



NATIONAL
HPV
VACCINATION
ROUNDTABLE

Cancer Prevention Through HPV Vaccination:

An Action Guide for Large Health Systems

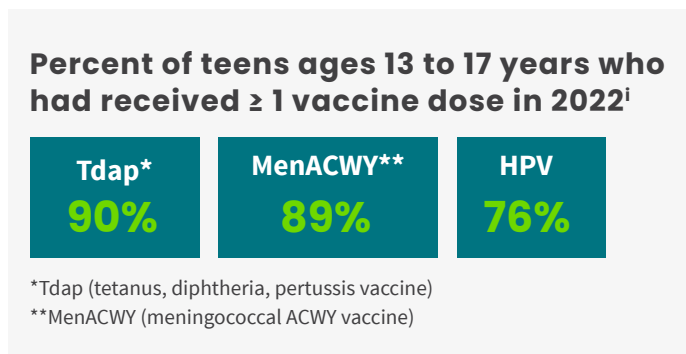


HPV Cancer Prevention Starts With Your Health System

Your health system has the power to make a lasting impact on human papillomavirus (HPV) vaccination rates. By implementing system changes to improve vaccination rates starting at age 9, your health system can help reduce the burden of HPV cancers and lower the financial hardships associated with them.

HPV vaccination rates lag behind other preteen vaccines.

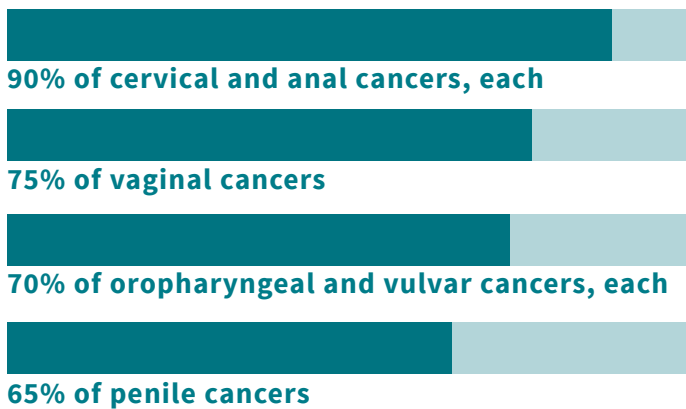
The HPV vaccine is a powerful tool to help prevent multiple cancers, yet HPV vaccination rates are lower than those of other preteen vaccines.



HPV vaccination is cancer prevention.

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

HPV is linked to:ⁱⁱ



The HPV vaccine protects against the virus types that cause most HPV cancers and genital warts. It's estimated that HPV vaccination can help 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,^{vii} who were among the first cohort of preteens to receive the vaccine.





Missed opportunities for vaccination could contribute to low HPV vaccination rates.

Implementing a consistent, timely, and evidence-based approach to messaging is key to improving HPV vaccination rates and reducing disparities.^{viii}

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

Why Prioritize HPV Vaccination?

Decrease costs.

Preventing HPV cancers and precancers is less expensive than treating them.^{ix} The National Cancer Institute reported that \$2.3 billion was spent nationally on cervical cancer care in 2020.^x

HPV vaccination is included as a [Merit-based Incentive Payment System \(MIPS\)](#)¹ clinical quality measure.

Improve quality of care.

Timely HPV vaccination administration can have a positive impact on organizational quality measures for childhood immunizations and pediatric well-care visits.

Improving organizational HPV vaccination practices works to mitigate racial and geographical disparities in the burden of HPV pathologies.^{xi}

Improve patient experiences.

HPV vaccination offers lifelong protection against most HPV precancers and cancers.

On-time vaccination means patients only need two doses instead of three, saving parents or guardians and patients money and time.



Actions at-a-Glance

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



Strategies to Increase HPV Vaccination

Action 1

Establish an HPV vaccination team to monitor and improve HPV vaccination rates.

Action 2

Educate system leadership.

Action 3

Create a pro-vaccination environment.

Action 4

Reduce missed opportunities for vaccination through evidence-based interventions.

Action 5

Evaluate, sustain, and celebrate success.

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., a [Merit-based Incentive Payment System \[MIPS\]^{1\)}\).](#)

Actions Your Health System Can Take

Action 1: Establish an HPV vaccine team to monitor and improve HPV vaccination rates.

A [whole-office approach](#)² to HPV vaccination is key for continuous improvement and can be particularly effective when used in a complex, integrated health system.



