What is HPV?

Human papillomavirus (HPV) is a common family of viruses. There are more than 100 types of HPV viruses. Some cause infection of the skin and others infect mucous membranes of various areas of the body. Different types of HPV infection affect the body in different ways. For instance, some types of HPV can lead to cancer of the tongue, tonsils, anus, cervix, vulva, and penis, and others cause warts in the genital area.

How common is HPV?

HPV is very common. According to the Centers for Disease Control and Prevention (CDC), most American men and women will contract at least one type of HPV virus during their lifetime. Approximately 79 million Americans are currently infected with HPV, and about 14 million more become infected each year. HPV is the cause of almost all cervical cancers in women and recent studies show that HPV is associated with the majority (70%) of oropharyngeal cancers (cancer of the tongue or tonsils), which occur primarily in men, in the United States.

How serious is HPV?

HPV is extremely serious. In the United States, there are 34,800 new cancer cases caused by HPV each year, of which about 4 out of 10 are in men. Each year there are 10,900 new HPV-attributable cervical cancer cases, and more than 4,000 women die from cervical cancer. Cancer of the oropharynx (tongue, tonsils) due to HPV is even more common with 13,500 new cases each year, 11,300 of which are in men. Treatment may involve surgery, chemotherapy, and/or radiation.

How is HPV spread?

The most common ways to get an HPV infection is from oral, vaginal, or anal sex with an infected person. Infection can also be acquired from 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. Fortunately, the body usually fights off the virus naturally; however, in cases where the virus cannot be fought off naturally, the person is at risk for serious complications, including cancer. There are treatments available for the health problems that HPV can cause, for example, removal of genital warts or pre-cancerous cervical cells, and chemotherapy, surgery, or radiation for cancer.

What is HPV vaccine?

Gardasil 9 is the only HPV vaccine currently being distributed in the United States. Gardasil 9 protects against most HPV-attributable cancers in men and women. It also prevents most genital warts and cervical pre-cancers. 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 also be given beginning at age 9 or 10 years. 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. Vaccination is routinely recommended through the age of 26 for all males and females, and can be given through age 45 years, if desired.

If the vaccine series is started before the 15th birthday, two doses are needed. If it’s 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 has all the needed doses.

HPV vaccine works better when given on time. HPV vaccine produces better immunity to fight infection when given to preteens as compared to older adolescents and adults. 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.

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. Before licensure, the HPV vaccine was 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 120 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 except fainting after vaccination (a common occurrence for adolescents after any vaccination). Like other vaccinations, most side effects from HPV vaccination are mild (e.g., fever, headache, 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. HPV vaccination has reduced the numbers of teen girls and young women with vaccine-type HPV infection. It also has reduced cases of genital warts, cervical pre-cancerous changes, and other complications of HPV infection.

Resources for more information

➤ Your healthcare provider or local health department
➤ CDC’s information on vaccines and immunization: www.cdc.gov/vaccines
➤ Immunize.org's vaccine information website: www.immunize.org
➤ Vaccine Education Center at the Children’s Hospital of Philadelphia: www.chop.edu/centers-programs/vaccine-education-center
➤ CDC’s Vaccines For Children (VFC) program: www.cdc.gov/vaccines/programs/vfc/index.html

SOURCES


CDC. National Center for Immunization and Respiratory Diseases. HPV Vaccine-Questions and Answers. www.cdc.gov/hpv/hcp/answering-questions.html
