



Cancer Prevention Through HPV Vaccination:

An Action Guide for Nurses and Medical Assistants



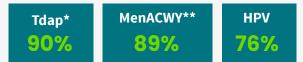
HPV Cancer Prevention Starts With You

Nurses and medical assistants have the power to help reduce the burden of HPV cancers by making strong HPV vaccination recommendations starting at age 9. Make it your team's goal to take advantage of every appropriate patient encounter to encourage HPV vaccination. Before providing information to parents or guardians, please consult your state's scope of practice laws.

HPV vaccination rates lag behind other preteen vaccines.

The HPV vaccine is a powerful tool to help prevent multiple cancers, yet HPV vaccination rates are lower than those of other preteen vaccines.

Percent of teens ages 13 to 17 years who had received ≥ 1 vaccine dose in 2022ⁱ



*Tdap (tetanus, diphtheria, pertussis vaccine) **MenACWY (meningococcal ACWY vaccine)

HPV vaccination is cancer prevention.

HPV causes about 37,000 cases of cancer in men and women each year in the United States."

HPV is linked to:"

90% of cervical and anal cancers, each

75% of vaginal cancers

70% of oropharyngeal and vulvar cancers, each

65% of penile cancers

The HPV vaccine protects against the virus types that cause most HPV cancers and genital warts. It's estimated that HPV vaccination can help prevent over 90% of all HPV cancersⁱⁱⁱ and that it could virtually eliminate cervical cancer, which takes the lives of over 4,000 womenⁱⁱⁱ in the US each year.

HPV vaccination should begin at age 9^{iv} and should finish by age 13 for boys and girls. The HPV vaccine is most effective when given before age 13.

HPV vaccination works. Studies have reported a 70% reduction in high-grade anal precancers and cancers among women who received the HPV vaccine before age 17,^v likely, in part, due to herd immunity.^{vi}

A 65% reduction in cervical cancer cases was observed from 2012-2019 among women ages 20-24, who were among the first cohort of preteens to receive the vaccine.^{vii}

Every member of your practice can be a valuable advocate for HPV vaccination.

Implementing a consistent and evidence-based approach to HPV vaccination recommendations is key to improving vaccination uptake and reducing disparities.^{viii}

Make it an organizational goal to vaccinate every age-eligible child in the communities your practice serves. This guide features actionable steps your practice can take to increase HPV vaccination uptake.

Actions at-a-Glance

Click the Action icon associated with each item below for detailed guidance.



Strategies to Increase HPV Vaccination

Action 1	Promote a pro-vaccination culture.
Action 2	Make effective HPV vaccine recommendations.
Action 3	Use recommended strategies to answer questions.
Action 4	Reduce missed opportunities for vaccination.

If you are reading a printed version of this guide, please see the Appendix for full links to hyperlinked words, as indicated by superscript numbers (e.g., <u>how the HPV vaccine protects against cancers</u>¹).

Actions You Can Take

Action 1: Promote a pro-vaccination culture.

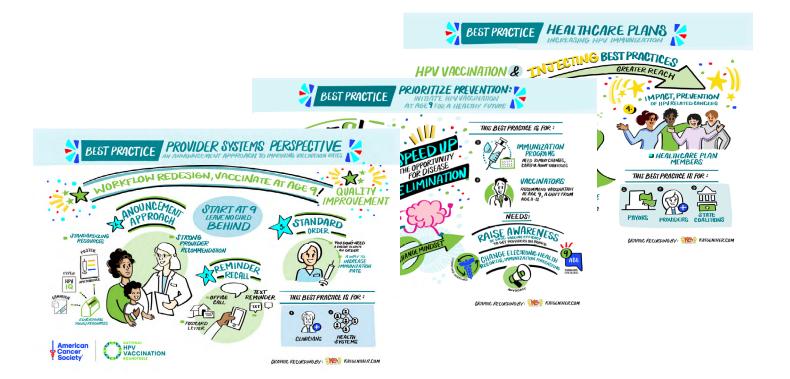
Nurses and medical assistants are often the first health professionals to meet with patients. You set the tone for the patient experience and can make the difference of whether parents or guardians choose HPV vaccination for their children.

Some actionable steps include:

- Advocate for professional development opportunities for you and your teammates to learn about <u>how the HPV</u> vaccine protects against cancers¹ and <u>methods to improve vaccine delivery</u>.²
- Keep educational materials about the HPV vaccine available for parents or guardians and include HPV cancer prevention information on your website and social media pages.

