

# HPV vaccine

The HPV (human papillomavirus) vaccine is offered on the NHS to all 12 and 13 year olds ( school year 8 )

It helps protect against cancers caused by HPV, including:

- cervical cancer
- some mouth and throat (head and neck) cancers
- some cancers of the anal and genital areas

It also helps protect against genital warts.

In Wales, girls and boys aged 12 to 13 years are routinely offered the first HPV vaccination when they're in school Year 8.

The second dose is normally offered 6 to 12 months after the first (in school Year 8 or Year 9).

It's important to have both doses to be protected.

Those who missed their HPV vaccination at school can continue to have the vaccine up to their 25th birthday.

## **What is HPV?**

HPV is the name given to a very common group of viruses.

There are many types of HPV, some of which are called "high risk" because they're linked to the development of cancers, such as cervical cancer, anal cancer, genital cancers, and cancers of the head and neck.

Other types can cause conditions like warts or verrucas.

Nearly all cervical cancers (99.7%) are caused by infection with a high-risk type of HPV.

But only some of the anal and genital cancers, and cancers of the head and neck, are caused by HPV infection.

The rest of these cancers are caused by other risk factors like smoking and drinking alcohol.

HPV infections do not usually cause any symptoms, and most people will not know they're infected.

## **How is HPV infection spread?**

The HPV virus is very common and is easily spread by sexual activity.

As much as half the population will be infected at some time in their life. In most cases, the virus doesn't do any harm because your immune system gets rid of the infection. But in some cases, the infection persists and can lead to health problems.

Although most girls don't start having sex until after they're 16 years of age, it's important that they get this protection early enough and a good time is in the early teenage years – getting the vaccine as early as possible will protect them in the future.

Using a condom during sex can help to prevent HPV infection. However, as condoms do not cover the entire genital area and are often put on after sexual contact has begun, a condom is no guarantee against the spread of HPV.

## **What are the different types of HPV and what they do ?**

There are more than 100 different types of HPV, and around 40 that affect the genital area. HPV is very common and can be caught through any kind of sexual contact with another person who already has it.

Most people will get an HPV infection at some point in their lives and their bodies will get rid of it naturally without treatment.

But some people infected with a high-risk type of HPV will not be able to clear it.

Over time, this can cause abnormal tissue growth as well as other changes, which can lead to cancer if not treated.

High-risk types of HPV are linked to different types of cancer, including:

- cervical cancer
- vaginal cancer
- vulval cancer
- anal cancer
- cancer of the penis
- some cancers of the head and neck

Infection with other types of HPV may cause:

- genital warts – small growths or skin changes on or around the genital or anal area; they're the most common viral sexually transmitted infection (STI) in the UK
- skin warts and verrucas – not on the genital area
- warts on the voice box or vocal cords (laryngeal papillomas)

### **How the HPV vaccine work?**

Currently, the national NHS HPV vaccination programme uses a vaccine called Gardasil.

Gardasil protects against 4 types of HPV: 6, 11, 16 and 18. Between them, types 16 and 18 are the cause of most cervical cancers in the UK (more than 70%).

These types of HPV also cause some anal and genital cancers, and some cancers of the head and neck.

HPV types 6 and 11 cause around 90% of genital warts, so using Gardasil helps protect girls against both cervical cancer and genital warts.

HPV vaccination does not protect against other infections spread during sex, such as chlamydia, and it will not stop girls getting pregnant, so it's still very important to practise safe sex.

### **Who can have the HPV vaccine through the NHS vaccination programme?**

The first dose of the HPV vaccine is routinely offered to girls and boys aged 12 and 13 in school Year 8.

The second dose is normally offered 6 to 12 months after the first (in school Year 8 or Year 9).

People who miss either of their HPV vaccine doses should speak to their school immunisation team or GP surgery and make an appointment to get up-to-date as soon as possible.

It's important to have both doses of the vaccine to be fully protected.

People who missed their HPV vaccination and are in the eligible groups can still be vaccinated on the NHS up to their 25th birthday.

People who start the HPV vaccination after the age of 15 will need 3 doses as they do not respond as well to 2 doses as younger people do.

