Start at 9

To Prevent Cancers Caused by HPV—For Providers

Updated Recommendation

Providers should start the 2-dose HPV vaccine series at the age 9 well-visit to increase vaccination completion success and prevent more cancers.¹

Facts About HPV and HPV Vaccination

- HPV is linked with 91% of cervical and anal cancers, 63% of penile cancers, and 70% of oropharynx cancers.²
- Research has shown that the HPV vaccine provides close to 100% protection against infections and pre-cancers caused by high-risk HPV types.³
- In 2021, only 33.8% of 13-year-old-adolescents in NYS (excluding NYC) have completed the HPV vaccine series.⁴

Key Messages for Providers

- 1. Start recommending HPV vaccination at age 9 years to increase the chance of series completion by age 13 years.⁵
 - Implementing HPV vaccination at the earliest opportunity produces a strong immune response. HPV vaccination at younger ages (i.e., less than 15 years), even with a reduced 2-dose schedule, yields higher antibody titers compared to vaccination later in adolescence.
- 2. The American Academy of Pediatrics, the American Cancer Society, and the National HPV Vaccination Roundtable recommend starting the series at age 9.^{1,3,6}
 - This strategy is also consistent with the ACIP recommendation stating that the HPV series can start at age 9.7
- 3. HPV vaccination is cancer prevention.^{1,3,7}
 - HPV vaccination helps protect against six types of cancer. The vast majority of HPV-related cancer deaths are preventable with the 9-valent HPV vaccine.
 - HPV vaccination can prevent more than 90% of cancers caused by the HPV virus when given at the recommended ages.
 - The burden of HPV-related mortality in the U.S. far surpasses the mortality from tetanus, diphtheria, pertussis, and meningococcal disease combined.
- 4. Other reasons cited for starting the HPV vaccine series at age 9 include⁶ :
 - Decreases questions about sexual activity.
 - Decreases requests for only the "school-required vaccines."
 - Increases likelihood of full vaccination before first HPV exposure.
 - Widely acceptable to parents, providers, and systems.

Simple Sample Script:

"Now that your child is 9, they're due for a vaccination to help protect them from cancers caused by the HPV virus. We will give the vaccine today. Do you have any questions?"



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Tips for Designing Practice Workflows^{2,5,9}

- Consider the advantages of offering the HPV vaccine as a stand-alone vaccination at age 9. This provides the best protection and increases the likelihood of series completion by the 13th birthday. The HPV vaccine can be given in conjunction with other vaccines for the second dose.
- Consider updating your EMR to prompt the initiation of the HPV vaccine series for your patients after their 9th birthday.
- Consider using standing order sets in your EMR to improve efficiency and access to administration of the HPV vaccine.
- To assure initiation and completion of the series, run proactive automatic reports on a monthly or quarterly basis and make this part of your pre-visit planning workflow/ assessment.
- Consider opening your calendar to schedule patients for follow up visits before they leave the office.
- Consider using parent/caregiver education resources to engage with parents on the value of HPV vaccination.
 - Why Age 9? Fact Sheet
 - <u>HPV (Human Papillomavirus) Vaccine:</u>
 <u>What you Need to Know</u>

Human papillomavirus vaccination (minimum age: 9 years)

Routine and Catch-Up Vaccination

- HPV vaccination routinely recommended at age 11-12 years (can start at age 9 years) and catch-up HPV vaccination recommended for all persons through age 18 years if not adequately vaccinated
- 2-or 3-dose series depending on age at initial vaccination:
 - Age 9-14 years at initial vaccination: 2-dose series at 0, 6-12 months (minimum interval: 5 months; repeat dose if administered too soon)
 - Age 15 years old or older at initial vaccination: 3-dose series at 0, 1-2 months, 6 months (minimum intervals: dose 1 to dose 2: 4 weeks; dose 2 to dose 3: 12 weeks; dose 1 to dose 3: 5 months; for all intervals, repeat dose if administered too soon)
- **Interrupted schedules:** If vaccination schedule is interrupted, the series does not need to be restarted.
- No additional dose recommended when any HPV vaccine series has been completed using the recommended dosing intervals.

Special Situations

- Immunocompromising conditions, including HIV infection:
 3-dose series, even for those who initiate vaccination at ages 9 through 14 years.
- History of sexual abuse or assault: Start at age 9 years
- Pregnancy: Pregnancy testing not needed before vaccination; HPV vaccination is recommended after pregnancy; no intervention needed if vaccinated while pregnant.

Adapted From Recommended Child and Adolescent Immunization Schedule for ages 18 years and younger—2023, by the Centers for Disease Control and Prevention.⁸ In the public domain.

- 1. National HPV Vaccination Roundtable. HPV vaccination at 9-12 years old. https://hpvroundtable.org/wp-content/uploads/2022/04/Evidence-Summary-HPV-Vaccination-Age-9-12-Final.pdf. Published April 2022. Accessed June 30, 2023.
- National HPV Vaccination Roundtable. Cancer prevention through HPV vaccination in your practice: An action guide for physicians, physicians assistants, and nurse practitioners. <u>https://hpvroundtable.org/wp-content/uploads/2018/04/PROVIDERS-Action-Guide-WEB.pdf</u>. Published September 2019. Accessed June 30, 2023.

American Cancer Society. HPV VACs: Just the facts for providers. <u>https://www.cancer.org/content/dam/cancer-org/online-documents/en/pdf/ftyers/hpv-vacs-just-the-facts-for-providers.pdf</u>. Published May 2020. Accessed June 30, 2023.
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^{9.} Centers for Disease Control and Prevention. 5 ways to boost your HPV vaccination rates. https://www.cdc.gov/hpv/hcp/boosting-vacc-rates.html. Published November 2021. Accessed June 30, 2023.



^{23.} 7. Meites E, Szilagyi PG, Chesson HW, et al. Human papillomavirus vaccination for adults: updated recommendations of the Advisory Committee on Immunization Practices. MMWR Morb Mortal Wkly Rep. 2019;68(32):698-702. https://www.cdc.gov/mmwr/volumes/68/wr/mm6832a3.htm