine protects against cervical cancer The HPV vaccine is preventive and should be taken prior to infection. Consequently, in the vaccination programme, HPV vaccine is offered to girls well before the average age of sexual debut in Norway.

The HPV vaccine protects against HPV 16 and 18 and cervical abnormalities caused by these two types of HPV. The vaccine does not protect against other cancer-causing HPV types.

Cervical abnormalities are a prerequisite for development of cervical cancer. Since the cancer develops over many years, it can take 10-30 years before the preventive effects of the HPV vaccine against cervical cancer can finally be confirmed.

The HPV vaccine which is given in the national childhood immunisation programme (Gardasil®), also protects against genital warts caused by HPV 6 and 11.

The vaccine provides more than 95 per cent protection against HPV 6, 11, 16 and 18.

Experience shows that the vaccine has a continued protective effect 5-6 years after vaccination. The duration of the protection is being carefully monitored by the medical authorities. If required, administration of a booster dose will be recommended.

How the vaccine is given The vaccine is injected in the upper arm using a thin needle. In order to be fully vaccinated, you must have 3 doses over a period of 6-12 months. The second dose is usually given 2 months after the first, and the last dose is given 6 months after the first dose.

Prior to vaccination, the school nurse will ask if you are healthy and whether you have had reactions to previous vaccines. Remember to tell the nurse if you are taking any medication, or if you have any allergies or other health problems.

Vaccination is safe, even if you have a cold or are a little out of sorts. However, vaccination is normally postponed in the case of acute illness and in the presence of fever exceeding 38 degrees.



Some people find vaccinations a little painful and uncomfortable, and some people may faint. If you are anxious about this, or have previously felt unwell after vaccination, you can ask to lie down when the vaccine is given.

As with all other vaccines, you must wait approximately 20 minutes at the school nurse office after the vaccine has been given.

Side effects and safety The HPV vaccine has been trialled in large international studies and has been approved by the Norwegian Medicines Agency. The approval is based on thorough assessment of the vaccine's efficacy and risks.

The most common side effects of the HPV vaccine are swelling and soreness in the arm in which the vaccine was injected. This disappears after a few days. Short-lasting fever, headache, nausea, vomiting, diarrhoea and abdominal pain have also been reported.

All vaccines can, in rare cases, give an allergic reaction in the form of rash and itching after the vaccination. In very rare instances, more severe allergic reactions can occur. Health personnel who perform vaccinations are prepared to deal with such situations.

Apart from some very rare allergic reactions, there is no documentation that HPV vaccine has caused serious illness. Very rare side effects can never completely be ruled out and may only appear after a large number of people have received a new drug. Consequently, the medical authorities monitor possible side effects continually.

All serious and unexpected symptoms occurring after vaccination must be reported to the medical authorities. The reports are thoroughly investigated in order to establish whether the symptoms are due to the vaccine or a disease which occurred by chance at the same time as the vaccination.

Symptoms occurring after vaccination need not be a reaction to the vaccine, but may be signs of illness requiring treatment. Please contact your doctor if you are worried.

Regular cervical examination (the screening programme) All women in Norway are offered a cervical examination every 3 years from the age of 25. The aim is to reduce cervical cancer mortality through early detection of cancer or cervical abnormalities. The screening programme has resulted in a marked reduction in the number cervical cancer cases.

It is also important that individuals vaccinated against HPV participate in the screening programme. The most important reasons for this are that the vaccines do not protect against all cancer-causing forms of HPV, and it is not currently known how long the protective effect of the vaccines will last.

Furthermore, the possibility that other cancer-causing types of HPV become a more important cause of cancer than the two forms against which the vaccine protects, cannot be ruled out. The aim is that both the vaccination and regular examinations together will provide the best possible protection against cervical cancer.



Registration in SYSVAK As with all vaccinations in the childhood immunisation programme, HPV vaccination will be registered in the national vaccination register SYSVAK. This includes registration of name, date of birth, address, vaccine and vaccination date.

- Useful facts**
- The offer of HPV vaccine in the national childhood immunisation programme applies to girls in 7th grade. Vaccination of older girls, or postponement of the vaccination must be organised through a general practitioner, and the expenses must be covered by the person involved.
 - The World Health Organisation (WHO) recommends that the HPV vaccine is included in the national childhood immunisation programme. HPV vaccine has already been introduced in the childhood immunisation programmes in a number of countries, including Denmark, the United Kingdom, France, Germany and the USA. Sweden will include the vaccine in the childhood immunisation programme in 2010.
 - 50 million HPV vaccine doses have been distributed worldwide (August 2009).
 - The HPV vaccine consists of artificially-produced particles which resemble parts of the HPV virus surface. The vaccine does not contain live viruses, contains no viral hereditary material and cannot cause HPV infection.
 - No vaccines in the childhood immunisation programme, including the HPV vaccine, contain mercury as preserving agent.
 - Condoms do not provide adequate protection against HPV infection because the virus is also present in skin areas in the groin, which condoms do not cover/protect.
 - HPV vaccine does not protect against other sexually transmitted diseases. Individuals who have been given the HPV vaccine should also use condoms.
 - There are currently no published studies which demonstrate protection against early stages of or cancer in boys/men. However, there are ongoing studies and vaccination of boys will be considered as new data becomes available.

Photo illustration: Lene Solbakken
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