New York State HPV Coalition
Working to Prevent HPV Cancers

NEW YORK STATE
NYS HPV COALITION
ACTION PLAN
2023 - 2026

www.nyshpv.org

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NYS HPV Coalition Action Plan Purpose and Background

The purpose of the NYS HPV Coalition Action Plan is to provide a road map for increasing human papillomavirus (HPV) vaccine uptake across the state. Although there is already substantial activity occurring throughout NYS to promote HPV vaccination, we hope to work together to amplify and accelerate the impact of those interventions. This resource can be used to guide your own HPV work and to advance state and regional collaborations to reduce HPV-related infections and disease.

NYS HPV Coalition

Mission: To increase HPV vaccination rates and decrease HPV-related disease in NYS through education, coordination, advocacy, and leadership.

History and Structure:

The NYS HPV Coalition, which was launched in 2017, is an action team of the NYS Cancer Consortium. Coalition subcommittees (Provider Education and Public Education) work with a wide range of partners to advance the mission with oversight by a steering committee, comprised of the following 17 state and regional health organizations. To sign up as a general member for quarterly updates and to participate on subcommittees go to www.nyshpv.org

- Academic Pediatric Association
- American Cancer Society/ACS Cancer Action Network
- American College of Obstetricians and Gynecologists, District II
- American Academy of Pediatrics, NYS
- Columbia University Irving Medical Center
- Community Health Care Association of NYS
- Medical Society of the State of New York
- Montefiore Medical Center
- New York State Academy of Family Physicians
- New York State Association of County Health Officials
- New York State Cancer Consortium
- New York State Department of Health
- New York Health Plan Association
- New York State Public Health Association
- New York City Department of Health and Mental Hygiene
- Nurse Practitioner Association New York State
- Roswell Park Comprehensive Cancer Center

HPV Vaccination Guidelines

The Advisory Committee on Immunization Practices (ACIP), a CDC committee, provides guidance regarding the use of vaccines and related agents for control of vaccine-preventable diseases in the civilian population of the United States. In 2006, ACIP recommended the administration of HPV vaccination to protect girls against HPV infection. This recommendation was expanded to include vaccination of boys in 2011. Currently, ACIP recommends the routine administration of the 2-dose nine valent HPV vaccine (Guardasil 9) to children at ages 11 and 12 but can start the series at age 9. Adolescents who receive the first dose of HPV vaccine on or after their 15th birthday should receive 3 doses of vaccine (0, 1-2 months, and 6 months after the initial dose).[i] Although the vaccine is most effective when given between ages 9 and 12 it is recommended up to age 26. In 2018 the vaccine was approved by the Food and Drug Administration (FDA) for people between 27 and 45 years of age in the context of shared decision-making between a patient and their provider. For more information on HPV vaccination recommendations from ACIP, go to https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/hpv.html.

HPV vaccine and cancer prevention: how to protect our adolescents

HPV is the most common sexually transmitted infection in the US. Each year, nationwide, there are over 14 million new HPV infections, half of which occur in individuals between the ages of 15 and 24 years. As a result, 37,300 cases of HPV-associated genitourinary and oropharyngeal cancers are diagnosed annually in this country.[ii] HPV is transmitted by skin-to-skin contact and does not require bodily fluid contact, making condom-use an inadequate form of prevention.

