**The Facts About Human Papillomavirus**

**What is HPV?**

HPV is a viral infection spread through skin-to-skin sexual intercourse or skin-to-skin contact that can cause genital warts, cervical and other types of cancers.More than 100 types of HPV have been identified1; of these, about 40 HPV types infect the genital area.3 HPV types are classified as high-risk or low-risk, according to the association with cancer, around one-half of infections are with a high risk HPV type.5

**How common is HPV infection?**

HPV infection is the most common cancer causing STI in the United States. It is estimated that 79 million individuals are currently infected with HPV.2 CDC estimates that more than 90% and 80%, respectively, of sexually active men and women will be infected with at least one type of HPV at some point in their lives.

HPV causes about 31,500 cases of cancers each year.6 A recent study revealed the death rates for cervical cancer in women are increasing in the U.S. The rate of death in black women is 77% higher and 47% higher in white women.8

**How is HPV spread?**

HPV can be spread by vaginal, anal, and oral sex, or by skin to skin contact. Oral-genital and hand-genital transmission of some genital HPV types have been reported.9 Mothers can also spread HPV infection to their babies during vaginal delivery. About 300 infants are infected from their mother’s birth canals yearly.7

**Does HPV infection cause symptoms?**

HPV infections often cause no symptoms in men or women and are hard to identify. HPV can be spread even when an infected person has no visible signs or symptoms.

**What are the symptoms of HPV infection?**

Symptoms depend on the type of HPV that is causing the infection. Low-risk strains may cause genital warts, usually about 1-3 months after exposure.10 Warts may appear in the genital region or around the mouth, wherever the exposure to the infection occurred. High risk types of HPV cause approximately 5% of all cancers worldwide12 and do not cause warts. Infected people rarely have symptoms. If cancer develops in a person infected with a high risk type of HPV, they may begin to experience symptoms related to the cancer.

**Are there treatments available for HPV infection?**

There is no available treatment for HPV infection; however there are treatments available for the complications of HPV infection. For instance, genital warts may be treated by chemicals that dissolve the warts, freezing or burning warts, laser removal, injectable medicine and surgery.10 Cervical cancer and other cancers associated with HPV can also be treated through surgery and other cancer treatments, when necessary. Fortunately, more than 90% of new HPV infections clear or become undetectable within two years. Clearance usually occurs in the first 6 months after infection.10

**HPV Continued…**

**What complications can result from HPV infection?**

Complications of HPV infection depend on the type of virus that is causing the infection.

Low-risk types do not cause cancer but can cause genital warts. About two-thirds of people who have sexual contact with a partner with genital warts will develop warts.13

 Persistent high- risk HPV infections can lead to cell changes that can progress to cancer. High risk HPV can cause several types of cancer (cervical, anal, oropharyngeal, vaginal, vulvar, and penile). HPV causes 91% of cervical cancer6 and 70% of oropharyngeal cancers.12 The Oral Cancer Foundation estimates over 49,000 new diagnosis of oropharyngeal cancer and over 9,700 expected deaths from oropharyngeal cancer in 2017.15

Cervical cancer is by far the most common HPV-related disease. Nearly all cases of cervical cancer can be attributable to HPV infection.12 Although most HPV infections clear up on their own and most pre-cancerous lesions resolve spontaneously, there is a risk for all women that HPV infection may become chronic and pre-cancerous lesions progress to invasive cervical cancer.5

Unfortunately, HPV infection of the cervix does not usually cause symptoms. Therefore, it is recommended that young women get screened with a Pap test or HPV test. For women, the Pap test is a simple and effective way of checking cells from the cervix to see if they are normal or abnormal. Some abnormal cells can develop into cancer. The HPV test is used to look for HPV in the cells of the cervix. HPV is the cause of cervical cancer.5 A Pap test plus an HPV test (called co-testing) is the preferred way to find early cervical cancers or pre-cancers in women 30 and older.14

The American Cancer Society estimates that over 12,000 females in the United States will be diagnosed with cervical cancer and that about 4,200 females in the US will die from cervical cancer in 2017.8

**Can HPV infection be prevented?**

Yes; the most reliable method of preventing HPV infection is abstinence from sexual activity, including skin-to-skin contact. Refraining from sexual activity until a person is in a lifelong, mutually monogamous relationship with an uninfected person can prevent the sexual transmission of HPV.

Vaccines Gardasil and Gardasil-9 (approved by the Food and Drug Administration) are available and recommended for young men and women to prevent some of the high-risk types of HPV that are responsible for causing cancer. Gardasil protects against HPV types 6, 11, 16 & 18. (16) The latest Gardasil (9-valent) vaccine protects against nine strains of the virus (6, 11, 16, 18, 31, 33, 45, 52, and 58(18).The vaccine is designed to prevent most cancers and pre-cancers, as well as genital warts.17

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