



# NYS HPV VACCINATION GUIDE FOR SCHOOL- BASED HEALTH CENTERS



Preventing cancer in the future by increasing the adoption of strategies today to vaccinate all adolescents against HPV.



This guide is jointly produced by the New York State HPV Coalition and its state-wide partners in public health.

IN THIS GUIDE:

- ✓ Practice Strategies
- ✓ Communication techniques
- ✓ Parental Consent
- ✓ Minor Self-Consent
- ✓ Parent Education
- ✓ Peer Education
- ✓ School-Wide Education
- ✓ Resources you can use today!

With gratitude for guidance and consultation from:



American Academy of Pediatrics

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New York Chapter 1

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## ACKNOWLEDGEMENTS

### AUTHORS

#### **Jana Shaw, MD, MPH**

Chair, Public Education Committee, NYS HPV Coalition  
Chief Medical Officer, North Country Family Health Center, Watertown, NY  
Associate Professor of Pediatrics, State University of New York, Upstate Medical University, Syracuse, NY

#### **Michael Seserman, MPH**

Co-Chair, NYS HPV Coalition  
Manager, State Health and Primary Care Systems  
American Cancer Society

We wish to thank the panel of subject matter experts who contributed to this document:

Elizabeth Ettiene, MD  
Pediatrician  
Urban Health Plan  
Bronx, NY

Melanie A. Gold, DO, DMQ  
Medical Director, School-Based Health Centers  
Columbia University Irving Medical Center;  
New York-Presbyterian Hospital  
New York, NY

Jane Hamilton, RN  
Manager School-Based Health  
Mary Imogene Bassett Hospital  
Delhi, NY

Joey Marie Horton, MBA  
Executive Director  
North Country Family Health Center  
Watertown, NY

Katherine Shapiro, MPH  
Project Director, HPV Planning  
NYC Department of Health and Mental Hygiene

Darren Wu, MD  
Medical Director  
Open Door Family Medical Centers  
Ossining, NY

Susan J Levine, CPNP  
Port Chester School Based Health Center  
Open Door Family Medical Centers  
Port Chester, NY

Lindsay Neptune, APRN, PPCNP-BC  
Pediatric Nurse Practitioner  
Open Door Family Medical Centers

Kristin Oliver, MD  
Assistant Professor of Pediatrics, Environment,  
and Public Health  
Icahn School of Medicine at Mount Sinai,  
New York, NY

#### Editing:

Debra Gitterman, MFA  
Philmont, NY

Allison Krug, MPH  
Artemis Biomedical Communications, LLC

### BACKGROUND AND PURPOSE

The mission of the New York State (NYS) HPV Coalition, launched in 2017, is to increase human papillomavirus (HPV) vaccination rates and decrease HPV-related disease in NYS through education, coordination, advocacy, and leadership. An objective of the NYS HPV Coalition is to increase HPV vaccination completion rates to 80% among 13 to 17-year-old adolescents in NYS by 2023. The 2017 National Immunization Survey (NIS) results for teen HPV vaccine series completion was 53.6% in NYS. [1] Various subcommittees of the Coalition are dedicated to working with partners to advance this mission. The Public Education Subcommittee, which has a focus on educating parents, convened an expert School-Based Health Center (SBHC) Workgroup to identify strategies that have facilitated the administration of HPV vaccination in SBHCs among the student populations they serve.

The purpose of this guide is to share the promising strategies identified by SBHCs throughout NYS and make it easy for other SBHC staff to implement these practices in their own settings. Some strategies presented are not yet supported by research but, rather, are recommended based on empirical and anecdotal evidence from one or more SBHCs. There are many logistical challenges which SBHCs have overcome to promote vaccination of adolescents against HPV. It is our expert panel's hope that these tools and tactics will prove helpful to you.



**HPV VACCINE**  
**IS CANCER PREVENTION**

### EXECUTIVE SUMMARY

HPV infection is the most common sexually transmitted infection (STI) in the U.S., with approximately 79 million people becoming newly infected annually.[2] The Centers for Disease Control and Prevention (CDC) estimates that most Americans will acquire HPV at some point in their lives. The virus is spread primarily through intimate skin-to-skin contact and is usually asymptomatic. However, persistent infection with HPV can cause six types of cancer, in addition to genital warts. Although most HPV infections are cleared by the body and do not cause cancer, persistent infection with HPV causes virtually all cervical cancers, 90% of anal cancers, about 70% of oropharyngeal cancers, and 60-70% of vaginal, vulvar, and penile cancers.[3] Thus, prevention of HPV infection has enormous potential to prevent HPV-related cancers.

