

Cancer Prevention Through HPV Vaccination: An Action Guide for Small Private Practices



ACKNOWLEDGMENTS

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Your practice has the power to make a lasting impact on human papillomavirus (HPV) vaccination and help reduce the HPV cancer burden in your community.

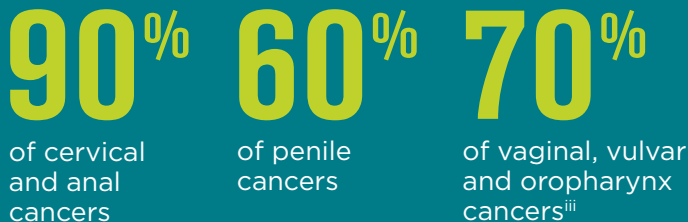
HPV cancer prevention starts in your practice.

We invite you to join the national “We’re In”² movement to prevent HPV cancers and pre-cancers. By instituting system changes to improve HPV vaccination, **your health care practice can reduce future suffering and may save patients’ lives.**

The Problem

The HPV vaccine is a powerful tool to prevent multiple cancers, yet vaccination rates lag behind those of other preteen vaccines. HPV causes about 31,500 cases of cancer in men and women each year in the U.S.ⁱ Nearly all cases of cervical cancer are caused by HPV, and the virus also causes many cancers of the vagina, vulva, penis, anus, and oropharynx.ⁱⁱ

HPV is linked with:



The HPV vaccine prevents infection by virus types that cause the vast majority of these cancers and genital warts. In fact, HPV vaccination may help to eliminate cervical cancer, which takes the lives of over 4,000 women in the U.S. each year.^{iv}

Missed opportunities for vaccination contribute to low HPV vaccination rates. A high-quality recommendation from a clinician is a powerful motivator of HPV vaccine acceptance, but many clinicians deliver the HPV vaccine recommendation hesitantly, late, or not at all.^v

The Solution

The HPV vaccine is cancer prevention. Boys and girls should get the HPV vaccine series at age 11 or 12. The vaccine can be given starting as early as age 9. The HPV vaccine is most effective when given before age 13 to achieve the best immune response, and it provides long-lasting protection.^{vi}

HPV vaccination works. Infections with the HPV types that cause most HPV cancers and genital warts have dropped 71% among teen girls since children first started getting the vaccine in 2006.^{vii} [Get more facts.](#)³



Make it your practice’s goal to identify and vaccinate every age-eligible child in your care. Every member of your practice should understand and advocate for HPV vaccination as cancer prevention and should work together to reduce missed opportunities for vaccination.

Be a part of the cancer prevention community. The pages that follow have actions you can take to begin increasing HPV vaccination within your practice **today.**





Actions At-A-Glance

Visit the action associated with each item below for detailed guidance.

Evidence-based interventions:

Standing orders	Action 3
Provider prompts	Action 3
Presumptive recommendations	Action 3
Patient reminder and recall systems	Action 3
Plan-Do-Study-Act cycles	Action 5

Other strategies you can use:

Take a team approach	Action 1, Action 2
Reduce financial barriers	Action 4
Create a pro-immunization environment	Patient Education Tools

WHY PRIORITIZE HPV VACCINATION?

1 Provide quality care to your patients

- Vaccinating children is standard care. Consult CDC's [decision tree](#)⁴ on dose delivery.
- The American Academy of Pediatrics (AAP), American Academy of Family Physicians (AAFP), and American College of Obstetricians and Gynecologists (ACOG) all recommend HPV vaccination as part of the [adolescent platform](#)⁵ for boys and girls at ages 11 to 12.
- [Bundling the HPV vaccine](#)⁶ with Tdap and meningococcal vaccines builds upon your existing immunization success.
- Your practice can improve HPV vaccination by applying [interventions proven to work](#).⁷

