Human Papillomavirus (HPV) is a common family of viruses that causes infection of the skin or mucous membranes of various areas of the body. There are over 100 different types of HPV viruses. Different types of HPV infection affect different areas of the body. For instance, some types of HPV cause warts in the genital area and other types can lead to abnormal cells on the cervix, vulva, anus, penis, mouth, and throat, sometimes leading to cancer.

HPV is very common. According to the Centers for Disease Control and Prevention (CDC), most sexually active American men and women will contract at least one type of HPV virus during their lifetime. HPV is considered the most common sexually transmitted infection in the United States. It is the cause of almost all cervical cancers in women and has been linked to the rise of oral cancers in young people in the United States.

HPV is extremely serious. Approximately 79 million Americans are currently infected with HPV, and about 14 million more become infected each year. In the United States, there are nearly 13,000 new cervical cancer cases diagnosed annually, and more than 4,000 women die from cervical cancer every year. Men are affected too. An estimated 11,500 HPV-associated cancer cases occur in American men each year.

The most common ways to get an HPV infection is from vaginal or anal sex with an infected person; however, this is NOT the only way to get HPV. Infection can also be acquired from oral sex and any skin-to-skin contact with areas infected by HPV. It is possible to have HPV and not know it, so a person can unknowingly spread HPV to another person.
Can HPV infection be treated?

There is no treatment for HPV infection; there are only treatments available for the health problems that HPV can cause, such as genital warts, cervical changes, and cancer. In some cases, the body fights off the virus naturally. In cases where the virus cannot be fought off naturally, the person is at risk for serious complications, including cancer.

What is HPV vaccine?

Gardasil 9 is the only HPV vaccine currently being distributed in the United States. Gardasil 9 protects against cervical cancers in women and also against genital warts and cancers of the anus, penis, vagina, vulva, mouth, and throat. For preteens, HPV vaccine is given in two shots, separated by 6 to 12 months. It is important to get all the recommended doses to get the best protection.

At what age should my son or daughter get HPV vaccine?

Routine vaccination with HPV vaccine is recommended for all 11- and 12-year-old boys and girls. The vaccine can be given as early as 9 years of age. If your son or daughter did not receive the two doses of vaccine at the recommended age, they should still start or complete their HPV vaccine series. Your son can be given the vaccine through the age of 21 (and also certain males through age 26 years), and your daughter can be given the vaccine through the age of 26. If the vaccine series is started at age 15 years or older or, if the person has problems with their immune system, three doses are necessary. Check with your healthcare provider to make sure your child is up to date with HPV vaccination.

For HPV vaccine to work best, it is very important for preteens to get all the recommended doses before any sexual activity begins. It is possible to get infected with HPV the very first time they have sexual contact with another person, even if they do not have intercourse. Also, the vaccine produces better immunity to fight infection when given at the younger ages compared to the older ages.

Are HPV vaccines safe?

HPV vaccine has been shown to be very safe. Every vaccine used in the United States is required to go through rigorous safety testing before licensure by the FDA. The HPV vaccine has been extensively tested in clinical trials with more than 28,000 male and female participants. Since the first HPV vaccine was licensed for use in 2006, more than 50 million doses of HPV vaccine have been distributed in the United States. Now in routine use, the vaccine is continually monitored for safety.

In the years of HPV vaccine safety monitoring, no serious safety concerns have been identified. Like other vaccinations, most side effects from HPV vaccination are mild, including fever, headache, and pain and redness in the arm where the shot was given.

Is HPV vaccine effective?

The vaccine has been shown to be highly effective in protecting against the HPV types targeted by the vaccine. A study looking at HPV infections in girls and women before and after the introduction of HPV vaccines shows a significant reduction in vaccine-type HPV in U.S. teens since the vaccine was introduced.

Adapted from a publication developed by the Michigan Department of Community Health, Division of Immunization

Sources:
CDC. National Center for Immunization and Respiratory Diseases. HPV Vaccine-Questions and Answers. www.cdc.gov/hpv/parents/questions-answers.html
CDC. National Center for Immunization and Respiratory Diseases. Preteens and Teens Need Vaccines Too! www.cdc.gov/Features/PreteenVaccines/index.html