A safe and effective vaccine to prevent the highest-risk HPV strains was licensed in 2006 for girls, and in 2009 the vaccine was approved for use in boys. The CDC and national advisory committees recommend that children receive the 2-dose vaccine regimen at 11 or 12 years of age. If a youth starts vaccination at 15 years of age or later, the vaccine should be given as a 3-dose series (0, 1-2 and 6 months). In 2018 the vaccine was approved by the Food and Drug Administration (FDA) for people 9-45 years of age. Although New York's HPV vaccination coverage rate has been increasing in both girls and boys, there is a dramatic gap between the high rates of Tdap and quadrivalent meningococcal conjugate vaccines and the relatively low levels of HPV vaccination coverage.[4] The strategies in this guide aim to close that gap and increase vaccination coverage.

## NYS HPV Vaccination Guide for School-Based Health Centers

Because most middle-school age youth attend public schools, SBHCs offer a convenient setting for administering HPV and other vaccines. Still, vaccinating students in a school setting presents many unique challenges. This Guide provides practical strategies that SBHCs can employ to help increase their HPV vaccination rates.

Provider strategies include consistently strong messages to parents and student patients to initiate and complete the HPV vaccination series before 13 years of age to reduce the risk of HPV-related cancer. Utilizing data acquired through the state and city immunization registries and SBHC electronic medical records to generate provider and parent reminders can also be quite effective. Automatically recommending the HPV and other needed vaccinations during all visits and implementing standing orders to empower nurses to administer the vaccine, where allowed by the sponsoring institution, are other tactics worthy of consideration.

Perhaps the largest logistical challenge to HPV vaccination in SBHCs is the need to obtain parental consent, often for each dose of the vaccine. Several strategies have been used to facilitate obtaining parental consent forms, including the following:

- obtaining consent for the full HPV vaccine series upon SBHC enrollment (e.g., obtain consent for all necessary vaccinations);
- utilize implicit consent - no parental consent is needed if the first dose was already provided elsewhere with an option for parents to opt out;
- provide students with incentives to return forms (e.g., pizza party if the entire class returns forms);
- empower others within the school system to obtain consent when the parent is at school (such as the main office, homeroom teachers, school counselors, etc.)

In New York, minors can legally consent to the HPV vaccination if the provider determines that the youth is being physically intimate, sexually active, or contemplating becoming so. The intent of public health law 10 NYCRR §23.4 [5] is to promote HPV vaccination among teens who are at increased risk of HPV infection and want to be vaccinated but are not ready or are unable to discuss sensitive topics with their parent(s) or guardian(s).

Educating parents of young adolescents about HPV may help reduce vaccine hesitancy. SBHCs in elementary schools should start talking with parents when the child enters 4<sup>th</sup> grade (i.e., age 9 or 10 years old). Schools can use multiple communication channels to talk about the HPV vaccine and its benefits. To do so, decision-makers at the school must be positively engaged and educated about the critical role of the SBHC as well as the significance of the HPV vaccine in preventing HPV infection and related cancers. A community campaign might include posting the vaccination rate for the entire school and promoting the achievement of a realistic school-wide goal for initiating and completing the HPV vaccination series.

Outreach to parents can be effectively paired with educating middle school students by:

- Working with health teachers to ensure that accurate information about HPV and the HPV vaccine is fully covered in health classes at all grade levels.
- Starting a student-driven HPV peer education group.
- Engaging students on the topic in interesting and interactive ways (e.g., using a visual art project like *Beneath the surFACE* – more information is provided on page 15).

Overall, there must be concerted, multi-faceted efforts to increase HPV vaccination rates in schools. SBHCs are well-positioned to be the change agents in this effort. Making an impact on HPV vaccination rates requires a broad and collaborative approach. We know this is possible because the SBHCs which have had success provided the strategies outlined in this guide. Thank you for joining in this effort to increase rates of HPV vaccination. By working together, we can eliminate cancer morbidity and mortality among our student patients.

## SUMMARY OF EVIDENCE

HPV is the most common sexually transmitted infection (STI), with 79 million new cases annually in the United States.[2] HPV infection is responsible for a combined 30,700 cases of cervical, vaginal, vulvar, penile, anal, and oropharyngeal cancers in the United States each year.[3] The virus is transmitted by skin-to-skin contact and does not require bodily fluid contact, making condom use an inadequate form of prevention. The CDC recommends 11-12 years of age as the ideal period to vaccinate youth for optimal prevention of HPV as the vaccine is most effective at a younger age, and certainly prior to HPV exposure.[4,6] Administering the vaccine before the 15<sup>th</sup> birthday will only require 2 doses compared to a 3-dose series over the course of 6 months for persons 15-26 years old. The FDA approved the vaccine to be started as early as age 9 for both girls and boys.

