HUMAN PAPILLOMA VIRUS (HPV)

What is Human Papilloma Virus (HPV)? Is HPV the same thing as Genital Warts?
HPV is a virus that invades healthy skin cells and may cause them to grow in an unusual pattern—warts. There are more than 100 subtypes of this virus which affect humans. About 30 of these subtypes affect the genitals and are spread during sexual contact; some of these can cause genital warts. A few subtypes of this virus can affect cervical tissue leading to pre-cancerous or cancerous changes.

What do warts look like?
Typically, warts are small, flesh colored, cauliflower-like growths on the skin. They may also be flat, and are usually painless. They may be pink, brown or white in color. They usually appear in groups on the external genitalia and around the anus, and they can be found on the scrotum, inner thighs, and groin. However, they can also be found on the inner vaginal walls and the cervix, although HPV on the cervix is usually microscopic and found on pap smear examination.

Who can get HPV?
Anyone, regardless of age or sexual orientation, can contract the virus as well as pass it to another person. Genital infection is spread by skin to skin contact during vaginal, anal, and oral sex. Although rare, HPV can infect a child during the birth process. The virus may also live a short amount of time on surfaces and objects after contact. The likelihood of contracting HPV sometime in the lifespan may be as high as 75-90%. Approximately two-thirds of young adults with two or more sexual partners will have already been exposed.

How do I know if I have been exposed?
HPV infection may have no symptoms, but the immune system may still be fighting off the virus. Many people do not know they have the virus, because warts do not always appear. If warts do appear, it usually is 1-6 months after exposure, but warts have been known to appear after only a few weeks or many years. Even though there may be no visible warts, the virus may remain dormant on the skin, making it difficult to know if you have been infected. Warts may appear when the body’s immune system is stressed, such as during pregnancy, being on systemic steroid medication, having another infection like mononucleosis, or with HIV.

When should I see my health care provider?
- If you notice any unusual growths, bumps, or skin changes in the genital area
- If you notice any unusual pain, bleeding, or itching

As part of a routine STI check or gynecological exam, share concerns about HPV exposure with your clinician.

How is it diagnosed?
- Warts may be felt or seen on visual examination
- Vinegar can be applied to the skin to help make warts more visible
- The virus may be detected when a pap smear is performed. Presently, only specimens from a person’s cervix can reliably be tested for HPV
• Occasionally, irritation or discomfort during sex may be attributable to visible or microscopic warty changes and an instrument called a colposcope can help see these lesions. A small skin biopsy may be necessary for confirmation.

**How is HPV treated?**
Currently, there is no cure, but there are treatments to destroy visible warts. Treatment depends on size, location, and number of warts present. Available treatments include: self-applied prescription medications, provider-applied acid solutions, cryotherapy (freezing), electrocautery (burning), or laser treatment. Genital warts usually require multiple treatments to make them go away more quickly, although the warts may spontaneously disappear in about six months even without treatment. No treatment can eliminate the virus; however, the immune system learns to fight it off, usually within 2 years.

*Over-the-counter medications for common skin warts are not designed to be used on sensitive genital tissue. These can irritate the skin and worsen genital warts.*

**What is the relationship between HPV and Cervical Cancer?**
Some subtypes of HPV do not cause visible genital warts, but may lead to pre-cancerous or cancerous changes in the cervix if untreated. The pap smear exam looks for cellular changes associated with the presence of these HPV subtypes. Although signs of HPV are found on about 20% of all pap smears, progression to cancer is rare and takes years to develop. About 50% of abnormal pap smears resolve on their own. Regular monitoring with pap smears and colposcopy (looking at the cervix with magnification) can ensure that treatment is available before a condition becomes more serious.

Tobacco use is strongly correlated to the development of pre-cancerous changes when HPV is present, and continued tobacco use interferes with the immune system’s ability to fight off the virus.

**How do I decrease my risk of getting HPV?**
- Immunizations against HPV (Gardasil) are recommended for young people aged 9-26. Gardasil is available at UCSC Student Health Center and other facilities. It consists of a series of three shots which prevent most, but not all types of HPV.
- The use of latex barriers—condoms (for a penis or a vagina) or dental dams, may help to decrease the area of skin to skin contact (although, the virus can be present on the inner thighs, scrotum, and anus).
- Maintain clear communication with your partner(s) about your sexual history.
- See your health care provider right away if you feel you are at risk for exposure.

**For more information:**
For more information, please make an appointment with your health care provider. It is fine to come in with a partner for a consultation. Internet resources about HPV and cervical cancer:

- [www.asccp.org/faq](http://www.asccp.org/faq)
- [www.wcn.org/gcf](http://www.wcn.org/gcf)
- [www.cervicalcancercampaign.org](http://www.cervicalcancercampaign.org)