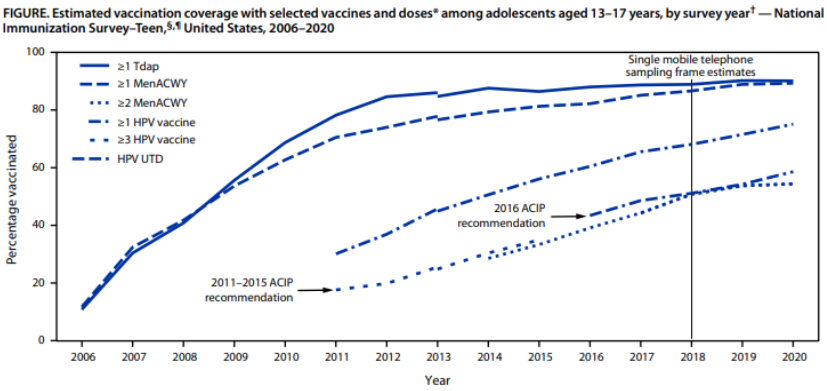

Figure 1

Despite the availability of a safe and effective vaccine to prevent HPV infection and its complications, a large proportion of adolescents have not been immunized against HPV. Nationally, in 2020, approximately 71 percent of adolescents aged 13-17 years initiated the vaccine series, but less than 59 percent of adolescents received all the recommended doses for series completion.[iii] While HPV vaccination rates are increasing among both boys and girls, vaccine series completion rates remain far below those of the other adolescent vaccines (Figure 1).

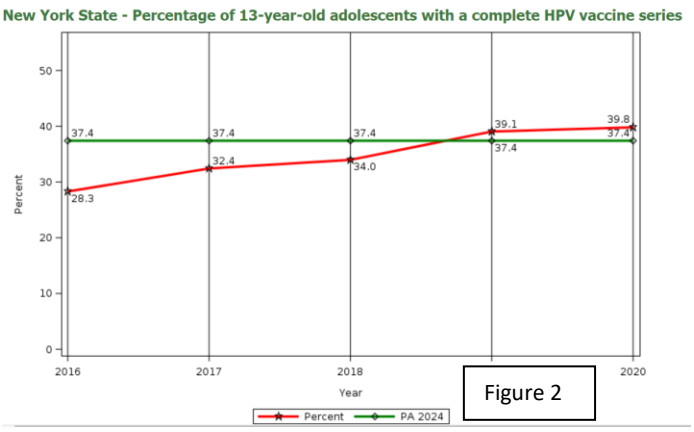

Figure 2

According to the CDC, 75.9 percent of males and females ages 13-17 have received at least one dose of the HPV vaccine in NYS, but only 64.4 percent of this same age group are up to date on their HPV vaccine series (Appendix II).[iv] Further, only 39.8 percent of 13-year-olds are up to date on their HPV vaccine series in NYS, indicating that many vaccines may not be administered on the recommended schedule. The trend data in NYS show an 11.5 percentage point increase in HPV vaccine

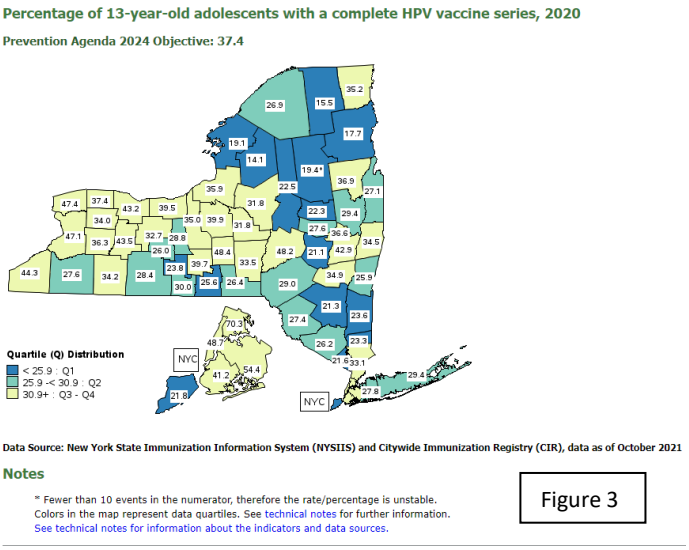

Figure 3

completion among 13-year-old adolescents since 2016 (Figure 2).