### Barriers to HPV

Adolescent vaccination is challenging because students are more independent, preventive health care visits are less frequent compared to younger children, teens expect a higher degree of collaboration in decisions, and vaccines are no longer on the forefront of parents' thoughts. Studies consistently show that a strong recommendation

from a medical provider is the single best predictor of vaccination for any vaccine, including the HPV vaccine. In the 2014 NIS-Teen study, nearly 15% of parents who said that they would not be getting their child vaccinated against HPV in the next 12 months stated "not receiving a recommendation from their child's provider" as one of the top reasons.[7] Other common reasons cited by parents include lack of knowledge about the vaccine, having safety concerns about the vaccine, not needing the vaccine, and not seeing their child as being at risk. [8] (Figure 1)

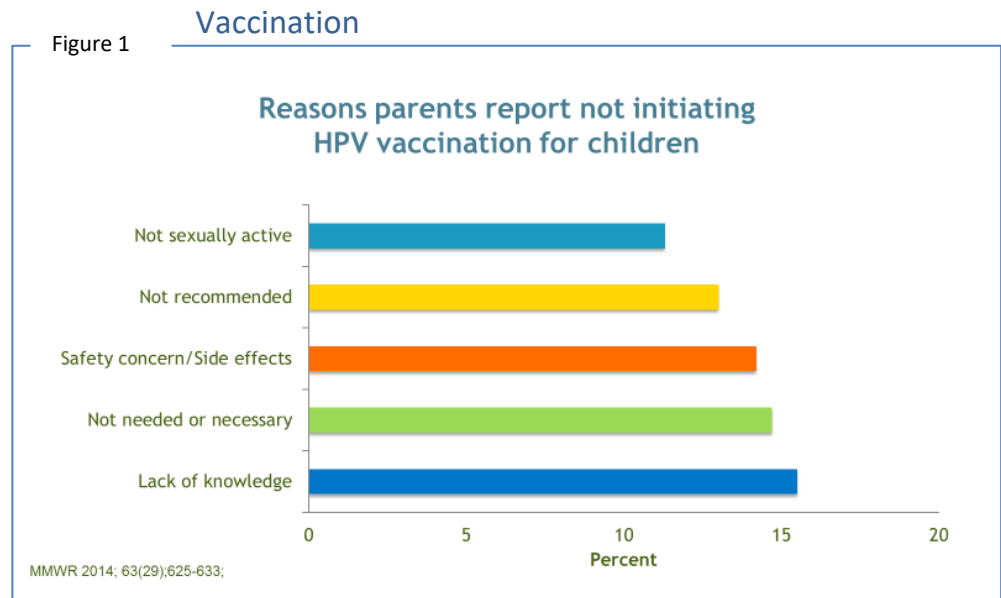
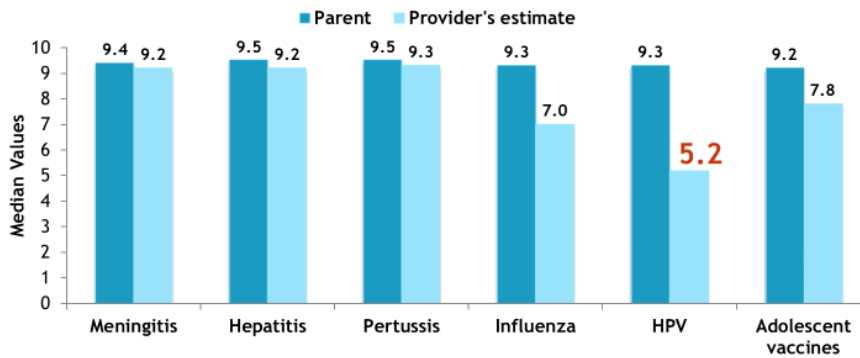


Figure 2

**Clinicians underestimate the value parents place on HPV vaccine**



Adapted from Healy et al. Vaccine. 2014;32:579-584.

Unfortunately, when compared to other adolescent vaccines, providers seem to overestimate parental concerns about HPV vaccination, and underestimate parent opinion on the importance of vaccination. Provider communication with parents is key to educating them about the HPV vaccine and

overcoming hesitancy. Unfortunately, many primary care providers fail to make a high-quality recommendation about the HPV vaccine. One reason seems to be that providers underestimate the value parents place on the HPV vaccine compared to other adolescent vaccines such as those that prevent pertussis and meningococcal infections.[9] (Figure 2) The next section presents effective strategies to increase vaccination in your clinic.

**Evidence-based Interventions to Increase HPV Vaccination in Clinical Settings[10]**

Provider Recommendation is the number one reason parents choose 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. The CDC encourages that you 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 The HPV Vaccine” [11] and the World Health Organization HPV training module [12] for more information.

