

HPV vaccines protect pre-teens from cancer



Cervical cancer is the only type of human papillomavirus (HPV) cancer for which there is a screening. Even with the screening, HPV causes 10,800 cases of cervical cancer each year in the United States. There are approximately 300,000 new cervical precancer cases every year and 12,900 cases of oropharyngeal cancer, 5,900 anal cancer, 3,300 vulvar and vaginal cancer, and 800 penile cancer. There is no screening for these types of cancers and they may not be detected until they cause health problems.

Over 90% of HPV cancers are preventable through HPV vaccination.

The Centers for Disease Control (CDC) now recommends 2 doses of HPV vaccine for people starting the vaccination series before the 15th birthday. Three doses of HPV vaccine are recommended for people starting the vaccination series on or after the 15th birthday and for people with certain immunocompromising conditions.

Which age groups should be vaccinated?

The vaccination series can be started at age 9 years.

What is the recommended 2-dose HPV vaccination schedule?

For girls and boys starting the vaccination series before the 15th birthday, the recommended schedule is

2 doses of HPV vaccine. The second dose should be given 6-12 months after the first dose (0, 6-12 month schedule). If a child receives his/her first dose of the HPV vaccine before he/she was 15 years old, they will only need one more dose.

What HPV vaccines are currently available in the United States?

Beginning in 2017, only the 9-valent HPV vaccine is sold in the United States. Prior to 2017, three HPV vaccines were licensed for use in the United States: 9-valent HPV vaccine, quadrivalent HPV vaccine, and bivalent HPV vaccine.

Contract services are funded under contract with AHCCCS.

Why is the 2-dose schedule change recommended only for girls and boys age 9-14 years?

The Advisory Committee on Immunization Practices (ACIP) makes recommendations based on the best available scientific evidence. Immunogenicity studies have shown that 2 doses of HPV vaccine given to 9-14 year-olds at least 6 months apart were as good, or better, than 3 doses given to older adolescents and young adults. Studies have not been done to show this in adolescents age 15 years or older.

If a girl or boy received 2 doses of HPV vaccine less than 5 months apart, do they need a third HPV vaccine dose?

Yes. In a 2-dose schedule of HPV vaccine, the recommended interval is 6-12 months, and the minimum interval is 5 months between the first and second dose. If the second dose is given earlier than 5 months, a third dose should be administered.

Q: If someone is age 15 years or older and started the vaccination series at age 11 but only received 1 dose, how many more doses do they need?

This person needs 1 more dose to complete a 2-dose series, which is recommended because the vaccination was started before turning 15 years old. In a 2-dose

series, the second dose is recommended 6-12 months after the first dose. In this case, the first dose was given several years ago, so the second dose can be given right away.

Q: If a HPV vaccine series was started with quadrivalent HPV vaccine or bivalent HPV vaccine and will be completed with 9-valent HPV vaccine, what are the intervals for the remaining doses in a 3-dose or 2-dose series?

If the first dose of any vaccine was given before the 15th birthday, vaccination should be completed according to a 2-dose schedule. In a 2-dose series, the second dose is recommended 6-12 months after the first dose (0, 6-12 month schedule).

If the first dose of any vaccine was given on or after the 15th birthday, vaccination should be completed according to a 3-dose schedule. In a 3-dose series, the second dose is recommended 1-2 months after the first dose, and the third dose is recommended 6 months after the first dose (0, 1-2, 6 month schedule). If a vaccination schedule is interrupted, vaccine doses do not need to be repeated.

Sources:

Clinician FAQ: CDC Recommendations for HPV Vaccine 2-Dose Schedules

<https://www.cdc.gov/cancer/hpv/statistics/cases.htm>

Habbema D, et al. Int J Cancer. 2017 Mar 1;140(5):1215-1222

<https://www.cdc.gov/hpv/hcp/more-than-screening/index.html>