While NYS county level data is limited, according to the NYSDOH, more rural areas, particularly in the North Country (Jefferson, St. Lawrence, Essex, Hamilton, Lewis, and Franklin Counties) have the lowest vaccination completion rates in the state.[v] This is consistent with nationwide data showing HPV vaccine initiation rates to be 11 percentage points lower in rural areas compared to urban areas.[vi] The Southern Tier (Yates, Allegany, and Tioga) and lower Hudson Valley (Rockland, Sullivan, and Ulster) are also notable for low HPV vaccine coverage compared to other counties in the state (Figure 3).

In New York City, the up to date vaccination rate for adolescents 13 to 17 years of age was 70.3% in 2021 (Appendix II), but only 48% of 13-year-olds are up to date at the recommended schedule (Figure 4). Notably, the Borough of Staten Island has the lowest HPV vaccine coverage rates in the city. There are also several pockets of low coverage in Brooklyn and Queens.

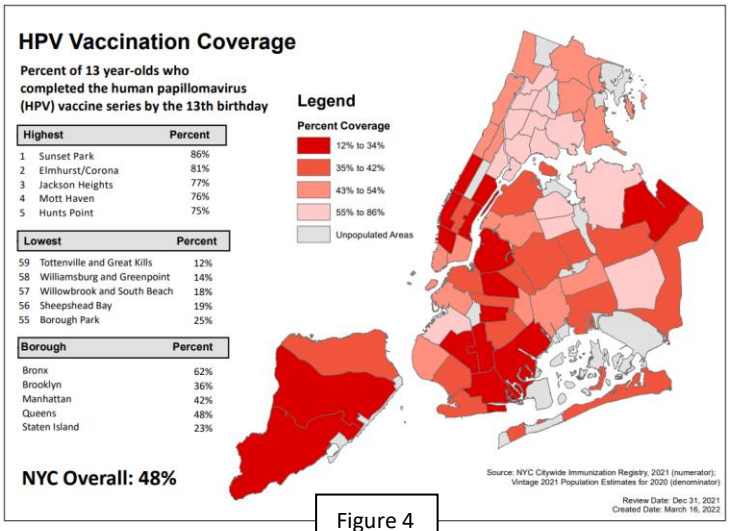

Figure 4

Barriers to HPV Vaccination

There are many barriers to adolescent HPV vaccine uptake. The 2018 NIS-Teen Data listed the top five reasons parents reported not vaccinating their children were: feeling the vaccine is not needed or necessary; not recommended by a provider; safety concerns or side effects; lack of knowledge; and their child is not sexually active.[vii]

Of note, the ranking of these reasons for not vaccinating have changed between 2015 and 2018, with more parents worried about safety concerns than previously reported, as shown in Figure 5.

Providers play a major role in HPV vaccine promotion and administration. Provider delivery of a strong vaccine recommendation is among the most cited factor associated with HPV vaccine uptake. Further, provider communication with parents is key to educating them about the HPV vaccine and overcoming vaccine hesitancy. Providers educating parents can address some of the concerns behind vaccine hesitancy, such as the importance of the vaccine and dispelling myths or misconceptions regarding vaccine safety.

Why are so many primary care providers failing to make a strong, effective recommendation about HPV vaccine? Reasons for this include provider discomfort discussing sex, limited time to answer questions that parents may

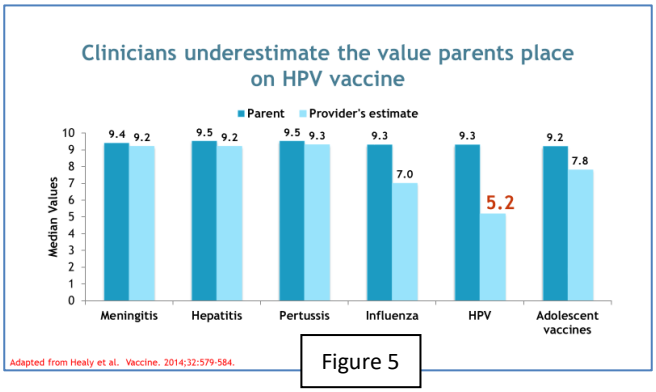

Figure 5

have, providers overestimating parental HPV vaccine hesitancy and underestimating the value that parents place on the HPV vaccine compared to other adolescent vaccines such as those that prevent pertussis and meningococcal infections (Figure 5).[viii]