2 Reduce future disease and costs for your patients

- The vaccines you provide to patients now are expected to [protect them](#)⁸ for the rest of their lives.
- Vaccinating “on time” (i.e., patients receive two doses before their 15th birthday) saves parents and patients time and money by reducing the number of office visits to complete the series.
- Prevention of HPV cancers now is less expensive for your patients than testing for and treating cancers and pre-cancers later.
- The cost of the HPV vaccine is regularly covered (by [insurance](#)⁹ or the [Vaccines for Children \[VFC\]](#)¹⁰ Program), as with all childhood vaccinations.
- HPV vaccination prevents over 90% of cervical cancer cases and reduces costs associated with abnormal Pap tests, office visits, and procedures for cervical cancer prevention.
- Nationally, \$1.7 billion is spent annually in direct medical costs to treat conditions associated with genital HPV infections^{viii}—imagine the resource savings generated through prevention!

3 Enhance your role as a champion for patients

- Focusing on patient wellness and cancer prevention reinforces your reputation as a practice that cares deeply about its patients.
- Making annual well-child visits inclusive of HPV vaccination can lead to a healthier patient population.
- Family-focused interventions such as [vaccine reminder calls and advance scheduling](#)¹¹ are proven effective in increasing the completion of the HPV series.^{ix}



ACTIONS YOUR PRACTICE CAN TAKE

■ Action 1 Identify an HPV vaccine champion

Establishing an [HPV vaccination clinic champion](#)¹² is critical in a small practice. The champion will help structure and drive organization change.

- Provide the champion with scheduled administrative time to plan and lead efforts.
- Empower the champion to [assemble an HPV vaccine team](#)¹³ of clinical and non-clinical staff and foster collaboration by holding brainstorm sessions and [huddles](#).¹⁴ Depending on the size of your practice, your team may include all your staff.
- Together, the team should:
 - Identify the number of patients ages 9–13 in your practice.
 - Set [quality improvement \(QI\)](#)¹⁵ priorities and objectives.
 - Report baseline rates to leadership from the outset to show improvement as efforts take effect.
 - [Create a plan](#)¹⁶ and a timeline to roll out process improvements throughout the practice and share this plan with leadership.
 - Provide [in-service training](#)¹⁷ for the entire practice on HPV vaccination and establish [consistent messaging](#)¹⁸ to be used by all staff.
 - Motivate every member of the practice to become an HPV vaccine champion.

For older patients who were not vaccinated on time (i.e., at ages 11–12), vaccination may be given up to age 26 for females and males. Consult the Immunization Action Coalition's [Ask the Experts](#)¹⁹ HPV forum for guidance.

■ Action 2 Secure buy-in from leadership

Engage practice leadership early in the process and demonstrate how improving rates can advance the business objectives of the practice. Leadership support is key for creating sustainable practice changes.

- Review the team's QI plan with leadership, and communicate the importance of the HPV vaccine in improving patient outcomes and reducing costs.
- Provide regular progress updates to leadership, and ask for help in removing any barriers they can positively influence.
- Leadership can also effectively promote and model HPV vaccination strategies. Engage them in voicing support for the HPV vaccine team's efforts.



■ Action 3 Minimize missed opportunities

One of the most important ways to increase vaccination in your practice is by using every visit to provide vaccination and keep patients up to date on all immunizations.

