Human Papillomavirus (HPV)

Human papillomavirus, or HPV, is a common virus that affects both males and females. There are more than 100 types of the virus. In fact, certain types of HPV cause common warts on the hands and feet. Most types of HPV are harmless, do not cause any symptoms, and go away on their own.

There are about 40 types of HPV that affect the genital area. Up to 80% of males and females who have had any kind of sexual activity involving genital contact will be infected with at least one type of genital HPV at some time. Certain ‘high risk’ genital HPV types can sometimes lead to cancers of the cervix, vulva, vagina, penis, anus, mouth and throat.

Signs and Symptoms:

HPV infection is generally diagnosed by the presence of visible warts. However, many people exposed to the virus do not develop visible warts because their immune system keeps the virus under control. Therefore, HPV infection may be present without any signs. There is currently no blood test to detect HPV infection.

Certain types of HPV affecting the cells in the cervix can be detected by cervical screening tests. HPV infection has the potential to cause cervical cancer if not treated, but this takes 10 to 15 years. Most women clear the HPV infection without treatment or cancer.

Treatment:

The HPV infection itself cannot be treated. In most people, the virus is cleared naturally in one to two years. Treatments are only available for the genital warts and cancers caused by the infection.

There is no cure for HPV infection, however treating visible warts as soon as they appear reduces the spread of the virus. Warts are more difficult to treat in a person with an impaired immune system.

Transmission:

The HPV virus is spread through direct skin to skin contact with an infected person, most commonly through sexual contact.

The virus can be passed from person to person even if there are no visible warts. Warts that occur elsewhere on the body are caused by different types of HPV and contact does not seem to cause genital warts. If visible warts are treated as soon as they appear, the spread of HPV is reduced. The virus can live in the skin for many years and during that time can be passed on through sexual contact. Even though the warts are gone, HPV can still be living in the genital skin and it is still possible to transmit the virus to your partner. This explains why genital HPV infection spreads easily among sexually active people. It is unknown how long a person with HPV infection remains infectious or can pass the infection on to a sexual partner. Spermicidal foams, creams and gels have not been shown to have any effect against HPV.

HPV may also be passed from mother to baby during labour and birth.

Prevention:

Preventing the spread of HPV involves having safe sex, regular cervical screening tests and being vaccinated if eligible.

Safe sex

The use of condoms for sex is encouraged. Using condoms will reduce the spread of HPV but will not completely remove the risk. Spermicidal foams, creams and gels have not been shown to have any effect against HPV.

Cervical screening tests

Women aged 25 to 74 years should have a cervical screening test every 5 years to monitor the presence of HPV and any changes to the cells in the cervix. You may be sexually active before the age of 25; however the National Cervical Screening Program recommends screening commence at age 25.

Regular cervical screening tests are important for all females, whether vaccinated against HPV or not, as the HPV vaccine doesn’t protect against all types of HPV that can cause cervical cancer. As cervical screening tests detect HPV and abnormal changes to cells in the cervix, treatment can start before cancer develops.

Vaccination

Some types of HPV infection can be prevented. The vaccine protects against 9 types of HPV for more than 90% of uninfected women who are vaccinated. The vaccine protects against infection with the types of HPV which cause more than 70% of cases of cervical cancer. The vaccine will not prevent all types of HPV that cause cervical cancer.

Immunisation against HPV is recommended as part of the National School Based HPV Vaccination Program.
In 2018 the funded vaccine is available for all Year 7 students.

The vaccine is given as a 2 or 3 dose schedule over a 6 month period (the Immunisation Provider will advise which schedule you need). The vaccine is most effective when all doses have been given. Missed doses should be given as soon as possible. A funded vaccine can be given by your doctor or vaccine service provider, however a consultation fee may be charged.

Immunisation is still recommended for people who have had sexual contact, even though they may have already been infected with 1 or more of the 9 types of HPV as the vaccine protects against all 9 HPV types. The vaccine should not be given during pregnancy but is safe for breastfeeding women.

Worldwide, extensive clinical trial and post marketing safety surveillance data indicate that HPV vaccines are well tolerated and safe. The World Health Organization (WHO) Global Advisory Committee on Vaccine Safety has not found any safety issues that would alter their recommendations for use of the HPV vaccine.

Contact your immunisation provider if you or your child has a reaction following vaccination which you consider serious or unexpected.

A confidential National HPV Vaccination Program Register has been established by the Australian Government to administer and collect data about the HPV Vaccination Program.

Health outcome:

Most genital HPV infections do not cause any symptoms and people usually do not know they have the infection as their immune system clears the virus naturally. However, certain ‘high risk’ genital HPV types can sometimes lead to cancers of the cervix, vulva, vagina, penis, anus, mouth and throat.

Most women who have HPV will clear the virus naturally and do not develop cervical cancer. In a small number of women HPV stays in the cells of the cervix. If the infection is not cleared, there is an increased risk of cervical cancer. It is important to have a cervical screening test every 5 years so HPV and associated cell changes can be identified, checked and treated if necessary.

Help and assistance:

If you think you have warts, have been exposed to genital warts, or are worried about HPV infection, talk to your local doctor, sexual health clinic, family planning clinic or nearest public health unit. You can be immunised at your local doctor or medical centre. Check with your local council, community child health and community health centre regarding free immunisation clinics.

Related Content

- School Immunisation Program
- Genital warts and HPV fact sheet

Other resources

- Human papillomavirus (HPV) National Centre for Immunisation Research and Surveillance
- Sexual Health
- Cervical screening
- National HPV Vaccination Program
- National HPV Vaccination Program Register
- National Cervical Cancer Screening