Human papillomavirus (HPV) is the most common sexually transmitted infection that can infect the genital areas, mouth and throat of females and males. There are more than 100 different types of HPV. HPV types can be divided into high-risk and low-risk.

- High-risk HPV infection types 16 and 18 cause virtually all cervical cancers and most anal cancers. They also can cause genital, mouth and throat cancers.
- Low-risk HPV types 6 and 11 cause more than 90 percent of genital warts.

Currently 79 million Americans are infected with HPV, another 14 million become newly infected each year. Adolescents and young adults between the ages of 15 to 24 account for as many as half of these infections.

What is Cervical Cancer?
Cervical cancer is a cancer of the cervix, the lower part of the womb. Cervical cancer sometimes takes years to show symptoms. It can also go from precancerous to cervical cancer in less than a year. The American Cancer Society (ACS) estimates that more than 12,000 women in the United States will be diagnosed with cervical cancer this year and more than 4,000 will die from the disease.

The ACS recognizes HPV infection as the number one risk factor for cervical cancer. However, cervical changes can develop that may not be related to HPV. Routine pap tests are very important. Pap tests are an effective way to detect changes in the cervix that can catch the signs of cancer before the patient has any symptoms. When cervical cancer is found early, it is very treatable. Getting the HPV vaccine does not replace routine pap tests.

Can HPV infection be treated?
There is no medical treatment for HPV infection. There are only treatments for the health problems HPV can cause such as genital warts, cervical changes and cervical cancer.
How is HPV transmitted?
HPV is passed through close physical contact during sex. This includes vaginal and anal sex and even genital touching. HPV may also be passed on during oral sex. Most infected persons do not realize they are infected or that they are passing HPV on to a partner.

How can you reduce the risk of getting HPV?
There are several ways that people can lower their chances of getting HPV:

- Abstinence from any type of sexual activity is the best way to prevent HPV.
- HPV vaccines can offer the best protection to females and males who receive all three vaccine doses and have time to develop an immune response before they begin sexual activity.
- Condoms, if used, may lower the chances of getting HPV.

What is the HPV vaccine?
The HPV vaccine provides highly effective protection against specific types of HPV that have been shown to cause the development of cancer or genital warts affecting both females and males. There are three kinds of HPV vaccine in the United States. All vaccines are given in a series of three immunizations. It is very important to get all three vaccine doses to achieve the best protection.

Cervarix (available for females only)
- Protects females against high-risk HPV types 16 and 18 that cause most cervical cancers.

Gardasil 4 (available for both females and males)
- Protects against high-risk HPV types 16 and 18 that cause most cervical and anal cancers, offers protection against other genital, throat and mouth cancers.
- Protects against low-risk HPV infections types 6 and 11 that cause most genital warts.

Gardasil 9 (available for females and males)
- Protects against high-risk HPV types 16, 18, and five additional types that cause most cervical and anal cancers, and offers protection against other genital, throat and mouth cancers.
- Protects against low-risk HPV types 6 and 11 that cause most genital warts.

How effective is HPV vaccine?
In clinical studies, HPV vaccines have been over 90 percent effective in preventing infection and precancerous lesions in women caused by HPV types 16 and 18. Efficacy is close to 90 percent in males and close to 100 percent in females in protecting against genitals warts caused by HPV types 6 and 11.

Have Questions?
Individuals who have questions or concerns about HPV vaccine should contact their health care provider.

Children may be eligible to receive free vaccines through the Vaccines for Children program before their 19th birthday. Contact the Missouri Department of Health and Senior Services or your local public health agency to find out if your child is eligible.