Posters, Flyers, and Graphics to Create a Pro-vaccination Environment

- American Cancer Society: <u>HPV VACs³</u> flyer
- American Cancer Society National HPV Vaccination Roundtable <u>Flyers and posters</u>⁴ and <u>Co-brandable "Start at</u> <u>Age 9" Social Media Graphics</u>⁵
- California Department of Public Health: <u>Vaccines for Your Preteen</u>⁶ flyers, graphics, and posters available in multiple languages
- US Department of Health and Human Services: <u>HPV Vaccine Graphics</u>⁷



Action 2: Make effective HPV vaccination recommendations.

Your vaccination recommendation is powerful. All patient-facing staff should be <u>trained</u>⁸ to begin the discussion about the HPV vaccine with parents or guardians. Start these discussions at age 9, and repeat them at each visit until the patient <u>completes their vaccination series</u>.⁹

• Make a <u>presumptive recommendation</u>¹⁰ starting at age 9. These are brief statements that assume parents or guardians are ready to vaccinate. These are more effective than open-ended discussions.

"Your child is 9 years old. That means we'll give them their HPV vaccine today to help protect them against six types of cancers."

<u>Use every opportunity¹² to vaccinate and emphasize</u> the need to <u>complete the vaccination series</u>.¹³

"We need to schedule a follow-up appointment in six months for your child to get their last dose of the HPV vaccine. Once they're fully vaccinated, they'll have lifelong protection against six types of cancer. " Make <u>bundled recommendations</u>¹¹ if patients are eligible for multiple vaccinations such as Tdap and/ or meningococcal ACWY.

"Your child is due for vaccinations to help protect against meningitis, HPV cancers, pertussis, and the flu. We'll give them those shots during today's visit."

Do your part to reduce the burden of HPV cancers.

Parents and guardians want their kids to get the HPV vaccine. Studies have shown that parents <u>view the HPV vaccine positively</u>¹⁴ and that they rate the HPV vaccine to be <u>as important as other</u> <u>vaccines</u>.¹⁵

Still, about **1 in 5** parents reported not receiving an HPV vaccination recommendation from <u>2019-2021</u>.¹⁶





Action 3: Use recommended strategies to answer questions.

Build trust by effectively answering questions from parents or guardians about the HPV vaccine. Using <u>research-backed strategies</u>¹⁷ to answer questions can make the difference of whether parents or guardians choose to have their children receive the HPV vaccine.

Below are example prompts to address common questions.

 Actively listen to their concerns to build trust. Identify their <u>primary concern¹⁸</u> and restate it to show you are listening.

"You mentioned that you're worried about the safety of the vaccine. Would you say that's your biggest concern?"

• Address the concern using research-tested methods.

"The HPV vaccine is very safe. The Centers for Disease Control and Prevention (CDC) has extensively researched its safety and has not identified any concerns. Like other medications, vaccines can cause side effects, like pain and swelling where the shot was given. That's normal for the HPV vaccine too and will go away in a day or two." • Show urgency by using the words "recommend" and "today".

"HPV vaccination starts at age 9 because at this age it's most effective in preventing six types of cancers. That's why [primary care provider name] and I strongly recommend that your child gets that vaccine today."

• Make a note to prompt again if HPV vaccination is declined.

"I'm making a note to revisit this topic at your child's next checkup. I want to make sure they have the chance to be protected against HPV cancers."

Research-tested Answers to Questions About HPV Vaccination

The <u>main reasons</u>¹⁹ parents refuse HPV vaccination for their children are they don't think it's necessary or they don't think it's safe. For more information on research-tested answers, review these resources and prepare answers to the most common questions and concerns about the HPV vaccine.

- American Academy of Pediatrics: FAQs About HPV²⁰
- CDC: Talking with Parents about HPV Vaccination²¹ and Questions Parents May Ask about Vaccines²²
- American Cancer Society: <u>HPV Vaccines²³</u>

By providing research-tested answers and strong vaccination recommendations, you can be the reason parents or guardians choose to protect their children from HPV cancers.

Action 4: Reduce missed opportunities for vaccination.

Recommended tools and workflows can help your practice improve HPV vaccination uptake. Review expert-recommended QI strategies on page 8 for more information.

Step 1

Develop a process to flag patients who are due for vaccination. For example:

- During pre-clinic team meetings, review which patients are due for vaccination and pull records.
- When you first triage patients, review their HPV vaccination status. If the patient is due, use established messaging to encourage vaccination.

Step 2

Ask leadership to establish <u>standing orders²⁴</u> and to provide <u>competency training²⁵</u> on immunization delivery to facilitate efficient delivery of vaccines to patients by nurses and medical assistants.