### **Why is the HPV vaccine given at such a young age?**

HPV infections can be spread by any skin-to-skin contact and are usually found on the fingers, hands, mouth and genitals.

This means the virus can be spread during any kind of sexual activity, including touching.

The HPV vaccine works best if girls and boys get it before they come into contact with HPV (in other words, before they become sexually active).

So getting the vaccine when recommended will help protect them during their teenage years and beyond.

Most unvaccinated people will be infected with some type of HPV at some time in their life.

In most cases, the virus does not do any harm because their immune system clears the infection.

But in some cases the infection stays in the body for many years and then, for no apparent reason, it may start to cause damage.

### **HPV vaccination for men who have sex with men (MSM)**

Men who have sex with men (MSM) have not benefited in the same way from the longstanding girls' programme, so may be left unprotected against HPV.

From April 2017, MSM up to and including the age of 45 became eligible for free HPV vaccination on the NHS when they visit sexual health clinics in Wales.

Ask the doctor or nurse at the clinic for more details.

### **HPV vaccination for transgender people**

Trans women (people who were assigned male at birth) are eligible in the same way as MSM if their risk of getting HPV is similar to the risk of MSM who are eligible for the HPV vaccine.

Trans men (people who were assigned female at birth) are eligible if they have sex with other men and are aged 45 or under.

If trans men have previously completed a course of HPV vaccination as part of the girls' HPV vaccine programme, no further doses are needed.

### **How is the HPV vaccine given?**

The HPV vaccine is currently given as a series of 2 injections into the upper arm.

They're spaced at least 6 months apart, and people who missed their HPV vaccination offered at school can get the vaccine for free up to their 25th birthday.

It's important to have both vaccine doses to be protected.

People who get their first vaccination dose at the age of 15 or older will need to have 3 injections.

Men who have sex with men (MSM), and trans men and trans women who are eligible for the vaccine, will need 3 vaccination doses (2 if they're under 15).

For those who need 3 doses of the vaccine:

- the second dose should be given at least 1 month after the first
- the third dose should be given ideally within 12 months of the second dose

It's important to have all vaccine doses to be properly protected.

### **How long does the HPV vaccine protect for?**

Studies have already shown that the vaccine protects against HPV infection for at least 10 years, although experts expect protection to last for much longer.

But because the HPV vaccine does not protect against all types of HPV that can cause cervical cancer, it's important that all girls who receive the HPV vaccine also have regular cervical screening once they reach the age of 25.

Find out more about the [vaccine](#).

### **Cervical screening and the HPV vaccine**

Cervical screening is a way of picking up abnormal cells in the cervix before they progress to cancer. It's been shown that early detection and treatment of cervical abnormalities picked up by screening can prevent three-quarters of cervical cancers.

The NHS cervical screening programme involves checking women between the ages of 25 and 64 every three to five years for early cervical abnormalities.

Regular cervical screening is the best way to identify abnormal cell changes in the cervix. So it's important that all girls who receive the HPV vaccine also have regular cervical screening once they reach the age of 25.

Phone the NHS Direct Wales HPV helpline for impartial advice and information on 0845 602 3303 open 8.00am to 8.00pm Monday to Friday.

### **How HPV causes cervical cancer**

If you become infected with one of the high-risk strains of HPV, and your immune system does not deal with it, the infection can lead to the growth of pre-cancerous cells in your cervix. This is known as cervical intraepithelial neoplasia (CIN).

CIN is not cancer but, if left untreated, it can develop into cancer in some women. This can take up to 10 years.

### **Why cervical screening is important**

The HPV vaccine does not protect against all types of HPV, so it is not guaranteed to prevent cervical cancer.

This is why regular cervical screening continues to play an important role in detecting potentially cancerous cell changes in the cervix.

### **Protecting against other health conditions**

The HPV vaccine does not:

- treat a HPV infection already present
- protect against illnesses or conditions, including cancers, not caused by infection with HPV-6, HPV-11, HPV-16 or HPV-18
- protect against other sexually transmitted infections (STIs). Using condoms offers the best protection against STIs.