Who to Include on Your HPV vaccine Team



Invite clinical and nonclinical staff to serve as team members.



Identify a [“champion”](#)³ among the group to galvanize the team and lead outreach to system leadership. This person should have scheduled administrative time to guide the initiative.



Engage external groups, like local immunization partners, health departments, American Cancer Society affiliates, or pediatric society chapters.

Tasks to Guide Team Success



Identify patients ages 9 to 13 in your health system. When pulling data from electronic health records (EHRs), remember to exclude nonprimary care patients, including those from the emergency department, urgent care, and specialty visits.



Monitor and report HPV vaccination rates by provider, location, and/or system to identify high and low performers.



Consider tracking cases of genital warts, HPV cancers, HPV precancers, positive HPV test results, and/or abnormal Pap smear results.



Develop an [action plan](#)⁴ that includes improvement goals and objectives for a specific period of time.

Action 2: Educate system leadership.

Securing support from C-suite leadership is critical for creating sustainable systems change.

Step 1

Review the HPV Vaccination Team action plan with leadership and ensure that they understand [why the HPV vaccine is important](#)⁵ and how it can improve patient outcomes.

Step 2

If available, provide leadership with data showing the number of patients diagnosed with HPV cancers over the past 10 years. Highlight how increasing vaccination uptake can help reduce the number of cases by [up to 90%](#).⁶

Step 3

Provide regular progress updates, and inform leadership of any system barriers.

Action 3: Create a pro-vaccination environment.

Create a cancer prevention and pro-immunization culture by communicating the importance of HPV vaccination to your colleagues.

- Consider developing a simple, clear organizational message: **“The XYZ health care system recommends vaccinations to help protect against meningitis, HPV cancers, and pertussis for all age-eligible patients.”**
- Train all appropriate staff on [processes and messaging](#)⁸ and address common misconceptions. Repeat trainings as needed or offer [continuing education opportunities for health professionals](#).⁹
- Focus on the HPV vaccine as cancer prevention and include information during upcoming grand rounds. Instruct providers to use evidence-based HPV vaccination messaging by:
 - Offering [presumptive vaccination recommendations starting at age 9](#)⁷
 - or
 - Giving bundled recommendations (to include HPV, Tdap, and/or men ACWY vaccinations) starting at age 11 or 12
- Build a culture that supports HPV vaccination.
 - Organize an [HPV cancer survivor](#)¹¹ or HPV vaccination champion speaker panel to inspire both leadership and staff.
 - Send out newsletters that share successes and challenges and reiterate why improving HPV vaccination rates is important to your system.

Resource Center

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

- Download and print flyers and posters from the [American Cancer Society National HPV Vaccination Roundtable](#).¹⁰

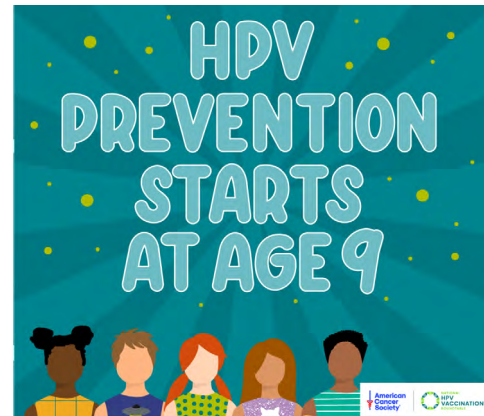


Action 4: Reduce missed opportunities for vaccination.

Evidence-based interventions can help your health system improve HPV vaccination uptake.

- Establish [standing orders](#)¹² to facilitate efficient vaccine administration to patients by properly trained medical staff to reduce workload demands on physicians.

- Ensure that all staff who administer vaccines receive competency training on immunization administration.
- Provide guidance on how to [facilitate conversations](#)¹³ with parents or guardians who are hesitant about HPV vaccination.



- Use [EHRs](#)¹⁴ to send patient reminders and give provider prompts starting at age 9.

- Optimize EHR functionality to capture all doses.
- Use EHR data to guide quality improvement (QI) efforts.
- Improve data collection by using [vaccination program tools](#)¹⁵ or short training videos to standardize processes.



- Connect to your state's [immunization information system \(IIS\)](#)¹⁶ and ensure that [current vaccination records are captured accurately](#)¹⁷ in both systems.

- Establish [patient reminder and recall strategies](#),¹⁸ and consider how to optimize your efforts via text messaging, mail, email, social media and/or phone calls.