- Provide an opportunity for vaccination-only visits or offer evening/weekend clinic hours.
- Promote a practice culture that is pro-immunization.
- Establish evidence-based interventions and QI programs to increase HPV vaccination rates:
 - [Establish standing orders](#)²⁰ (procedures to facilitate efficient delivery of vaccines to age-eligible patients by properly trained medical staff other than a physician).
 - Ensure that all staff who administer vaccines receive competency training on administering the HPV vaccine.
 - [Standing orders](#)²¹ can reduce missed opportunities and help alleviate workload demands on physicians.
 - Eligible staff must be committed and empowered to act on standing orders.
 - Use electronic health records (EHR) to [send patient reminders](#)²² and give [provider prompts](#).²³
 - Optimize EHR functionality to capture two doses.
 - Leverage your EHR data to inform patient care and QI efforts.
 - Improve data collection by training staff on exactly what data to capture and which fields to complete. Use [job aids](#)²⁴ or short training videos to standardize processes.
- Connect to your state's [immunization information system \(IIS\)](#)²⁵ to [pull down/upload](#)²⁶ current vaccination records. Check with your state health department to see what services they offer.
- Establish patient [reminder and recall systems](#)²⁷ and consider how to optimize via text messaging, mail, email, and/or phone calls.
- Instruct providers to give a strong [bundled](#)²⁸ and [presumptive recommendation](#).²⁹ Consider implementing a [Maintenance of Certification](#)³⁰ HPV vaccination QI project.^x
- Apply QI strategies recommended by the experts:
 - HPV VACs: [Steps for Increasing HPV Vaccination in Practice](#)³¹
 - AAP: [HPV Champion Toolkit: Making a Change in Your Office](#)³²
 - CDC: [AFIX Programs](#)³³ (for [VFC](#)³⁴ providers)
 - CDC: [Quality Improvement and Evidence Based Interventions](#)³⁵
 - HPV IQ: [Immunization Quality Improvement Tools](#)³⁶
 - Massachusetts Department of Public Health: [Top Strategies for Increasing Immunization Coverage Rates](#)³⁷
 - Merck Vaccines: [Health Care Provider-Generated Ideas for Process Improvement](#)³⁸
 - NFID: [5 Key Steps Infographic](#)³⁹



■ Action 4 Adopt strategies to reduce financial barriers

- Refer to the manufacturer's [coding cheat sheet](#)⁴⁰ to improve accurate billing.
- Consult with your practice's primary payors to determine what resources, materials, or practice incentives they may offer.
- Explore cost sharing or group purchasing with other practices/systems to decrease costs.
 - Learn more about [financing, ordering, and maintaining vaccine supply](#).⁴¹
- Reduce barriers for uninsured or underinsured patients by partnering with:
 - Local health departments
 - State cancer consortiums
 - School nurse associations
 - [Federally Qualified Health Centers](#)⁴²
 - [VFC Program](#)⁴³ (identify your VFC coordinator by contacting your [state/local or territorial immunization program](#)⁴⁴)
- If your practice does not stock the HPV vaccine, consider partnering with public health or community vaccination providers.

■ Action 5 Evaluate, sustain, and celebrate success

Monitor your practice and provider-specific HPV vaccination rates. This will help uncover opportunities for improvement.

- Establish [systematic methods](#)⁴⁵ to regularly evaluate the ongoing success of your efforts.
 - Conduct [Plan-Do-Study-Act \(PDSA\)](#)⁴⁶ cycles. Consider the following end points for PDSAs: reduce missed opportunities, raise age of data capture to 14, capture first doses, capture completion of series or up-to-date.
 - Give providers [feedback](#)⁴⁷ on their performance.
 - Utilize [IIS](#)⁴⁸ to inform vaccination coverage assessments, missed vaccination opportunities, invalid dose administration, and vaccination coverage disparities. IIS can also facilitate inventory management and accountability.
 - Consider tracking cases of genital warts, HPV cancers (if able to differentiate), and abnormal Pap smear results.
- Celebrate success! Recognize clinicians with consistently high and/or increasing HPV vaccination rates.



If your practice implements changes and sees positive results in your HPV vaccination rates, let us know! Please send your story to HPV.Vaccination.Roundtable@cancer.org.

