Genital Human Papilloma Virus (HPV)

Prevalence
HPV is a very common genital infection. An estimated 24 million Americans are already infected with the virus, with one million new infections occurring annually. At least 40 HPV types are known to cause genital infection. Many other HPV types cause warts on other areas of the body, which are not transmissible to the genitals.

Transmission
The virus may be transmitted through any kind of genital contact, not just intercourse. Sex toys and genital-to-genital rubbing are also ways in which the virus can be transmitted.

Incubation
The incubation period is from 3 weeks to several months and occasionally years. Many people carry latent HPV, which means the virus is not in an active stage, therefore they show no signs of HPV infection or disease.

Symptoms
Most often there are no symptoms, occasionally itching and/or local soreness may be present. Warts can be various shades of brown, gray or pink. They may be clustered (resembling cauliflowers), raised bumps or semi-flat formations. Often there is no visible evidence that the virus is present. In females HPV can infect the vulva, vagina, cervix, perineum, urethral opening and rectal area. In males HPV can affect the penis, urethra, scrotum and surrounding area, as well as in and around the rectum. The mouth, lips and tongue can also be infected (rare occurrence).

Complications
Women carry a higher risk of developing complications related to HPV. Certain HPV types (i.e. types 16, 18, etc.) are co-factors in the development of cervical cancer. Prior to the development of cancer, various degrees of dysplasia (abnormal cell growth) can be detected on cervical Pap smears. Vulvar, vaginal, rectal and penile cancers have also been associated with the HPV virus, but these cancers are not as common as cervical cancer.

Testing
Presently, there is no routine test available to confirm the presence or absence of HPV. Examination of the genital area and history of exposure remain the best means of identifying those who may be infected. HPV testing has been FDA approved for use in women with a Pap smear who have a reading of "Atypical Cell of Undetermined Significance" (ASCUS). HPV DNA typing/testing is sometimes used to decide which women with ASCUS Pap smears may need a colposcopy examination.

Colposcopy is a magnified view of the genital area using a coloscope. A similar procedure called androscopy is available for men, but is infrequently performed and is being “phased out” as a method of examining the male genitalia. Remember these procedures are only useful if the virus has resulted in a visible change. An absence of abnormal changes does not mean that the virus is not present. For women, cervical Pap smears remain the single most important test for identifying complications related to HPV.

There is much about HPV that is still unknown. Recent research indicates HPV infection frequently may last for several years, not life long as previously suspected. Because routine tests are not available and re-infection occurs frequently, it is difficult to offer the assurance of an infection free state that most people would desire.

HPV Vaccine
Gardasil is the HPV vaccine recommended for girls/women 9-26 years of ages. The vaccine protects against HPV Types 16 and 18, which are responsible for about 70% of all cervical cancer and most vaginal and vulvae cancers. It also protects against HPV Types 6 and 11, which cause about 90% of genital warts. Gardasil is available through the Specialty Clinic, located on the first floor of the Tang Center. Call (510) 643-7177 to schedule your appointment. Whether the infection is from a high risk or low risk HPV strain, the emotional impact and implication of having HPV may be a challenge. Time, resources and information are the best tools to gain emotional control.

Safer Sex
Condoms can be up to 70% effective in preventing HPV transmission during intercourse. However, HPV can be transmitted through genital contact that does not involve intercourse, such as genital-to-genital rubbing.

For more information got to www.ashastd.org, Facts and Answers, HPV

Appointment with Health & Sexuality Peer Educator: (510) 642-2000
HPV (continued)

Treatment of Genital Warts

Chemicals, freezing and electrocautery are the treatments available to remove HPV growths. These treatments help remove actual warts and abnormal cells, but unfortunately there is no medication available to completely eradicate the virus. Trichloracetic acid or cryotherapy (freezing) are the primary methods of treatment used at the UHS. Periodic evaluation is a crucial part of your care.

Treatments offered at UHS:

- **Trichloracetic acid (TCA)** – TCA is an acid, which is applied every 7-14 days by a clinician. It produces a transient, intense stinging sensation when applied to the skin. It is safe to use in pregnancy.

- **Cryotherapy** – Often referred to as “freezing the warts”, is a liquid nitrogen preparation. Liquid nitrogen is usually applied every 7-14 days by your clinician. After application it produces a very cold and/or stinging sensation. The treated area may become sore and/or irritated, or the warts may detach from the skin and slough off.

- **Podofilox (Condylox)** - This is a solution or gel that can be self-applied. The medication is applied twice per day for 3 consecutive days; the treatment cycle is repeated weekly for a maximum of 4 weeks. During the treatment period podofilox will gradually destroy the wart tissue. Podofilox is available with a prescription and is best used for warts that are easily visible and accessible. Its safety in pregnancy is unknown. There are no symptoms/sensations when the solution is first applied, however, within several days irritation and/or soreness may occur.

- **Imiquimod (Aldara) cream** – Is also a medication that can be self-applied and is available for purchase with a prescription. It is applied at bedtime on three alternating days per week (i.e. Monday, Wednesday, Friday or Tuesday, Thursday, Saturday, etc.) until the warts clear or for a maximum of 16 weeks. Its exact mechanism of action is not known. It is believed to work by enhancing the body’s immune system, which then works to destroy the abnormal cells. Its safety in pregnancy is unknown. As with other preparations, it may cause irritation and soreness at the application site.

Care of Treated Areas

- **Zinc oxide cream** can be purchased over the counter and is available at the UHS Pharmacy for a minimal fee. This ointment can be applied to the externally treated areas to help promote healing and prevent discomfort when urinating.

- **Preparation H or Anusol cream** can be applied as a soothing cream.

- **Sitz baths** (sitting in a tub of warm water) can provide significant relief from burning, irritation and itching.

- **2% topical xylocaine jelly (prescription needed)** can be obtained in pharmacies including the UHS Pharmacy. This jelly can be applied externally to treated areas and provides a temporary numbing effect. Occasionally, it can lead to a local allergic reaction. Stop using it immediately if an irritating reaction occurs.

- **Analgesics** such as acetaminophen (eg, Tylenol), aspirin and ibuprofen (eg, Advil, Nuprin, Motrin) provide significant relief when needed for pain and when taken as instructed on the package. For more severe pain, your clinician may prescribe a different type of medication.

General Comfort Measures

- Wear loose clothing that “breathes” well.

- Use only mild soap around your genital area.

- If you experience burning on treated areas while urinating, try pouring water over your vulva.

- Don’t wipe after urinating or defecating; pat yourself with dampened toilet paper, a Tucks pad or a baby wipe.

- Prevent irritation by avoiding intercourse, tampon use, prolonged sitting, and bicycle riding.

- A positive attitude and frame of mind can help the immune system and help with your healing. Visualize yourself healing and in good health.

- A generally healthy lifestyle which includes a balanced diet of nutritious foods, regular exercise, plenty of rest, and many forms of relaxation or meditation can be very helpful in promoting healing and preventing recurrences.

Check our website: [www.uhs.berkeley.edu](http://www.uhs.berkeley.edu) to learn more about this medical concern or others.