Expert-recommended QI Strategies

There are a wide variety of QI strategies to improve HPV vaccination rates. Explore and test which of the following can work best for your health system.

- ACS National HPV Vaccination Roundtable: [Promising Best Practices: An Illustrated Guide](#)¹⁹
- American Academy of Pediatrics: [Improving HPV Vaccination Rates Using Maintenance of Certification Requirements](#)²⁰
- CDC: [Immunization Quality Improvement for Providers \(IQIP\)](#),²¹ which offers programs to implement strategies to give [strong vaccine recommendations](#)²² and to [strengthen vaccine communications](#).²³
- HPV IQ: [QI Tools](#)²⁴
- Merck Vaccines: [Vaccination Program Tools](#)²⁵
- Institute for Healthcare Improvement: [QI Essentials Toolkit](#)²⁶

Action 5: Evaluate, sustain, and celebrate success

Monitor your system's progress to keep your cancer prevention mission on track and to thank your staff for their efforts.

Evaluate.

Establish ways to regularly evaluate the ongoing success of your efforts throughout your health system.

Sustain.

Establish an HPV QI [Performance Dashboard](#)²⁷ online or post in staff work areas.

Leverage [IIS](#)²⁸ to inform assessments of vaccination uptake in your system or across racial or ethnic subgroups. IIS can also help identify missed vaccination opportunities, as well as facilitate inventory management and accountability.

Celebrate success.

Recognize clinicians, clinics, practices, or other groups with consistently high and/or increasing HPV vaccination rates.

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


Additional Resources


- [Start HPV Vaccination at Age 9](#)²⁹
 - [2023 Human Vaccines & Immunotherapeutics Collection Toolkit](#)³⁰
 - [HPV Vaccination at 9 – 12 Years of Age: An Evidence Summary](#)³¹
 - [Start at Age 9 Print On-demand Toolkit](#)³²
 - [Why Age 9? Fact Sheet](#)³³
- [2024 ACS National HPV Vaccination Roundtable Impact Report and Action Plan](#)³⁴
- [ACS National HPV Vaccination Roundtable Resource Center](#)³⁵
- [ACS National HPV Vaccination Roundtable Video Collection](#)³⁶
- [ACS Recommendations for HPV Vaccine Use](#)³⁷
- [ACS HPV Information and Resources for Patients and Parents](#)³⁸
- [ACS HPV Vaccine Information for Health Professionals](#)³⁹
- [American Academy of Pediatrics: Adolescent Immunization Discussion Guides](#)⁴⁰
- [CDC: HPV Resources](#)⁴¹
- [CDC: HPV Continuing Education](#)⁴²
- [HPV Data Sources](#)⁴³
- [Immunize.org: Vaccine Apps for Health Care Providers](#)⁴⁴



Follow the American Cancer Society National HPV Vaccination Roundtable.

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Appendix: Large Health Systems