Step 3

Use <u>electronic health records (EHRs)</u>²⁶ to send patient reminders and give provider prompts.

- Optimize EHRs to identify which patients need vaccination and to capture all doses.
- Use EHR data to guide quality improvement (QI) efforts.
- Improve data collection by using <u>vaccination</u> program tools²⁷ or short training videos to standardize processes.

Step 4

Connect to your state's <u>immunization information</u> <u>system (IIS)</u>²⁸ and ensure <u>that current vaccination</u> <u>records are captured accurately</u>²⁹ in both systems.

Step 5

Establish <u>patient reminder and recall strategies</u>,³⁰ and consider how to optimize via text messaging, mail, email, social media and/or phone calls.





Share your story!

Let us know what lessons you learned from your efforts to improve HPV vaccination rates. What worked? What strategies needed to be revisited? Send your story to **HPV.Vaccination.Roundtable@cancer.org**

Resource Center

Expert-recommended QI Strategies

There are a wide variety of QI strategies to improve HPV vaccination rates. Explore and test strategies that may work best in your practice.

- American Cancer Society National HPV Vaccination Roundtable: Promising Best Practices: An Illustrated Guide³¹
- American Academy of Pediatrics (AAP): Improving HPV Vaccination Rates Using Maintenance of Certification • Requirements³²
- CDC: Immunization Quality Improvement for Providers (IQIP)³³, which offers programs to implement strategies to give strong vaccine recommendations³⁴ and to strengthen vaccine communications.³⁵
- HPV IQ: OI Tools³⁶
- Merck Vaccines: Vaccination Program Tools³⁷
- Institute for Healthcare Improvement: **OI Essentials Toolkit**³⁸

Additional Resources

- Start HPV Vaccination at Age 9³⁹
 - 2023 Human Vaccines & Immunotherapeutics Collection Toolkit⁴⁰
 - HPV Vaccination at 9 12 Years of Age: An Evidence Summary⁴¹
 - 0 Start at Age 9 Print On-demand Toolkit⁴²
 - 0 Why Age 9? Fact Sheet⁴³
- 2024 ACS National HPV Vaccination Roundtable Impact Report and Action Plan⁴⁴ .
- ACS National HPV Vaccination Roundtable Resource Center⁴⁵
- ACS National HPV Vaccination Roundtable Video Collection⁴⁶
- ACS Recommendations for HPV Vaccine Use⁴⁷ •
- ACS HPV Information and Resources for Patients and Parents⁴⁸
- ACS HPV Vaccine Information for Health Professionals⁴⁹
- American Academy of Pediatrics: Adolescent Immunization Discussion Guides⁵⁰
- CDC: HPV Resources⁵¹ •
- HPV Data Sources52
- Immunize.org: Vaccine Apps for Health Care Providers⁵³



Follow the American Cancer Society National HPV Vaccination Roundtable.



HPVRoundtable



HPVRoundtable

References

- Pingali C, Yankey D, Elam-Evans LD, et al. Vaccination Coverage Among Adolescents Aged 13-17 Years National Immunization Survey-Teen, United States, 2022. MMWR Morb Mortal Wkly Rep. 2023;72(34):912-919. doi: 10.15585/mmwr.mm7234a3
- ii. Centers for Disease Control and Prevention. Cancers Linked With HPV Each Year. September 18, 2024. Accessed October 3, 2024. <u>https://www.cdc.gov/cancer/hpv/cases.html</u>
- iii. Centers for Disease Control and Prevention. Cancers Caused by HPV. September 30, 2024. Accessed October 3, 2024. <u>https://www.cdc.gov/hpv/about/cancers-caused-by-hpv.html</u>
- iv. Perkins RB, Humiston S, Oliver K. Evidence supporting the initiation of HPV vaccination starting at age 9: Collection overview. *Hum Vaccin Immunother*. 2023;19(3):2269026. doi: 10.1080/21645515.2023.2269026
- v. Baandrup L, Maltesen T, Dehlendorff C, Kjaer SK. Human papillomavirus vaccination and anal high-grade precancerous lesions and cancer-a real-world effectiveness study. *J Natl Cancer Inst*. 2024;116(2):283-287. doi: 10.1093/jnci/djad189
- vi. Rosenblum HG, Lewis RM, Gargano JW, Querec TD, Unger ER, Markowitz LE. Human Papillomavirus Vaccine Impact and Effectiveness Through 12 Years After Vaccine Introduction in the United States, 2003 to 2018. *Ann Intern Med*. 2022;175(7):918-926. <u>doi: 10.7326/M21-3798</u>
- vii. Siegel RL, Giaquinto AN, Jemal A. Cancer statistics, 2024. *CA Cancer J Clin*. 2024;74(1):12-49. doi: 10.3322/caac.21820
- viii. Dempsey AF, Pyrzanowski J, Lockhart S, Campagna E, Barnard J, O'Leary ST. Parents' perceptions of provider communication regarding adolescent vaccines. *Hum Vaccin Immunother*. 2016;12(6):1469-1475. <u>doi: 10.1080/21645515.2016.1147636</u>