Resource Citations:

- i <https://www.cdc.gov/cancer/hpv/statistics/cases.htm>
- ii Ibid.
- iii Ibid.
- iv <https://www.cdc.gov/cancer/cervical/statistics/index.htm>
- v <http://pediatrics.aappublications.org/content/early/2016/12/01/peds.2016-1764.full>
- vi <http://pediatrics.aappublications.org/content/140/6/e20163947>
- vii <https://www.cdc.gov/mmwr/volumes/66/wr/mm6633a2.htm>
- viii <https://www2a.cdc.gov/stdtraining/ready-to-use/Manuals/HPV/hpv-notes-2013.docx>
- ix <http://pediatrics.aappublications.org/content/131/6/1114>
- x <http://pediatrics.aappublications.org/content/early/2016/02/01/peds.2015-0675>

Create a pro-immunization environment by displaying posters, brochures, flyers, and handouts. Use pro-immunization messaging on your online channels including patient portals, your practice website, and social media outlets.

Materials you can use:

- Adolescent immunization schedules⁴⁹
- Fact sheet: Diseases and the Vaccines that Prevent Them: HPV⁵⁰



- Flyers and posters: CDC's Flyers and Posters for Preteens and Teens⁵¹
- Industry handout: 4 Things a Parent Needs to Know About Human Papillomavirus (HPV)⁵²
- Sample flyer: HPV Vaccine: Cancer Prevention for Boys and Girls⁵³
- Social media messages: HPV Vaccine Myth Busting for Health Care Providers Social Media Toolkit⁵⁴

Follow the National HPV Vaccination Roundtable:



<https://twitter.com/HPVRoundtable>
<https://www.facebook.com/groups/HPVCancerFreeFamily>

National HPV Vaccination Roundtable Resources:

- Elearning module: *Increasing Adolescent Immunization Coverage*—free 1-credit CME⁵⁵ or non-credit version⁵⁶
- HPV survivor videos⁵⁷
- Middle School Health Parent Toolkit⁵⁸
- HPV Resource Library⁵⁹
- Short video: *Protecting Your Patients from HPV-Associated Cancer: What Providers Need to Know about Oropharyngeal Cancer*⁶⁰

Additional National HPV Vaccination Roundtable and Partner Resources:

- ACS: Just the Facts⁶¹
- ACS: Steps to Increasing Vaccination in Your Practice⁶²
- AAFP: Immunizations website⁶³
- AAP: HPV Champion Toolkit⁶⁴
- ACOG: HPV Vaccination Toolkit⁶⁵
- CDC: Clinician Fact Sheets and Guidance⁶⁶
- NCI: NCI-designated Cancer Centers Urge HPV Vaccination for the Prevention of Cancer: Consensus Statement⁶⁷

Looking for action guides to share with other practice staff and clinicians?

Find [companion guides](#)⁶⁸ tailored to physicians, nurse practitioners, and physician assistants; nurses and medical assistants; and office teams in the National HPV Vaccination Roundtable's [Resource Library](#).⁶⁹

