

## Department of Genitourinary Medicine

# Patient Information

## HPV vaccine

The HPV vaccine is currently available on the NHS only through the immunisation programme in schools. It is offered to all girls aged 12 to 13 years, to protect against cervical cancer. However it can also offer protection against other HPV-related cancers and against genital warts. We are able to offer the vaccine privately to males and older females who are not eligible to receive the vaccine free of charge.

### What is HPV?

The human papilloma virus (HPV) is the name given to a family of viruses which can infect the skin, mouth, throat and genital area. There are over 100 types of HPV. They are transmitted by direct skin to skin contact, including sexual contact.

HPV infection is very common, and, in most cases, harmless. Most men and women will have an HPV infection at some time during their lives, usually without even knowing it. In many cases, the immune system will clear the infection within two years.

Some types can cause common skin warts, often found on the hands, and verrucas.

Types 6 and 11 are called low risk types. They cause about 9 out of 10 cases of genital warts, which are very common, but do not cause cancers.

Types 16 and 18 are called high risk types. They can cause abnormal changes in cells (called CIN) in the cervix (neck of the womb), which if undiagnosed and untreated can progress to cervical cancer. High risk HPV can also cause abnormal cell changes and cancers of the vagina, vulva, penis, anus and throat, although these are less common.

### How is HPV infection diagnosed?

Most of the population will have an HPV infection at some type, but in the majority it will not cause any symptoms. There is no routine test for HPV infection available. A negative routine sexual health screen does not exclude infection with HPV.

Some men and women will develop genital warts. An experienced doctor or nurse will usually be able to diagnose genital warts just by their appearance. Warts are due to the low-risk HPV types that are not linked with cancer.



The Information Standard 

# Information

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HPV infection in women may be picked up on a cervical smear test. Only women with high risk HPV will need to undergo more detailed examination and further tests.

## How can HPV infection be prevented?

The virus is very common and is easily spread by skin to skin contact, including sexual contact.

Condoms will provide some, but not complete, protection against infection; as condoms do not cover all the genital area it is possible to infect genital skin that is not covered by a condom. However condoms will protect against other sexually transmitted infections such as chlamydia.

Even people with only one sexual partner can get HPV, if their partner's previous sexual partner had HPV. Although HPV infection is common in men and women who are in a monogamous relationship, the more sexual partners you have, the more likely you are to be infected. Smoking increases the risk of persistent infection.

Two vaccines have been developed which can protect certain HPV types that are the commonest cause of cervical cancer.

## What is the HPV vaccine?

The HPV vaccine is not a treatment for HPV, and will not clear active infection. However it will protect against infection with certain types of HPV, and by doing so, also protect against a major cause of cancer.

There are two different types of the HPV vaccine available – Cervarix® and Gardasil®. Both of these vaccines protect you against the strains of HPV that are most likely to cause cervical cancer – types 16 and 18.

The vaccine we offer is Gardasil, which has the advantage of also protecting against types 6 and 11, which cause genital warts. In Australia, where Gardasil was used from the start, the incidence of genital warts as well as CIN in young people has reduced significantly.

Trials have shown that HPV vaccines are effective for up to ten years. It may be effective for longer than this, but we don't yet know as it has only been available for that time.

## Who should be immunised against HPV?

The HPV vaccine is available on the NHS through the immunisation programme in schools. This was funded as a cervical cancer prevention programme. It is aimed at young girls prior to the onset of sexual activity, as it is estimated that the majority will be infected with the virus within 6 months of becoming sexually active. The HPV vaccines do not prevent all cases of cervical cancer (as not all cervical cancers are caused by types 16 and 18), so it is still important that women attend for their cervical screening tests when invited.

A successful HPV immunisation programme for women will also reduce infection in unvaccinated heterosexual men, but not in men who have sex with men (MSM). This has been demonstrated in Australia, and the immunisation programme has now been extended to all boys and young men.

While the vaccine will not clear active infection, there is increasing evidence that it will protect against re-infection and reactivation of dormant infection. It may therefore provide some protection to people who may be starting a new sexual relationship.

There is evidence that if given following treatment for CIN, the HPV vaccine can reduce the risk of recurrent CIN, by protecting against re-infection. It may also reduce the risk of recurrence of other HPV-related pre-cancers.

In the UK, the HPV vaccine is licensed for use in males and females aged 9 and over. It is only available on the NHS as part of the immunisation programme to prevent cervical cancer. However, although there is less evidence available, you may wish to consider having the vaccine if you:

- are an older man or woman who has not been vaccinated, but is considering starting a new sexual relationship
- identify as a gay or bisexual boy or man
- are undergoing treatment for CIN or other genital pre-cancer.

## How is the HPV vaccine given?

The vaccine is given by injection in the upper arm or thigh. Three vaccines will be given within a one year period, although two doses are as effective in girls under the age of 15. The vaccine is best given to young people before they become sexually active, ie before they are likely to be infected with HPV, but may benefit those who are already sexually active.

## Is the HPV vaccine safe?

HPV vaccines have been given to millions of women and are considered to be very safe. Soreness, swelling and redness around the area where the injection was given are common, but wear off in a couple of days. Other mild side effects include a headache, fever, sickness, dizziness, diarrhoea and muscle pains.

Some people have an allergic reaction to the HPV vaccine, but this is very rare. It is usually a rash or itching, and very rarely, a more serious allergic reaction called anaphylaxis. The nurse giving the injection will know how to deal with this.

## Who shouldn't have the HPV vaccine?

You should not have the vaccine if you have had an allergic reaction to a previous HPV vaccine. However it is safe in people with other allergies, including nut allergies, and people with asthma and eczema.

If you are pregnant, you shouldn't have the HPV vaccine. There is currently no known risk of immunising pregnant women, but because there isn't much information about it, it is not recommended.

You should not have it if you have a high temperature or are generally ill. However, you can be immunised if you have a common cold.

The vaccine is safe in people with a weakened immune system, for example those with untreated HIV or who are taking immunosuppressant drugs. However, it may not be as effective.

## How much does the HPV vaccine cost?

If included as part of a sexual health check, the consultation is free. If you wish to proceed, the cost of the vaccine is £130 per dose. This can be paid by card or cheque prior to each dose.