Appendix: Nurses and Medical Assistants

- wa How the HPV vaccine protects against cancers: <u>https://www.cdc.gov/hpv/vaccines/</u>
- ŵα Methods to improve vaccine delivery: <u>https://www.immunize.org/wp-content/uploads/catg.d/p2045.pdf</u>
- wa HPV VACs: <u>https://www.cancer.org/content/dam/cancer-org/online-documents/en/pdf/flyers/hpv-vacs-just-the-facts-for-providers.pdf</u>
- ŷα Flyers and posters: <u>https://hpvroundtable.org/resource-center/?type=14</u>
- ýα Co-brandable "Start at Age 9" Social Media Graphics: <u>https://hpvroundtable.org/resource-center/?search=starting%20 at %20age%209</u>
- ŷα Vaccines for Your Preteen: https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/Immunization/Campaigns.aspx
- ÿa HPV Vaccine Graphics: https://www.hhs.gov/immunization/get-involved/spread-the-word/graphics/index.html
- ya Trained: <u>https://www.cdc.gov/hpv/vaccines/</u>
- ya Completes the vaccination series: https://www.cdc.gov/vaccines/imz-schedules/adolescent-easyread.html
- wia Presumptive recommendation: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10305488/
- νώα Bundled recommendations: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9691592/
- wia Use every opportunity: https://www.cdc.gov/hpv/hcp/vaccination-considerations/boost-rates.html
- wwa Complete the vaccine series: https://www.cdc.gov/vaccines/imz-schedules/adolescent-easyread.html
- wyα View the HPV vaccine positively: <u>https://pubmed.ncbi.nlm.nih.gov/24315883/</u>
- wyα As important as other vaccines: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4899198/
- ŵya 2019-2021: https://pubmed.ncbi.nlm.nih.gov/37361924/
- wya Research-backed strategies: <u>https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10305488/</u>
- wyα Primary concern: https://hpvroundtable.org/wp-content/uploads/2023/05/HPVIQ-flyer-FINAL.pdf
- νίyα Main reasons: <u>https://pubmed.ncbi.nlm.nih.gov/30348283/</u>
- ŵha FAQs About HPV: <u>https://www.healthychildren.org/English/safety-prevention/immunizations/Pages/hpv-vaccine-what-parents-need-to-know.aspx</u>
- wiα Talking with Parents about HPV Vaccination: <u>https://www.cdc.gov/hpv/hcp/vaccination-considerations/talking-with-parents.html</u>
- ŵûα Questions Parents may Ask about Vaccines: <u>https://www.cdc.gov/vaccines-children/hcp/conversation-tips/questions-parents-may-ask.html</u>
- ŵ̈̈̈a HPV Vaccines: https://www.cancer.org/cancer/risk-prevention/hpv/hpv-vaccines.html
- ŵa Standing orders: https://www.aap.org/en/patient-care/immunizations/implementing-immunization-administration-inyour-practice/office-strategies-for-improving-immunization-rates/
- ŵyα Competency training: <u>https://www.aap.org/en/patient-care/immunizations/implementing-immunization-administration-in-your-practice/vaccine-administration/</u>
- ŵŷα Electronic health records (EHRs): https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10145812/
- ŵÿα Vaccination program tools: <u>https://www.merckvaccines.com/vaccine-resources-tools/healthcare-information-</u> <u>technology-ehr/</u>
- ŵya Immunization information system (IIS): <u>https://www.cdc.gov/iis/contacts-locate-records/</u>
- ŵya That current vaccination records are captured accurately: <u>https://www.cdc.gov/iis/technical-guidance/</u>
- wixa Patient reminder and recall strategies: https://www.aap.org/en/patient-care/immunizations/implementingimmunization-administration-in-your-practice/reminder-and-recall-strategies/
- wixa Promising Best Practices: An Illustrated Guide: <u>https://hpvroundtable.org/wp-content/uploads/2024/02/ACS_Promising-Best-Practice-Booklet.pdf</u>