There could be other reasons for low immunization among children. In general, vaccine hesitancy could be exacerbated by the relative ease of access to vaccine misinformation from the Internet and social media, as demonstrated during the COVID-19 pandemic.[ix] Different racial and ethnic groups may have lower child vaccination rates due to a lack of provider recommendation, distrust of medical institutions, or just general lack of awareness of HPV and the HPV vaccine.[x] Religion could also play a factor, as different religious groups across New York State may have lower vaccine uptake in general, such as among the Orthodox Jewish or Mennonite communities.

Evidence-based Interventions to Increase HPV Vaccination in Clinical Settings[xi]

Provider Recommendation is among the top reasons for parents choosing to vaccinate their children. Studies show that presumptive statements—which are brief statements that assume parents are ready to vaccinate—are more effective in improving HPV vaccination rates than conversing with parents in an open-ended discussion. CDC encourages that providers also use a bundled approach by recommending the HPV vaccine in the "same way, same day" that you recommend other adolescent vaccines. When asked, answer parents' questions and use motivational techniques to counsel vaccine hesitant parents or patients, stressing the importance of the vaccine in preventing 6 different cancers. See the CDC tip sheet called, "Talking to Parents About HPV Vaccine"[xii] and the National HPV Vaccination Roundtable action guide for physicians, physician assistants, and nurse practitioners[xiii] for more information.

> ***"Your son/daughter is due for vaccinations to help protect against meningitis, HPV-related cancers, pertussis, and flu. We'll give those shots during today's visit."***

Starting at age 9. Recently, some organizations, including the American Academy of Pediatrics and the National HPV Roundtable, began recommending starting the HPV vaccine series at age 9. Starting the series at age 9 reduces the number of immunizations received in a single visit. Also, at this visit, parents are less likely to opt for only "school-required" vaccines". Vaccinating for HPV at age 9 increases the likelihood that adolescents will be up to date on vaccination by age 13, and studies suggest that adolescents receiving the series before age 13 have a higher level of protection against HPV and HPV cancers than teens who complete the vaccine series later.[xiv] Recommending the vaccine at a younger age will also protect more youth before they are exposed to an HPV infection, while reducing the likelihood of a parent associating the vaccine with sexual activity.[xv] At least starting the conversation with parents of children when they reach age 9, even if parents do not want to start the vaccine series, may improve on-time HPV vaccination rates because there will be more opportunities to achieve on-time vaccination. For more information about starting at age 9, go to www.hpvroundtable.org/hpv-vaccination-starts-at-9.

Electronic Medical Record (EMR) Alerts, Provider Prompts, Reminders, and Immunization Information Systems. One of the most important ways for providers to increase vaccination rates in their practices is to use every opportunity to administer vaccinations that are due. When patients come in for any type of medical visit (well-child, sick-child, or chronic care visits), check to see if they are due for vaccinations. Collaborate with your health information technology colleagues, office manager, and fellow providers to establish effective strategies, such as:

1. create provider prompts to flag when vaccinations are due or late;
2. establish EMR alerts or reports for all eligible patients and set reminders in your EMR system for the second dose;
3. develop a system to consistently call and send postcards to patients who are due for vaccinations;
4. link to your state's immunization registry to pull down/upload current vaccination records;
5. review patient reminder and recall systems and consider how to optimize them using text messaging, mail, email, and/or phone calls for missed vaccination visits.

Standing Orders. If your practice endorses standing orders, make sure they are being used. In many cases, patients can receive the vaccination before the provider even enters the room. Provide opportunities for vaccination-only visits or extended hours for vaccinations, especially for second or third doses of the vaccine.