*“Now that your son/daughter is 11, he/she is due for vaccinations to help protect against meningitis, HPV-related cancers, pertussis, and flu. We’ll give those shots during today’s visit.”*

Electronic Medical Record (EMR) Alerts, Provider Prompts, Reminders, and Immunization Information Systems

One of the most important ways to increase vaccination rates in your practice is to use every opportunity to provide vaccination and keep patients up-to-date on all immunizations. When patients come in, check to see if they are due for vaccinations. In most cases, patients can get the HPV vaccine during routine well-child, sick-child, or chronic care visits. Have your care team plan to run reports to identify patients who are due or overdue for vaccinations and share the information during a brief pre-visit huddle. Provide opportunities for vaccination-only visits or offer extended hours for vaccination. Promote a practice culture that is supportive of immunizations to protect every patient.

Collaborate with your health information technology colleagues, office manager, and fellow providers to establish effective strategies, such as:



- create provider prompts for when vaccinations are due or late;
- establish electronic medical record (EMR) alerts for all age-eligible patients and set reminders in your EMR system for the second dose;
- develop a system to consistently call and send postcards to patients who are due for vaccinations;
- link to your state’s immunization registry to pull down/upload current vaccination records;
- 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

Empower every member of your care team to become an HPV vaccine champion. A team-based approach is crucial for making effective and lasting system changes. 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. Remember, HPV vaccine is routinely recommended at 11-12 years of age and as early as 9 years of age.

## SUMMARY OF EVIDENCE SUPPORTING SCHOOL-BASED VACCINATION PROGRAMS

Voluntary school-based vaccination programs have demonstrated an ability to achieve high immunization rates because they eliminate several obstacles to vaccination: access to information that allows parents/adolescents to make informed decisions about vaccination and the ability to visit provider offices on 2 or 3 separate occasions. Convenience and availability of peer support during vaccination times were cited as points of satisfaction for parents/adolescents who had participated in school-based vaccination programs. Obtaining signed consent forms from parents was the main challenge of school-based vaccination programs.[13]

Voluntary school-based vaccination programs have been successful in achieving high rates of adolescent vaccination against hepatitis B in Australia, Canada, Italy, and other European countries, and more recently for HPV vaccination in the United Kingdom, Australia, and Canada. Voluntary school-based mass vaccination approaches have also been used in specific initiatives in the United States with some success.[14] A systematic review of 25 studies showed that uptake rates were highest in studies using school-based HPV vaccination programs to provide vaccines to students, such as in Australia, the UK, and Portugal. Factors contributing to vaccination included race/ethnicity, age, and parental and adolescent knowledge about HPV and the vaccine. The authors also suggest implementing school-based programs to minimize racial disparities in vaccination.[15]

One of the most successful school-based HPV vaccination programs has taken place in Australia. The National HPV Vaccination Program of Australia offers resources for school personnel, parents, students, and health professionals to guide planning and implementation of school-based HPV vaccination programs. Australia has provided free in-school vaccination for boys and girls ages 12 to 13 since 2007. Almost all schools in Australia have chosen to participate. In 2016, between 67.8% and 82.9% of girls under the age of 15 were vaccinated leading to a 78.6% national average. For boys, completion rates ranged from 61.4% to 76.1%, for a 72.9% national average.[16]

In England, a feasibility study prior to the launch of the national program for school-based HPV vaccination in 2007 included 36 middle schools in Manchester (n=2,817 girls). Vaccine uptake was 70.6% for the first dose and

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68.5% for the second dose. Uptake was significantly lower in schools with a higher proportion of ethnic minority girls. The main reason for parents' refusal of vaccination was insufficient information about the vaccine and its long-term safety. Maintaining the vaccine schedule was challenging as 16.3% (dose 1) and 23.6% (dose 2) of girls missed their vaccination day and had to be offered alternative appointments. The authors concluded that it is possible to deliver and achieve acceptable levels of coverage but they recognized certain challenges: spacing the doses at proper intervals while being mindful of what was happening at the schools at the time (i.e., beginning of the year tends to be busy, but that is the best time to initiate the first dose).[17]

In June 2018, Public Health England published research on the impact of the United Kingdom's HPV vaccine program. It found a significant fall in HPV infections in young women: HPV type 16 and 18 infections, which cause 70% of cervical cancer cases according to the World Health Organization, decreased by 86% in women aged 16 to 21 who were eligible for the vaccination as teenagers between 2010 and 2016. In addition, the study found a reduction in HPV types 31, 33, and 45, which can also cause cancer. This shows that the vaccine gives some cross-protection against HPV strains which are not in the HPV vaccine. There was also a decline in genital wart diagnoses in participating sexual health clinics. Between 2009 and 2017, the number of genital wart cases in girls aged 15 to 17 fell by 89%, and in boys of the same age the number of cases fell by 70% because of herd immunity.[18]