1. Merit-based Incentive Payment System (MIPS): <https://www.healthit.gov/topic/federal-incentive-programs/MACRA/merit-based-incentive-payment-system>
2. Whole-office approach: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6135237/>
3. “Champion”: <https://www.aafp.org/family-physician/patient-care/prevention-wellness/immunizations-vaccines/office-champions/get-started.html>
4. Action plan system: <https://www.aafp.org/family-physician/patient-care/prevention-wellness/immunizations-vaccines/office-champions/implement-test.html>
5. Why the HPV vaccine is important: <https://www.cdc.gov/hpv/hcp/educational-resources/index.html>
6. Up to 90%: <https://www.cdc.gov/hpv/about/cancers-caused-by-hpv.html>
7. Presumptive vaccination recommendations starting at age 9: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10305488/>
8. Processes and messaging: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10305488/>
9. Continuing education opportunities for health professionals: https://www.cdc.gov/immunization-training/hcp/courses/?CDC_AAref_Val=https://www.cdc.gov/vaccines/ed/courses.html
10. American Cancer Society HPV Vaccination Roundtable: <https://hpvroundtable.org/resource-center/>
11. HPV cancer survivor: <https://www.youtube.com/watch?v=fxMK-dnNFzM&list=PLpB8X9MugZYaPx-OieXYhfXEpsZCkYwB>
12. Standing orders: <https://www.aap.org/en/patient-care/immunizations/implementing-immunization-administration-in-your-practice/office-strategies-for-improving-immunization-rates/>
13. Facilitate conversations: <https://www.cdc.gov/hpv/hcp/vaccination-considerations/talking-with-parents.html>
14. EHRs: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10145812/>
15. Vaccination program tools: <https://www.merckvaccines.com/tools-and-resources/vaccination-program-tools/>
16. Immunization information system (IIS): <https://www.cdc.gov/iis/contacts-locate-records/>
17. Current vaccination records are captured accurately: <https://www.cdc.gov/iis/technical-guidance/>
18. Patient reminder and recall strategies: <https://www.aap.org/en/patient-care/immunizations/implementing-immunization-administration-in-your-practice/>
19. Promising Best Practices: An Illustrated Guide: https://hpvroundtable.org/wp-content/uploads/2024/02/ACS_Promising-Best-Practice-Booklet.pdf
20. Improving HPV Vaccination Rates Using Maintenance of Certification Requirements: <https://publications.aap.org/pediatrics/article-abstract/137/3/e20150675/81405/Improving-HPV-Vaccination-Rates-Using-Maintenance?redirectedFrom=fulltext?autologincheck=redirected>
21. Immunization Quality Improvement for Providers (IQIP): <https://www.cdc.gov/iqip/hcp/strategies/index.html>
22. Strong vaccination recommendations: <https://www.cdc.gov/iqip/hcp/strategies/strong-vaccine-recommendation.html>
23. Strengthen vaccination communications: <https://www.cdc.gov/iqip/hcp/strategies/strengthen-vaccination-communications.html>
24. QI Tools: <https://www.hpvqi.org/resources/qi-tools>
25. Vaccination Program Tools: <https://www.merckvaccines.com/vaccine-resources-tools/vaccine-recommendations/>
26. QI Essentials Toolkit: <https://www.ihl.org/resources/tools>
27. Performance Dashboard: <https://vaccinationtrends.com/>
28. IIS: <https://hpvroundtable.org/wp-content/uploads/2024/01/ACS-HPVRT-Best-Practices-HPV-Data.png>
29. Start HPV Vaccination at Age 9: <https://hpvroundtable.org/start-hpv-vaccination-at-age-9/>
30. 2023 Human Vaccines & Immunotherapeutics Collection Toolkit: https://hpvroundtable.org/wp-content/uploads/2023/05/HPV-RT-HVI-Supplement-Toolkit_Final-v2.pdf
31. HPV Vaccination at 9 – 12 Years of Age: An Evidence Summary: <https://hpvroundtable.org/wp-content/uploads/2023/05/Evidence-Summary-HPV-Vaccination-Age-9-12-Final-1.pdf>
32. Start at Age 9 Print On-demand Toolkit: https://hpvroundtable.org/wp-content/uploads/2023/05/FINAL_NW-Summit-Clinic-Toolkit-Print-On-Demand-Kits.pdf
33. Why Age 9? Fact Sheet: https://hpvroundtable.org/wp-content/uploads/2023/05/HPV_Roundtable-HPV_Why_Age_9_Sales_Sheet_WEB.pdf
34. 2024 National HPV Vaccination Roundtable Impact Report and Action Plan: <https://hpvroundtable.org/wp-content/uploads/2024/01/2024-HPVRT-Impact-Report-and-Action-Plan-Final.pdf>
35. ACS National HPV Vaccination Roundtable Resource Center: <https://hpvroundtable.org/resource-center/>
36. ACS National HPV Vaccination Roundtable Video Collection: <https://www.youtube.com/@HPVRoundtable/featured>
37. ACS Recommendations for HPV Vaccine Use: <https://www.cancer.org/cancer/risk-prevention/hpv/acs-recommendations-for-hpv-vaccine-use.html>
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40. American Academy of Pediatrics: Adolescent Immunization Discussion Guides: <https://www.aap.org/en/patient-care/immunizations/adolescent-immunization-discussion-guides/>
41. CDC: HPV Resources: <https://www.cdc.gov/hpv/>
42. CDC: HPV Continuing Education: https://www.cdc.gov/immunization-training/hcp/courses/?CDC_AAref_Val=https://www.cdc.gov/vaccines/ed/courses.html
43. HPV Data Sources: <https://hpvroundtable.org/wp-content/uploads/2023/09/HPV-Data-Sources.pdf>
44. Immunize.org: Vaccine Apps for Health Care Providers: <https://www.immunize.org/clinical/external/apps/>

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