APPENDIX: SMALL PRIVATE PRACTICES

1. Suite of guides: <http://hpvroundtable.org/task-groups/action-guides/>
2. We're In: <http://hpvroundtable.org/were-in/>
3. Get more facts: <http://hpvroundtable.org/wp-content/uploads/2017/11/HPV-Vaccine-Just-the-Facts-6-pager.pdf>
4. Decision tree: <https://www.cdc.gov/hpv/downloads/hpv-2-dose-decision-tree.pdf>
5. Adolescent platform: <https://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html>
6. Bundling the HPV vaccine: <http://www.aafp.org/patient-care/public-health/immunizations/disease-population/hpv.html>
7. Interventions proven to work: <https://www.hpviq.org/>
8. Protect them: <https://www.cdc.gov/hpv/hcp/need-to-know.pdf>
9. Insurance: <https://www.merckvaccines.com/Professional-Resources/Reimbursement-PlanSpecific>
10. Vaccines for Children [VFC]: <https://www.cdc.gov/vaccines/programs/vfc/index.html>
11. Vaccine reminder calls and advance scheduling: <http://pediatrics.aappublications.org/content/131/6/1114>
12. HPV vaccination clinic champion: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/HPV-Champion-Toolkit/Pages/HPV-Champion-Toolkit.aspx>
13. Assemble an HPV vaccine team: <http://hpvroundtable.org/wp-content/uploads/2017/11/Steps-for-Increasing-HPV-Vaccination-in-Practice.pdf>
14. Huddles: https://www.aap.org/en-us/Documents/hpvtoolkit_teamhuddle_hpv_2015_may.pdf
15. Quality improvement (QI): <https://www.hpviq.org>
16. Create a plan: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/HPV-Champion-Toolkit/Pages/Making-a-Change-in-Your-Office.aspx>
17. In-service training: http://hpvroundtable.org/wp-content/uploads/2017/10/YouAreTheKey_2017_update-fullset.pptx
18. Consistent messaging: <https://www.mysocietysource.org/sites/HPV/ResourcesandEducation/Lists/Clearinghouse/Attachments/228/2.4-Message%20Map-COLOR.pdf>
19. Ask the Experts: http://www.immunize.org/askexperts/experts_hpv.asp
20. Establish standing orders: <http://www.academicpediatrics.org/NIPA/assets/PDF/10StepsForStandingOrders.pdf>
21. Standing orders: <http://www.immunize.org/standing-orders/>
22. Send patient reminders: <https://www.healthit.gov/providers-professionals/achieve-meaningful-use/menu-measures/patient-reminders>
23. Provider prompts: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4762366/>
24. Job aids: <https://www.merckvaccines.com/Professional-Resources/EHRRelatedTools>
25. Immunization information system (IIS): <https://www.cdc.gov/vaccines/programs/iis/contacts-locate-records.html>
26. Pull down/upload: https://www.aap.org/en-us/Documents/healthInitiatives_hpvtoolkit_cleaning_iis_data_2015.pdf
27. Reminder and recall systems: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/Practice-Management/Pages/reminder-recall-systems.aspx>
28. Bundled: <http://www.aafp.org/patient-care/public-health/immunizations/disease-population/hpv.html>
29. Presumptive recommendation: <http://pediatrics.aappublications.org/content/early/2016/12/01/peds.2016-1764.full>
30. Maintenance of Certification: <https://www.cdc.gov/vaccines/ed/quality-improvement-proj.html>
31. Steps for Increasing HPV Vaccination in Your Practice: <http://hpvroundtable.org/wp-content/uploads/2017/11/Steps-for-Increasing-HPV-Vaccination-in-Practice.pdf>
32. HPV Champion Toolkit: Making a Change in Your Office: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/HPV-Champion-Toolkit/Pages/Making-a-Change-in-Your-Office.aspx>
33. AFIX Programs: <https://www.cdc.gov/vaccines/programs/afix/index.html>
34. VFC: <https://www.cdc.gov/vaccines/programs/vfc/index.html>
35. Quality Improvement and Evidence-Based Interventions: <https://www.cdc.gov/hpv/partners/outreach-hcp/quality-improvement.html>
36. Immunization Quality Improvement Tools: <https://www.hpviq.org/>