Additionally, a pilot study in 3 geographical regions of Peru was undertaken to immunize 5<sup>th</sup> grade girls which proved successful and was scaled up to include 527 primary schools across the country. Written informed consent was required from parents. The strategies resulted in 80% of eligible girls being vaccinated with 95% of them being vaccinated in school. Key factors contributing to success included: clearly defined implementation protocols, close coordination with schools and school officials, training of health care workers delivering the vaccines, and education and sensitization of teachers, parents, girls, and the broader community.[19]

Lastly, at two high schools in rural Kentucky, 935 students were given consent forms at the beginning of the school year. Of these, 55% returned the consent forms, and of those who gave consent, 70% initiated the vaccine series. Of this latter group which initiated the series, 88% successfully completed the full series. Despite the attrition, an estimated 45% of students had received all three doses by the end of the project.[20]

### STRATEGIES TO INCREASE HPV VACCINATION IN SCHOOL-BASED HEALTH CENTERS

#### Provider Strategies

##### Make a Strong Provider Recommendation

As previously stated, a strong provider recommendation is the most powerful predictor of HPV vaccine acceptance. This is also the case in the SBHC setting. If parents are not offered the opportunity to get their children protected from HPV-related cancer, their children will be at risk of HPV-related cancer. Your recommendation is the key.

- ✓ Use a *presumptive* approach. Consider stating: “Your child is due to receive the cancer prevention HPV vaccine. I will vaccinate her/him today.”
- ✓ If the child needs several vaccines, bundle all the needed vaccines into a single statement. Consider saying: “Your child is due to receive vaccines to protect him/her against meningitis, HPV-related cancer, whooping cough and flu.”

##### Highlight the Benefits of the HPV Vaccine

- ✓ State that the vaccine is more effective when started at 11-12 years of age and before the onset of sexual activity.
- ✓ State that the vaccine can reduce the risk of developing 6 different cancers.
- ✓ Share that Australia could become the first country to eradicate cervical cancer thanks largely to the school-based National HPV Vaccination Program.
- ✓ HPV vaccine is covered by all health insurance plans. Children without insurance can receive the vaccine free of charge through the Vaccines for Children program.



##### Highlight the Safety of the HPV Vaccine

- ✓ The HPV vaccine was licensed in 2006. All vaccines have ongoing post-licensure safety monitoring. The HPV vaccine is very safe and effective. It has been safely used by hundreds of millions of people around the world since 2006. A good handout from the CDC reviews the safety and effectiveness of vaccination\* is: <https://www.cdc.gov/vaccines/partners/downloads/teens/vaccine-safety.pdf>
- ✓ Common side effects include arm soreness, redness, or swelling, headache and fever. Fainting can occur with any medical procedure including any vaccination. Sitting or lying down prevents fainting after vaccination. These adverse events are short-lived and self-limiting. Severe reactions to the HPV vaccine are extremely rare, while HPV-related cancers are relatively common.
- ✓ Vaccination is the safest protection from HPV-related cancers.
  - People infected with HPV should still be vaccinated to derive the benefit of protection from other HPV vaccine strains.

\*For other resources to support provider-specific strategies, see page 18 in the Resource section of the Guide.

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### Develop a Center-Wide Approach

Developing a multifaceted approach to improve HPV vaccination rates is essential to prompt improvements in vaccination rates. See this National HPV Vaccination Roundtable Action Guide for Small Practices for more information <http://hpvroundtable.org/wp-content/uploads/2018/04/SMALL-PRACTICES-Action-Guide-WEB.pdf>.

- ✓ Know your current HPV vaccination rate:
  - Set organizational benchmarks for HPV vaccination coverage.
  - Measure HPV vaccination coverage rates by provider on a regular basis (i.e., 1<sup>st</sup> and 3<sup>rd</sup> school marking period).
- ✓ Develop a team approach to vaccinate all eligible children and adolescents. Educate, encourage, and empower all SBHC support staff members to become vaccine champions.
- ✓ Engage with external organizations and resources to obtain vaccination coverage rates if internal resources are not available (i.e. NYS Department of Health Assessment, Feedback, Incentive, and Exchange (AFIX) program).
- ✓ Advertise vaccination services at school. Work with school leadership and teachers to establish a culture of HPV vaccine acceptance and confidence.
- ✓ Ensure sufficient HPV vaccination supply:
  - Review vaccine storage and supply regularly.
  - Ensure proper vaccine storage.
- ✓ Develop an improvement plan using structured quality improvement techniques such as the Plan – Do – Study – Act (PDSA) improvement cycle. Here is an American Academy of Pediatrics Sample PDSA: [https://www.aap.org/en-us/Documents/hpv\\_qi\\_series\\_completion.pdf](https://www.aap.org/en-us/Documents/hpv_qi_series_completion.pdf)

### Standing Orders

Standing orders streamline vaccination practice, reduce missed opportunities, improve vaccination coverage and patient care, and maximize provider efficiency and work flows. See a Standing Order Implementation Guide available here: <http://www.immunize.org/catg.d/p3067.pdf>.

