

# HPV: Warring Off Cervical Cancer

## **Introduction**

There has been a lot of media attention in Texas focusing on possible mandatory HPV vaccination. Why all the hype and how does it affect you? Genital HPV is the most common sexually transmitted infection in the United States. HPV infection is strongly linked with the development of cervical cancer. Vaccination against HPV could dramatically reduce the rate of cervical cancer and genital warts.

## **What is HPV?**

HPV (Human papillomavirus) is a family of over 100 types of viruses, and different types of HPV infection affect different areas of the body. HPV infections have skin manifestations (typically as warts), but this discussion will focus on genital HPV infections. HPV may cause genital warts (also known as venereal warts or condylomata) or abnormal cells on the cervix. Low risk HPV (types 6 and 11) cause the majority of genital warts, whereas high risk HPV (types 16 and 18) cause 70% of abnormal cervical cells. Abnormal cervical cells may lead to cervical cancer if untreated.

## **Who gets HPV?**

Genital HPV affects approximately 20 million people in the United States. An estimated three out of four people who are sexually active will have a genital HPV infection at some time in their life. Most HPV infections will not cause symptoms. However, genital infections may lead to warts on the vulva, vagina, cervix, or anus. Genital warts are often flesh-colored or white bumps that may cause itching, pain, or vaginal discharge. Abnormal pap tests are also frequently caused by HPV infection. Testing for high and low risk HPV is available and may be used in conjunction with the pap test.

## **How is it transmitted?**

Genital HPV is transmitted through sexual contact. A person can get HPV from vaginal, anal or oral sex with an infected person or any skin-to-skin contact with any affected areas. Warts on other parts of the body, i.e. hands, do not cause genital warts. Most HPV infections are transient and will go away on their own in a matter of time. Approximately 80% of HPV infections will clear within one year of initial infection. However, some people with genital HPV will carry the virus forever. The best way to prevent transmission of HPV is avoiding skin-to-skin contact with an infected person, using condoms prior to contact with the infected area, and staying in a monogamous relationship.

## **Why is HPV a problem?**

Genital warts are not cancerous but are often treated because of the symptoms. Infection of the cervix by HPV is associated with virtually all cases of cervical cancer. The time

between HPV infection and development of cervical cancer usually takes ten years or longer. However, as high as 15% of HPV infections will progress to abnormal growth of cervical cells or cancer within two to three years if left untreated. Smoking also makes it more difficult for your body to fight the HPV infection. HPV infections do not affect the ability to get pregnant or have a baby.

### **When should HPV be treated?**

Many people seek treatment for genital warts because they are often unsightly and cause discomfort. Biopsy is often unnecessary to make the diagnosis. Over-the-counter treatments should not be used to treat genital warts. Treatment options include surgical removal, physical or chemical destruction, or prescription creams. Surgical treatment may be performed in the office setting or as an outpatient procedure in the hospital. Physical and chemical destruction include “freezing”, “burning”, and laser therapy. Prescription creams are also available for office and home therapy.

Cervical HPV infection is usually detected by pap smears. The first pap smear should be done approximately three years after first sexual intercourse but no later than age 21 years. If you have an abnormal pap smear, your health care provider will recommend appropriate follow up depending on the severity of the abnormal cervical cells.

### **What can be done to prevent HPV infection?**

HPV vaccination has been approved by the U. S. Food and Drug Administration and is currently available. A quadrivalent HPV vaccine (Gardasil) helps protect against infections caused by HPV types 6, 11, 16, and 18. Again, these four types are responsible for 90% of genital warts and 70% of cervical cancers. The current recommendation is vaccination of females aged 9-26 years. One study suggested that vaccination of all 12 year-old girls in the United States would prevent more than 200,000 HPV infections and 3300 cases of cervical cancer. Vaccination of both men and women would likely be more beneficial in preventing HPV infection but at a higher cost. Men usually do not have symptoms from HPV infections but can have genital warts. Genital HPV has also been associated with increased risk of penile cancer. HPV vaccination is not a treatment for abnormal cervical cells or genital warts but is a preventative measure. Vaccinations are available through the local Public Health Department or select pediatric and gynecologic offices.

### **Where can you go for more information?**

The resources listed are for information purposes concerning HPV. Please contact your health care provider for additional information.

The American College of Obstetricians and Gynecologists

[www.acog.org](http://www.acog.org)

FDA Office of Women’s Health Fact Sheet – HPV

[www.fda.gov/womens/getthefacts/hpv.html](http://www.fda.gov/womens/getthefacts/hpv.html)

HPV Vaccine Questions and Answers

[www.cdc.gov/std/hpv/STDFact-HPV-vaccine.htm](http://www.cdc.gov/std/hpv/STDFact-HPV-vaccine.htm)

Up To Date Public Website for Educational Materials

[www.patients.uptodate.com](http://www.patients.uptodate.com)