



**Health Professionals
Committed to the
Reproductive Needs of
Children and Adolescents**

HPV Vaccine

What is HPV (human papillomavirus) & the HPV vaccine?

HPV is a common virus that can cause genital warts and cancer. HPV is most commonly spread by sexual contact, but can be spread by non-intercourse sexual intimacy. Nearly everyone gets the HPV virus at some point in his or her lifetime. Most cases are acquired soon after individuals have sex for the first time. About 80% Americans will acquire the HPV virus by 50 years of age. HPV viruses cause genital warts and cervical cancer. The HPV virus affects men and women and causes vulvar, anal, penile and head and neck cancers as well. In 2006, the first HPV vaccine, Gardasil, was introduced and approved for use in the United States. This vaccine prevents cervical cancer and genital warts due to the most common HPV types that lead to these diseases. In 2014, a newer vaccine, Gardasil 9 was approved for use. This vaccine prevents diseases caused by even more HPV viruses.

How Effective is the HPV vaccine?

The HPV vaccines are extremely effective in preventing the four (Gardasil) and nine (Gardasil 9) types of HPV infection in young women and men who have not been previously exposed. The vaccine targets the types of HPV that causes the majority of cervical cancers and nearly all types of genital warts. Unfortunately, this vaccine will not treat HPV infection that is already present or its complications. It is important to get the vaccine before a girl or boy initiates any sexual relationships.

This vaccine does cover most common types of HPV but does not provide protection against all types of HPV. It is not known how effective the protection against HPV will be if you receive fewer than 3 doses.

Even if you are vaccinated with all 3 doses, it is still possible to get genital warts and/or abnormal cells that can eventually lead to cervical cancer. That is why women will still need to get pap smears starting at age 21 even if they have received the HPV vaccine.

How is the vaccine given?

If the vaccine is started in teens age 14 or younger, then they should receive 2 doses of the vaccine 6 months apart. If the vaccine is started at age 15 or older, then the vaccine is given as 3 intramuscular doses: the first dose is followed by a second dose 2 months later and a third dose is given 6 months after the first dose, given according to the ideal schedule. There is flexibility in dosing dose 2 and 3 to be given one month early or one month late and has been shown to be just as effective as the ideal schedule.

Age (years)	HPV vaccine	Dose 2	Dose 3
<15	Dose 1 today	6 months	NA
15-26	Dose 1 today	2 months	6 months

HPV vaccine may be given at the same time as other vaccines. If the vaccine schedule is interrupted, the vaccination series does not have to be restarted, just completed. If you started a series with HPV4, it is fine to complete the series with HPV9.

Is the HPV vaccine safe?

The HPV vaccine is safe. Nearly 60 million doses of HPV vaccine have been given and there is no data to suggest that there are any severe side effects or adverse reactions linked to vaccination. The HPV vaccination has been carefully and extensively studied. Vaccines do not cause autism spectrum disorder. Girls who receive the HPV vaccine do not engage in riskier sexual behavior. HPV vaccination is recommended because the benefits, such as prevention of cancer, far outweigh the risks of possible side effects. Health decisions are personal, and each person should make choices that are right for themselves and their families. It is important to remember that choosing not to vaccinate is not a risk-free choice—HPV vaccines prevent serious cancers and other diseases in both males and females.

How can I learn more?

CDC's website: www.cdc.gov/std/hpv

Immunization action coalition: <http://www.immunize.org/>