- ✓ Develop a standing orders protocol for the HPV vaccine series (0 and 6-12 months for the 2-dose series for patients under the age of 15 years at series initiation; 0, 1-2 months and 6 months after vaccination for 3-dose series requirements for patients age 15 years and older at series initiation). The standing orders protocol should be prescribed by a licensed physician or certified nurse practitioner.[21]
- ✓ Educate your SBHC staff and sponsoring institution about the benefits of standing orders. Review the standing order policy with your staff and engage them in active discussion. Answer any questions and assess their knowledge.
- ✓ Review adherence to the policy on a periodic basis.
- ✓ Use this HPV standing order template: <http://www.immunize.org/catg.d/p3090.pdf>
- ✓ If standing orders are not in place, the SBHC team can still make a difference by empowering the SBHC staff to promote HPV vaccination.

### Empower SBHC staff to promote vaccination

Arm all SBHC colleagues, such as front desk registration staff, health educators, medical assistants, registered nurses, mental health providers, and dental health professionals with the right language to speak professionally and confidently about the HPV vaccine, from the front desk to the exam room. Provide in-service training on

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HPV vaccination for the entire SBHC practice and establish consistent messaging for parents and school staff. Implement daily pre-clinic team meetings or huddles to improve flow and quality of care. Ensure that pre-visit planning or huddle discussions include a review of vaccination status. Be sure to assess the vaccination status of drop-ins or walk-ins too. Many SBHCs employ a single provider who is also the vaccinator. Hence the use of standing orders might only be beneficial to sites that have a support staff also licensed to vaccinate.

### Reminders

Utilizing electronic tools to assist in reminding clinical staff of the need for vaccination is an effective tool in improving HPV vaccination rates.

- ✓ Create prompts in the EMR to review immunization status at each encounter.
- ✓ Optimize the daily patient schedule to allow for “vaccine-only visit.”
- ✓ Conduct daily huddles to identify patients in need of vaccinations. Ensure that all barriers to vaccinations are addressed prior to the medical encounter to ensure a seamless visit (i.e., current immunization record and consent are both on file, and the Vaccine Information Sheet (VIS) and a letter to the parent indicating which vaccines were received are printed and ready to hand to the patient.
- ✓ Identify and develop effective strategies to communicate future vaccine visits with your patients and their parents (text messaging, call, and/or email).

### Use Quarterly Reports from the State or City Immunization Registry

In NYS, health care providers have access to NYSIIS statewide and the Citywide Immunization Registry (CIR) in New York City to review a patient’s immunization history. The state or city registry should always be reviewed for each patient at the start of every visit or prior to the administration of any vaccination.

- ✓ Establish a link with NYSIIS or CIR to allow for upload and download of vaccination information.
- ✓ Pull quarterly NYSIIS or CIR reports to assess HPV vaccination coverage for all patients starting at 10-11 years of age. Based on the data in the report, schedule immunization visits for patients in need of the HPV vaccine.
- ✓ Document patient’s vaccination status review in EMR during each encounter and ensure all immunizations provided are entered into NYSIIS or CIR if an automatic upload is not yet established.

### Minimize Missed Opportunities

An effective strategy to improve HPV vaccination rates is to remain focused on HPV vaccination at all visits and not just well-child exams. A strategic focus on HPV vaccination at every visit will significantly help to minimize missed opportunities to vaccinate.

- ✓ Offer the HPV vaccination during every medical encounter unless the patient has a medical contraindication to vaccination or is severely ill. Minor illnesses such as colds, upper respiratory tract infections, gastroenteritis, or fever are not contraindications to vaccination.
- ✓ Most children can be safely vaccinated during every medical encounter including routine well visits, sick-visits or chronic-care visits.
- ✓ History of HPV infection is not a contraindication to vaccination. Ensure that there is a system to promptly follow up with teens who have missed an immunization appointment.
- ✓ Medical contraindications include an anaphylactic allergy to because the tip cap for the prefilled bivalent vaccine might contain natural rubber latex. The quadrivalent and 9-valent HPV vaccines are

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produced in *Saccharomyces cerevisiae* (baker's yeast) and are therefore contraindicated for persons with an immediate hypersensitivity to yeast.

### Parental Consent

Obtaining parental consent in SBHCs is a common barrier to vaccination as parents are not always present during their child's medical visit. In order to remove this barrier, obtaining consent for the entire HPV vaccination series has been used successfully by some SBHCs. See sample consent forms in the Resources section.