- 32. Improving HPV Vaccination Rates Using Maintenance of Certification Requirements: <u>https://publications.aap.org/pediatrics/</u> article-abstract/137/3/e20150675/81405/Improving-HPV-Vaccination-Rates-Using-Maintenance?redirectedFrom=fulltext
- 33. Immunization Quality Improvement for Providers (IQIP): https://www.cdc.gov/iqip/hcp/strategies/index.html
- 34. Strong vaccination recommendations: https://www.cdc.gov/iqip/hcp/strategies/strong-vaccine-recommendation.html
- 35. Strengthen vaccination communications: <u>https://www.cdc.gov/iqip/hcp/strategies/strengthen-vaccination-communications.html</u>
- 36. QI Tools: https://www.hpviq.org/resources/qi-tools
- 37. Vaccination Program Tools: https://www.merckvaccines.com/vaccine-resources-tools/vaccine-recommendations/
- 38. QI Essentials Toolkit: https://www.ihi.org/resources/tools
- 39. Start HPV Vaccination at Age 9: https://hpvroundtable.org/start-hpv-vaccination-at-age-9/
- 40. 2023 Human Vaccines & Immunotherapeutics Collection Toolkit: <u>https://hpvroundtable.org/wp-content/uploads/2023/05/</u> <u>HPV-RT-HVI-Supplement-Toolkit_-Final-v2.pdf</u>
- 41. HPV Vaccination at 9 12 Years of Age: An Evidence Summary: <u>https://hpvroundtable.org/wp-content/uploads/2023/05/</u> Evidence-Summary-HPV-Vaccination-Age-9-12-Final-1.pdf
- 42. Start at Age 9 Print On-demand Toolkit: <u>https://hpvroundtable.org/wp-content/uploads/2023/05/FINAL_NW-Summit-Clinic-Toolkit-Print-On-Demand-Kits.pdf</u>
- 43. Why Age 9? Fact Sheet: <u>https://hpvroundtable.org/wp-content/uploads/2023/05/HPV_Roundtable-HPV_Why_Age_9_Sales_Sheet_WEB.pdf</u>
- 44. 2024 National HPV Vaccination Roundtable Impact Report and Action Plan: <u>https://hpvroundtable.org/wp-content/uploads/2024/01/2024-HPVRT-Impact-Report-and-Action-Plan__Final.pdf</u>
- 45. ACS National HPV Vaccination Roundtable Resource Center: https://hpvroundtable.org/resource-center/
- 46. ACS National HPV Vaccination Roundtable Video Collection: https://www.youtube.com/@HPVRoundtable/featured
- 47. ACS Recommendations for HPV Vaccine Use: <u>https://www.cancer.org/cancer/risk-prevention/hpv/acs-recommendations-for-hpv-vaccine-use.html</u>
- 48. ACS HPV Information and Resources for Patients and Parents: https://www.cancer.org/cancer/risk-prevention/hpv.html
- 49. ACS HPV Vaccine Information for Health Professionals: <u>https://www.cancer.org/health-care-professionals/hpv-vaccination-information-for-health-professionals.html</u>
- 50. American Academy of Pediatrics: Adolescent Immunization Discussion Guides: <u>https://www.aap.org/en/patient-care/</u> <u>immunizations/adolescent-immunization-discussion-guides/</u>
- 51. CDC: HPV Resources: https://www.cdc.gov/hpv/
- 52. HPV Data Sources: https://hpvroundtable.org/wp-content/uploads/2023/09/HPV-Data-Sources.pdf
- 53. Immunize.org: Vaccine Apps for Health Care Providers: <u>https://www.immunize.org/clinical/external/apps/</u>

Acknowledgments

The American Cancer Society National HPV Vaccination Roundtable would like to thank all members of the Provider Training Task Group for participating in the development of the six clinical action guides. Visit our website to view the entire suite of guides.

Collaborative Project: The Clinician & Systems Action Guides are a collaborative project of the member organizations of the American Cancer Society National HPV Vaccination Roundtable. Guides do not necessarily represent the views of all of the American Cancer Society National HPV Vaccination Roundtable member organizations.

Funding: Funding for this guide was made possible (in part) by the Centers for Disease Control (CDC) and Prevention Cooperative Agreement grant # CDC-RFA-IP21-2105, CFDA # 93.268. The content in this guide does not necessarily reflect the official policies of the Department of Health and Human Services, nor does the mention of trade names, commercial practices, or organizations imply endorsement by the US Government.

Version 2.0 released 2024

hpvroundtable.org

©2024, American Cancer Society, Inc. No. 081216 Rev. 10/24 Models used for illustrative purposes only.