

# The Swedish vaccination program

## VACCINATION AGAINST HPV FOR GIRLS

*On 1 January, 2010 a new vaccination will be introduced in the Swedish vaccination program for children. The vaccination provides protection against a virus that may cause cervical cancer, and will be offered to all girls born in 1999 or later. Girls are vaccinated by their school nurse when they are in grade 5 or 6.*

### Information for parents

The new vaccination protects against around 70 per cent of all cervical cancer. In other words, there is a risk of developing the cancer even if you have been vaccinated. Therefore, it is important to supplement the vaccination with the regular cervical screening tests that are offered later in life. Girls who are vaccinated at a young age and who attend cervical screening tests as adults have a very strong protection against cervical cancer.

Before you as a parent decide whether your child should be vaccinated, you may have some questions. How can a vaccine protect against cancer? How is the vaccination carried out? Here you will find answers to the most common questions.

### How can a vaccine protect against cancer?

The virus that causes cervical cancer is called human papilloma virus (HPV). The virus is transmitted through sexual contact, and most girls are exposed to it at some point in their lives. Infection is usually not noticed and generally heals by itself.

A small proportion of those who are infected suffer a lengthy infection that lasts for several years. This leads to a risk of cells in the cervix being altered. If the abnormal cells are not discovered and removed in time, they may develop into cancer.

There are approximately a hundred types of the virus, and at least 14 of them can cause cancer. The vaccination is aimed at the two types of the virus that cause the most cases of the disease. In practice, the vaccination provides protection against approximately 70 per cent of all cervical cancer.

The vaccine can only provide this protection before you have been infected. Therefore, it is important that the vaccination is given before, or as soon as possible after, the first sexual encounter.

### Vaccines and screening tests offer supplementary protection against cervical cancer

There is already an effective way of protecting oneself against cervical cancer, thanks to the Swedish cervical screening program. In this program, all

women between the ages of 23 and 60 are offered regular cervical screening tests. The examination is simple and painless. The aim is to discover possible abnormal cells in the cervix before they develop into cancer. The program has been in progress since the 1960s, and has significantly reduced the mortality of cervical cancer.

It is important that girls who are vaccinated also attend the cervical screening tests as adults, since they lack protection against around 30 per cent of all cervical cancer.

Girls who both get vaccinated and attend cervical screening tests later in life will have a strengthened protection against the disease. In the future, this combination is estimated to save the lives of many women in Sweden every year.

### How is the vaccination carried out?

The vaccination is given by the school nurse. The vaccine is injected into the upper arm muscle. In order to get the full effect of the vaccination, the girl needs three injections, usually within the course of five to seven months.

### What are the possible side effects of the vaccination?

Most girls do not experience any side effects. Among the side effects that do occur, some are more common than others. For example, the injection site might turn red, sore or a little swollen. Some may experience stomach-related symptoms (nausea, vomiting, diarrhoea), headaches, sore muscles or fatigue.

Rare side effects include dizziness, throat infection and slightly hardened skin or numbness around the injection site.

### Facts about cervical cancer

The average age of Swedish women who suffer cervical cancer is 54. Many of them were infected with HPV before the age of 20. The virus infection has then continued over many years, and has eventually caused abnormal cell structures. Over time, these alterations have developed into cancer.

Cervical cancer is a serious disease. Every year, approximately 250,000 women around the world die of the disease.

In Sweden, around 450 women suffer cervical cancer each year, and approximately 150 of them die. The statistics for serious cases of cervical cancer show how important it is to regularly attend the cervical screening tests. Eight out of ten of those who develop serious cervical cancer have failed to regularly attend their screenings, or have refrained from them completely.

### Frequently asked questions

*Are girls who are vaccinated against cervical cancer completely protected from the disease?*

No, the vaccination protects against around 70 per cent of all cervical cancer.

*Have cervical screening tests become unnecessary now that there is a vaccine against cervical cancer?*

Most definitely not, since vaccinated girls lack protection against 30 per cent of all cervical cancer. Therefore, it is very important that those who are vaccinated also attend the cervical screening tests which are offered to all women after they turn 23 years old.

*Is vaccination necessary, now that there already is a way to discover abnormal cells before they develop into cervical cancer?*

Research has shown that the combination of vaccination and cervical screening tests further increases the protection against the disease, something that will save the lives of many women.

*Will a booster vaccination be required later in life?*

It is not yet known whether, or if so when, girls who are now vaccinated will have to renew their protection. Therefore, the National Board of Health and Welfare will closely follow the ongoing research on the vaccine, in order to ascertain how long it lasts.

*Why is HPV vaccination only given to girls?*

Since only women suffer cervical cancer, research has so far focused on the vaccine's effect on girls. Studies are underway to examine to what extent the vaccine can protect boys from other types of cancer.

### Do you want to know more?

For more information, please contact the school health service.

#### IMPORTANT!

**Before the vaccination** – Please let us know if your child has any allergies or has had unusual reactions to previous vaccinations.

**After the vaccination** – Contact the school health service if you notice anything unusual about your child after the vaccination.