- ✓ When obtaining parental consent, use a *presumptive* approach to vaccination. Consider stating: “*Your child is due to receive the cancer prevention HPV vaccine. I will vaccinate her/him on X date.*”
- ✓ If the child needs several vaccines, bundle all the needed vaccines into a single statement. Consider saying: “*Your child is due to receive vaccines to protect him/her against meningitis, HPV-related cancer, whooping cough, and flu. I will vaccinate her/him on X date.*”
- ✓ Include the immunization consent form in the SBHC enrollment packet.
- ✓ Highlight that the HPV vaccine is for cancer prevention and that it is most effective when given between ages 11 and 12 and when given *prior* to the onset of sexual activity.
- ✓ Use incentives to promote returning parental immunization consent forms.
- ✓ Empower others (i.e., vaccine champion, school nurse, front desk staff, medical assistant, health educator, school personnel) to obtain consent when a parent visits the school for any reason.

### Minor Self-Consent



A 2014 study surveyed 263 adolescent health-care professionals in 43 states regarding unaccompanied minor visits and perceived likelihood of vaccine delivery in various scenarios (e.g., minor age, vaccine type, visit type, clinical setting). Most providers familiar with public primary-care clinics reported that 17-year-old patients often present alone (56.7%). Half of these providers said that 17-year-old patients would not receive HPV vaccines during routine check-ups because they could not provide self-consent. Respondents reported that they generally would support minors having the ability to self-consent for vaccines at age 14 years.

The authors concluded that the inability of minors to provide self-consent is a likely barrier to HPV vaccination.[22] To improve HPV vaccination rates, the NYS Department of Health added a new section to the health regulations (10 NYCRR §23.4)[5] to permit health-care providers to administer the HPV vaccine to sexually active minors during confidential sexual and reproductive health care visits without consent of the parent or guardian. This provision in the Public Health Law also prohibits the release of medical or billing records by a healthcare provider to a parent/guardian that may be generated from a minor consenting to the HPV vaccine. Young people are often afraid of parents discovering their use of sexual health services. Although it is best to obtain parental consent for vaccination administration, when necessary to allow self-consent, all efforts should be pursued by the SBHC to protect the minor's confidentiality. For additional information

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pertaining to this public health regulation, see the state health department frequently asked question document: [https://www.health.ny.gov/diseases/communicable/std/docs/faq\\_billing\\_consent.pdf](https://www.health.ny.gov/diseases/communicable/std/docs/faq_billing_consent.pdf)

If parental consent cannot be obtained for a patient who is a minor:

- ✓ Provide the patient with educational materials, such as the Vaccine Information Sheet (VIS) or other suitable materials that explain the benefits of the HPV vaccine.
- ✓ Disclose to the patient that depending on the type of insurance, the Explanation of Benefits (EOB) may reveal that the HPV vaccination was given during the medical visit. This may not be true for Medicaid in New York. With other insurers, the patient may be able to call his or her health plan to have the EOBs sent to a different address, such as the SBHC.
- ✓ Discuss that the immunization registry will contain the documentation of HPV vaccine for other medical providers which may then be communicated to the parent.
- ✓ Offer the patient support on how to communicate with a parent about the HPV vaccine if the patient was confidentially vaccinated without parental consent.
- ✓ Discuss with the patient how he/she wants to keep track of HPV vaccination since documentation on a yellow immunization card that is brought home might breach confidentiality around sexual activity if found by a parent.

### Parent Education

Start educating parents about the importance of the HPV vaccine when the child(ren) enter 4<sup>th</sup> grade and are 9 years of age. Discuss the importance of the HPV vaccine during routine well visits starting at age 9 and prepare parents for a child's confidential well visits around age 11 or 12 (Academy of Pediatrics Periodicity Schedule [https://www.aap.org/en-us/Documents/periodicity\\_schedule.pdf](https://www.aap.org/en-us/Documents/periodicity_schedule.pdf)).

- ✓ Utilize the SBHC setting as a unique opportunity to disseminate HPV educational materials to parents (i.e. school website, school PTA group, and community open houses held within the school).
- ✓ Educate parents about the student patient's right to self-consent to HPV vaccination without parental consent.
- ✓ Highlight that the HPV vaccine is for cancer prevention and that it is most effective when the vaccine is given between ages 11 and 12 and when given prior to virus exposure.

### Student Education

#### Integrating HPV into Existing Curricula

The school setting is a natural place to educate children and adolescents about HPV, its effects, and how to reduce the risk of HPV infection and HPV-related cancers. During middle school, students take health classes that cover infectious and chronic diseases, such as cancer. Both topics offer the perfect opportunity to work with health teachers to incorporate HPV education into the curriculum, if not already present. Utilize the unique partnership between the school and the SBHC and ask to collaborate with the health teacher to provide an overview of the SBHC and its vaccine-related services. Use HPV vaccination as an example of a preventive service that is more easily administered during the school day,



at school, rather than at a pediatrician's office in the community to complete the multiple-dose vaccination series.