Create and maintain a culture of promoting immunizations. Develop a practice culture where all staff are supportive and vigilant to protect every patient through immunizations. Empower every member of the team to become an HPV vaccine champion, not just clinical staff. A team-based approach is crucial for making effective and lasting system changes.

The New York State HPV Coalition Plan 2023 - 2026

Goals

1. To increase HPV vaccine series completion rates to 45% among 13-year-old adolescents in NYS by 2026. Baseline: HPV vaccine completion rates among 13-year-olds are 39.8% (NYSIIS and CIR, 2020).

2. To increase the HPV vaccine series completion rates to 80% among NYS adolescents ages 13-17 years by 2026. Baseline: HPV vaccine completion rates are 66.4% per the 2021 NIS-Teen data. This objective is aligned with the National HPV Vaccination Roundtable goal.

Objectives

1. Identify priority populations at risk for HPV under-vaccination
2. Increase HPV vaccination equity among priority populations via tailored interventions
3. Increase the number of providers that are discussing or recommending HPV vaccination starting at age 9
4. Increase the number of providers that adopt standing orders and/or reminders to reduce missed opportunities
5. Increase the number of retailers that are promoting HPV vaccination to their customers

New York State HPV Coalition Priorities 2023 - 2026

Year 1 Priorities: 2023

- Collect data to better describe priority populations
- Partner with pharmacies and educate Pharmacists
- Plan 2024 HPV Vaccination Summit
- Plan for and begin implementing activities to reach priority populations
- Apply for funding
- Enhance Coalition communications

Year 2 Priorities: 2024

- Initiate and expand new projects to better reach priority populations via health systems and community stakeholders
- Implement the NYS HPV Vaccination Summit
- Increase the number of new partnerships to engage priority populations
- Expand targeted digital advertising and social media messaging

Year 3 Priorities: 2025

- Continue ongoing Coalition initiatives such as the HPV Provider Report Cards, HPV Honor Roll Awards, targeted provider education, and priority population efforts
- Implement any new strategies or collaborations that are identified at the State Summit
- Initiate a new policy workgroup to identify and support priority policy changes

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Appendices

Appendix I. Logic Model for Coalition Activities

Project	Inputs	Activities	Outputs	Intermediate Outcomes	Long-Term Outcomes
Pharmacist Training	• Staffing and admin Clinical Champions • CMEs • Training materials • Promotion via host orgs • Travel reimbursement • Speaker stipend • Pre/post survey	• Meeting with Community Pharmacy Association of NYS and Pharmacy Chains to encourage HPV vaccine promotion and trainings • Training of Pharmacists at State/Reg. Conferences or Summits • Webinars	• # of Pharmacists that have been trained on HPV vaccination 101 and talking to parents • # of retailers that are promoting HPV vaccination	• Increase in the # of young people who receive a catch-up HPV vaccination from a pharmacist • Increase in % of adolescents receiving the recommended doses of HPV Vaccinations	• **Reduction in HPV-related cancers and other HPV-related diseases**
Pediatric Society Meetings	• Medical specialty admin • Clinical champions • CMEs • Educational materials • Travel reimbursement • Speaker stipend • Pre/post survey	• Education of pediatricians on benefits of starting at age 9 • Promotion of strategies to increase vaccination rates (standing orders, reminders, etc.)	• # of providers that have received HPV Coalition-sponsored training • # of new providers that engage with the Coalition	• Increase in % of adolescents receiving the recommended doses of HPV vaccinations by age 13	• **Reduction in HPV-related cancers and other HPV-related diseases**
HPV Health Plan Project	• Clinical Champions • ACS staff • Coalition workgroup • Provider education materials • Travel reimbursement • Plan survey	• ACS and Clinical Champions meet with health plan Medical Director and/or QI staff to promote HPV QI • Use a group letter promoting starting at 9 to get plans to adopt an HPV vax standard of care • Follow up with appropriate materials and guidance • Manage a health plan workgroup • Develop and administer a plan survey	• # of plans that establish a standard of care for starting to vaccinate at age 9 (e.g., reminders, standing orders) • # of plans that send out a provider letter encouraging starting at 9	• Increase in the # of parents and children who receive a provider recommendation for HPV vaccination by age 9 • Increase in % o adolescents receiving recommended doses of HPV vaccinations by age 13	• **Reduction in HPV-related cancers and other HPV-related diseases**