37. Top Strategies for Increasing Immunization Coverage Rates:
<http://www.mass.gov/eohhs/docs/dph/cdc/immunization/top-strategies.pdf>
38. Health Care Provider-Generated Ideas for Process Improvement:
<https://www.merckvaccines.com/Professional-Resources/HCPGeneratedIdeas>
39. 5 Key Steps Infographic:
<http://www.adolescentvaccination.org/professional-resources/hpv-resource-center/5-key-steps-hpv.pdf>
40. Coding cheat sheet:
https://www.merckvaccines.com/INTERSHOP/static/WFS/Merck-MerckVaccines-Site/-/Merck-MerckVaccines-merckvaccines-responsive/-/Professional-Resources/Documents/reimbursement/reimbursement_codes.pdf
41. Financing, ordering, and maintaining vaccine supply:
https://www.aap.org/en-us/Documents/immunizations_training_guide.pdf
42. Federally Qualified Health Centers:
<https://findahealthcenter.hrsa.gov/>
43. VFC Program:
<https://www.cdc.gov/vaccines/programs/vfc/index.html>
44. State/local or territorial immunization program:
<https://www.cdc.gov/vaccines/imz-managers/awardee-imz-websites.html>
45. Systematic methods:
<https://www.hpviq.org/assessment-feedback-tools/evaluate/>
46. Plan-Do-Study-Act (PDSA):
<http://www.ihl.org/resources/Pages/Tools/PlanDoStudyActWorksheet.aspx>
47. Feedback: <https://www.hpviq.org/assessment-feedback-tools/>
48. IIS: <https://www.cdc.gov/hpv/partners/outreach-hcp/iis.html>
49. Adolescent immunization schedules:
<https://www.cdc.gov/vaccines/schedules/hcp/child-adolescent.html>
50. Diseases and the Vaccines that Prevent Them: HPV:
<https://www.cdc.gov/vaccines/parents/diseases/teen/hpv-indepth-color.pdf>
51. CDC's Flyers and Posters for Preteens and Teens:
<https://www.cdc.gov/vaccines/partners/teens/posters.html>
52. 4 Things a Parent Needs to Know About Human Papillomavirus (HPV):
https://www.hpv.com/static/pdf/MKHPV_FACT_SHEET.pdf
53. HPV Vaccine: Cancer Prevention for Boys and Girls:
<https://www.mdanderson.org/content/dam/mdanders on/documents/about-md-anderson/Community%20Services/HP-Vaccine.pdf>
54. HPV Vaccine Myth Busting for Health Care Providers Social Media Toolkit:
<https://smhs.gwu.edu/cancercontroldtap/sites/cancercontroldtap/files/HPV%20Vaccine%20Social%20Media%20Toolkit%20FINAL.pdf>
55. Free 1-credit CME:
<https://www.cmeuniversity.com/course/disclaimer/114605#01>
56. Non-credit version:
<https://www.youtube.com/watch?v=pS-SZa3LY9k&feature=youtu.be#01>
57. HPV survivor videos:
https://www.youtube.com/watch?v=yFbdPY2DhTk&list=PLRuOuHzo7TdJzR83_C2ACchJlcFw-AbTc
58. Middle School Health Parent Toolkit:
<https://www.nasn.org/nasn/programs/educational-initiatives/middle-school-health/middle-school-health-parents>
59. HPV Resource Library:
<http://hpvrroundtable.org/resource-library/>
60. *Protecting Your Patients from HPV-Associated Cancer: What Providers Need to Know about Oropharyngeal Cancer.* https://www.youtube.com/watch?v=qnwb2-y_yPU&list=PLRuOuHzo7TdKdq1TstwyNbSn0KMI8L4--&index=13
61. Just the Facts: <http://hpvrroundtable.org/wp-content/uploads/2017/11/HPV-Vaccine-Just-the-Facts-6-pager.pdf>
62. Steps to Increasing Vaccination in Your Practice:
<http://hpvrroundtable.org/wp-content/uploads/2017/11/Steps-for-Increasing-HPV-Vaccination-in-Practice.pdf>
63. Immunizations website: <http://www.aafp.org/patient-care/public-health/immunizations.html>
64. HPV Champion Toolkit: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/immunizations/HPV-Champion-Toolkit/Pages/HPV-Champion-Toolkit.aspx>
65. HPV Vaccination Toolkit:
<http://immunizationforwomen.org/toolkit/hpv>
66. Clinician Fact Sheets and Guidance:
<https://www.cdc.gov/hpv/hcp/clinician-factsheet.html>
67. NCI-designated Cancer Centers Urge HPV Vaccination for the Prevention of Cancer: Consensus Statement:
https://healthcaredelivery.cancer.gov/hpvuptake/nci_hpv_consensus_statement_012716.pdf
68. Companion guides: <http://hpvrroundtable.org/task-groups/action-guides/>
69. Resource Library: <http://hpvrroundtable.org/resource-library/>