April 1, 2011

Genital Human Papilloma Virus Fact Sheet

1. **What is Genital Human Papilloma Virus (HPV)? –** HPV is the most common sexually transmitted infection. About forty subtypes of HPV can produce infections. HPV has been linked to genital cancers. These include cancers of the cervix, vagina, and vulva (area around the opening of the vagina) and anus. HPV can cause genital warts in both men and women. These HPV subtypes can also infect the mouth and throat. Most people who become infected with HPV do not even know they have it.

2. **How do people get HPV? –** HPV is passed on through genital contact, most often during vaginal and anal sex. A person can have HPV even if years have passed since he or she had sexual contact with an infected person. It is also possible to be co-infected with more than one subtype of HPV. Very rarely, a pregnant woman with genital HPV can pass HPV to her baby during delivery. In these cases, the infected child can develop recurrent respiratory papillomatosis (RRP).

3. **What are the signs, symptoms and potential health problems of HPV? –** Most people with HPV do not develop symptoms or health problems from it. In 90% of cases, the body's immune system clears the virus naturally within two years. But sometimes certain types of HPV can cause health problems. These subtypes of HPV that can cause cancer are not the same as the subtypes that can cause genital warts. There is no way to know which people who get HPV will go on to develop cancer or other health issues.

   a. Genital warts can appear within weeks or months after sexual contact with an infected partner, even if the infected partner has no signs or genital warts. If left untreated, genital warts might go away, remain unchanged, or increase in size and number. They will not turn into cancer.

   b. Cervical cancer general does not have symptoms until it is in an advanced stage. For this reason, it is extremely important for women to get regular screening for cervical cancer. Screenings can detect early signs of disease, before it can turn into cancer.

   c. Other HPV-related cancers might not have signs or symptoms until they are advanced and difficult to treat. These include cancers of vulva, vagina, penis, anus and head and neck.

   d. RRP causes warts to grow in the throat. It is very rare.

4. **How does HPV cause genital warts and cancer? –** HPV causes normal cells to turn abnormal. Most of the time, you cannot see or feel these cell changes. In most cases, the body naturally fights the infection. However, in some cases, the body is unable to remove the HPV infected cells. Those cells then cause genital warts or cancer. Warts can be visible within weeks or months of getting HPV, while cancer often takes years to develop.

5. **How common is HPV and related disease?** – At least 50% of sexually active people will get HPV at some time in their lives. Approximately 20 million Americans are currently infected with HPV. Every year another six million people in the United States become newly infected with another subtype. HPV is most common in young women and men who are in their late teens and early 20s. Anyone who has ever had genital contact with another person can get HPV. Both men and women can get it – and pass it on to their sex partners – without even realizing it.

   a. About 1% of sexually active adults (one million people) in the United States have visible genital warts at any point in time.

   b. Each year, about 12,000 women get cervical cancer in the United States.

6. **How can people prevent HPV-related disease?** There are several ways that people can lower their chances of getting HPV:

   a. Vaccines can protect males and females against some of the most common types of HPV. These vaccines are given in a three dose series. It is important to complete all three doses to get the best protection. The vaccines are most effective when given before a person becomes sexually active, when he or she could be exposed to HPV.

      (1) <u>Girls and women</u>**:** Two vaccines (Cervarix and Gardasil) are available to protect females against the types of HPB that cause most cervical cancers. One of these vaccines (Gardasil) also protects against most genital warts.

         (a) Both vaccines are recommended for 11 to 12 year old girls and for females 13 through 26 years of age, who did not get any or all of the shots. Girls as young as nine years of age can get these vaccines. It is recommended that the same vaccine is received for all three doses, whenever possible.

         (b) Females who are sexually active may also benefit from the vaccine as few young women are infected with all four of these HPV types. So they would still get protection from those types they have not acquired. Currently, there is no test available to tell if a girl/woman has had any or all of these four HPV types.

         (c) Because the vaccine does not protect against all types of HPV, it will not prevent all cases of cervical cancer or genital warts. About 30% of cervical cancers will not be prevented by vaccines, so it will be important for women to continue getting screened for cervical cancer (regular PAP tests). Also, the vaccine does not prevent about 10% of genital warts – nor will it prevent other sexually transmitted infections (STIs).

      (2) <u>Boys and men</u>**:** One available vaccine (Gardasil) protects males against most genital warts. This vaccine is available for boys and men nine through 26 years of age.

b. It is not known how much protection condoms provide against HPV, since areas that are not covered by a condom can be exposed to the virus. However, condoms may reduce the risk of genital warts and cervical cancer. They can also reduce the risk of HIV and some other STIs, when used all the time and the right way.

c. The only sure way to prevent HPV is to abstain from all sexual activity. Sexually active adults can reduce their risk by being in a mutually faithful relationship with someone who has not had other or few sex partners, or by limiting their number of sex partners. But even persons with only one lifetime sex partner can get HPV, if their partner had previous partners.

7. Can HPV and its associated diseases be treated? – There is no treatment for HPV. But there are treatments for the health problems that HPV can cause, such as genital warts, cervical cell changes, and cancers of the cervix, vulva, vagina and anus.

8. **For more information about HPV**: http://www.cdc.gov/std/hpv/

   a. Vaccine information, http://www.cdc.gov/vaccines/vpd-vac/hpv/default.htm#disease

   b. HPV and men: http://www.cdc.gov/std/hpv/STDFact-HPV-and-men.htm

   This fact sheet provides general information. Please contact your physician for specific clinical information.