



# Genital warts and HPV

Genital warts are one of the most common sexually transmitted infections in Australia. They are caused by the *human papilloma virus* (HPV, 'wart virus'). There are about 100 strains of HPV, but most do not affect the genitals.

Infection by the wart virus may result in:

- **Genital warts**

These are growths that appear around the genitals or anus, and sometimes in the vagina, rectum or urethra.

They may be raised or flat, single or multiple, small or large, and may cluster together with a cauliflower-like appearance. They are painless and rarely cause discomfort.

- **Subclinical infection**

No warts are visible but microscopic changes in cells show evidence of the virus.

## Transmission

HPV is spread by direct skin contact with a partner during vaginal or anal intercourse. Infection may occur by contact with a visible wart, and possibly also from an area of skin with no visible wart (subclinical infection).

After sex with an infected person, warts may take a few weeks to many months (or even years) to appear.

## Diagnosis

Genital warts are diagnosed by looking for them.

Subclinical HPV infection is difficult to diagnose. However, if present on the cervix, it may show up on a Pap smear.

There are no blood tests or swab tests to diagnose genital warts.

## Treatment

Treatment removes visible warts, but does not eradicate the wart virus. There are several types of treatment. Each may cause mild irritation. If you experience significant discomfort or inflammation you should tell your doctor, as an alternative treatment may be required.

## Cryotherapy

Warts are frozen by applying liquid nitrogen or dry ice once a week. It usually takes several applications before the warts disappear. You may not be able to see the warts yourself, so it is important to continue the treatment until the doctor says the warts have gone.

## Podophyllotoxin paint

Podophyllotoxin paint (*Condylline*) is a plant extract that is easily absorbed through the skin. It should be carefully applied to the warts twice daily for 3 days, followed by a break of 4 days. This treatment may be repeated for several cycles. Podophyllotoxin paint should not be applied inside the vagina, urethra or anus.

Podophyllotoxin should not be used by pregnant women.

## Imiquimod

Imiquimod 5% cream (*Aldara*) helps stimulate the immune system to destroy cells infected with HPV. Studies suggest it works better in women than men.

Rub a small amount of cream on to the warts, avoiding the surrounding skin. Wash the cream off with soap and water after 6 to 10 hours. Apply the treatment 3 times a week (on alternate nights) for up to 3 months. Imiquimod must be prescribed by a doctor. It is expensive, but private health insurance may reimburse you for some of the cost.

Imiquimod should not be used by pregnant women.

## Laser treatment

Laser treatment is used when warts are in places that are difficult to reach, very extensive or resistant to other treatments.

If a Pap smear reveals evidence of HPV on the cervix, laser treatment may be used to remove the affected cells.

Laser treatment is administered in hospital under a general anaesthetic.

## Recurrence after treatment

Most of the treatments destroy cells that are infected by the wart virus, but do not remove the virus from the body.

Because the virus may persist in the skin, it is possible for warts to return after treatment. If warts reappear, it does not necessarily mean that you have been re-infected.

In most people, warts eventually resolve and do not reappear. This is thought to be due to the body's natural defences.

## HPV and cancer

When some strains of HPV infect the cervix, they cause changes to its cells. These changes can be detected on a Pap smear, and may be present in women who have never had visible genital warts. Often these cells return to normal without treatment, but sometimes the abnormalities persist and there may be increased risk of developing cancer of the cervix in future. The risk is further increased in women who smoke. Fortunately, treating the abnormal cells can prevent cancer.

All women, but particularly those with a history of genital warts or HPV, need regular Pap smears. Your doctor can advise how often smears are needed.

## Prevention of HPV and warts

HPV is transmitted easily when visible warts are present, but there is an infectious period before they appear and after they resolve. The length of this period is unknown. People with visible warts can reduce the risk of spreading HPV infection by having warts treated as soon as they appear. Those with subclinical HPV infection may pass it on without realising they have the infection.

Condoms help to prevent spreading warts, but they only protect the area they cover. As HPV may be present anywhere in the anal and genital area, condoms may not provide full protection. For people in steady sexual relationships, the benefit of condoms is less clear, especially if both partners have warts. Discuss this with your doctor.

## Coping with warts

It is common for people with warts or HPV infection to feel upset, ashamed or concerned about the risk of cancer. This is normal, and it may help to remember the following points:

Genital warts can be managed. With patience and persistence, the warts will go away.

Cervical cancer, the most serious problem associated with HPV, is easily prevented by regular Pap smears and treatment of abnormal cells.

## More information

STD Services web site: [www.stdservices.on.net/std/warts](http://www.stdservices.on.net/std/warts)

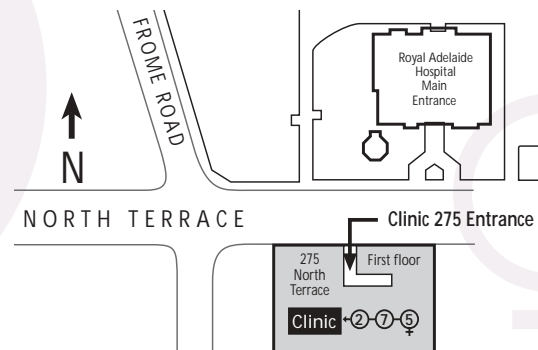
New Zealand HPV Project web site: [www.hpv.org.nz](http://www.hpv.org.nz)

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### Sexually Transmitted Diseases Services

#### Royal Adelaide Hospital

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No appointment necessary

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10am – 4.30pm

**Tuesday & Wednesday**

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# clinic