HPV Vaccination Equity Project	• Registry Data • Survey Data • Key informants • Message testing data • Digital education content • Print education materials • Social media platforms • Providers • Community partners	• Develop key informant survey instrument • Pilot survey Instrument and amend as needed • Develop tailored messages and materials/content targeting parents • Create a strategy and collateral if needed for providers who see the target audience • Encourage providers in target areas to implement start at 9 via county mtgs and outreach • Train community partners in HPV vaccination messaging to parents in under-vaccinated communities	• # of providers educated/reached • # of community partners engaged • # of providers that adopt a standard of care for starting to vaccinate at age 9, use of reminders, and/or use standing orders	• Increase in the # of parents and children who receive a provider recommendation for HPV Vaccination by age 9. • Increase in % of adolescents receiving the recommended doses of HPV Vaccinations by age 13	• **Reduction in HPV-related cancers and other HPV-related diseases**
New York State HPV Vaccination Summit	• Physical and/or virtual space • Speakers and moderators • ACS staff • Community partners (providers and non-clinical) • Education materials • Summit planning committee	• Educational sessions on starting vaccination at age 9 • Identify populations of interest for vaccine equity interventions • Develop or share messaging for engaging non-clinical partners on importance of HPV vaccination • Brainstorming sessions to reach targeted communities. • Networking session among members	• # of providers educated/reached • # of community partners engaged • # of partners who agree to collaborate • # of providers that commit to adopting a standard of care for starting to vaccinate at age 9, use of reminders, and/or use standing orders • # of local action plans drafted	• Increase in the # of organizations that have partnered on activities • Increase in the # of parents and children who receive a provider recommendation for HPV Vaccination by age 9. • Increase in % of adolescents receiving the recommended doses of HPV Vaccinations by age 13	• **Reduction in HPV-related cancers and other HPV-related diseases**
NYS HPV Maintenance of Certification Course	• Medical specialty admin • Clinical champions • CMEs/MOC4 • Educational materials • Speaker stipend	• Education of pediatricians on benefits of starting at age 9 • Review of strategies to	• # of providers that have received HPV Coalition-sponsored training	• Increase in % of adolescents receiving the recommended doses of HPV	• **Reduction in HPV-related cancers and other HPV-related diseases**

	• Pre/post survey • Data collection tool	increase vaccination rates (standing orders, reminders, etc.) • Sharing of tools to facilitate implementing the strategies in their practice	• # of new providers that engage with the Coalition • # of providers that receive CME • # of providers that receive MOC4 credits showing that they have made a sustainable practice change	vaccinations by age 13	

Appendix II. CDC TeenVax Data for 13-17-Year-Olds in New York Who Have Received at Least 1 Dose or are UTD on HPV Vaccination.

Survey Year	Vaccine	Dose	Geography	Dimension Name	Dimension Value	Coverage Estimate (%)	Sample Size
2021	HPV	Up-to-Date, Males and Females	NY-Rest of state	Age	13-17 Years	60.5	284
2021	HPV	Up-to-Date, Males and Females	New York	Age	13-17 Years	64.4	581
2021	HPV	Up-to-Date, Males and Females	NY-City of New York	Age	13-17 Years	70.3	297
2021	HPV	≥1 Dose, Males and Females	NY-Rest of state	Age	13-17 Years	73.2	284
2021	HPV	≥1 Dose, Males and Females	New York	Age	13-17 Years	75.9	581
2021	HPV	≥1 Dose, Males and Females	NY-City of New York	Age	13-17 Years	80.0	297