Weaving HPV content into existing classes in a way that reinforces or builds on previous lesson plans, sometimes in multiple subjects, can be an effective and engaging teaching method. One interesting and fun example is a unique program created in Syracuse, New York, at the State University of New York Upstate Medical University. *Beneath the surFACE* is an educational program for secondary school students developed by physicians, researchers, and caregivers at the Upstate Cancer Center. This education and advocacy program is focused on head and neck cancer causes, prevention, and minimizing risk factors through smart lifestyle choices, including advocacy for the HPV vaccination. The primary audiences are students in the age range of 10 to 13 (middle school) with relevant information for 14 to 18+ (high school).

The self-guided program materials are available for review at [www.upstate.edu/surface](http://www.upstate.edu/surface) and include:

- ✓ Teacher Guide – Curriculum/Script/Talking Points
- ✓ Instructor-guided online presentation
- ✓ *Beneath the surFACE* documentary link
- ✓ Supplemental materials: student activities, additional resources, and follow-up materials

### Peer Education

Another strategy that has been used to effectively educate and engage youth on health topics, such as tobacco use and nutrition, is youth empowerment. The idea is to teach youth to be peer leaders and educators who can be heard and trusted by other youth. Groups are created not only to share information but to advocate for a position and bring others into a campaign to enact change. In this case, an HPV education team would come together to learn about the topic and then speak to others in groups or class settings about the importance of HPV vaccination for cancer prevention, the need to encourage parents to support HPV vaccination, and the benefits of utilizing the SBHC to initiate and/or complete the HPV series. SBHCs are key partners in initiating and supporting an HPV-related empowerment group.

Although it is important that the group be student-driven, SBHC staff should provide education and training. Other school departments could be engaged to help with public speaking or to create skits to model talking to a parent or decision-maker about the issue. An excellent example of a peer-education approach has been implemented successfully in Seattle, Washington. A detailed HPV Campaign Tool Kit was created and can be found in the Resources section.

### School-Wide Education

#### Engaging School Decision-Makers

It is important to educate school principals and other administrators about the critical role that the SBHC plays in promoting and maintaining health among students. The job of the SBHC becomes more difficult if providers and other SBHC staff are being pressured to avoid taking students out of classes for vaccinations and other preventive services or medical treatments. Highlighting the shared goals of improving attendance and productivity by keeping students physically and emotionally healthy is a successful strategy. Seek out ways to build a relationship with school decision-makers and create informal opportunities to chat about the role of the SBHC and the importance of HPV vaccination and other services being provided by the SBHC. The goal is for the



administrator to see the SBHC and its staff as vital partners in meeting the complex needs of students and families so that young people can learn most effectively and succeed.

One of the most difficult interventions, depending on school leadership and culture, can be getting school administrators to support and actively facilitate the promotion of HPV vaccinations through school communications and events. In places that have strong buy-in from schools to promote school-based vaccination programs, the results have been very good.[13] Unfortunately, school administrators and School Boards may be apprehensive about introducing a potentially controversial topic with parents despite the public health rationale. Although it has taken time, the U.S. has seen widespread acceptance of the HPV vaccine by the health care community and most parents.

### School Campaigns for Change

Another school-wide educational strategy is to share the school's HPV vaccination rate. If possible, use the city or state vaccination registry to add up the number of age-eligible students in the school who have been vaccinated for HPV (from both the SBHC and outside healthcare providers) and divide by the total number of age-eligible students.

- ✓ Discuss the finding with the principal, the PTA, and other school stakeholders to develop a campaign to increase the HPV vaccination rate.
- ✓ Publicize the school or district rate internally and the need to prevent cancer by working together to increase the coverage rate.
- ✓ These data may help motivate the school to develop outreach to parents to achieve vaccination rate improvements which could be a source of school or district pride.



Providers, health educators, and dental health professionals at the SBHC can be strong advocates for integrating HPV education and vaccination information into curricula and parent-focused communications. As the old saying goes, “the squeaky wheel gets the grease.” The more SBHC staff and other stakeholders push and advocate, the more likely change will happen. Remember, SBHC staff do not have to work on this initiative alone. Find your allies within the school and in the community. Work with partners to use the following process to develop a plan to influence decision-makers at the school or district level to support and facilitate school-wide education:

- ✓ **DEFINE THE GOAL:** What do you want the decision-makers to do? Be very specific. For example, “The Principal will send one letter each year to parents/caregivers whose students have not been vaccinated to explain the importance of the HPV vaccine and encourage them to get vaccinated at the school by filling out this consent form.”
- ✓ **AUDIENCE:** Who has the power make the change? The School Principal, the Superintendent, the School Board?
- ✓ **MESSAGE:** What message will convince those with power to take action? Keep the focus on the vaccine as cancer prevention, most effective if administered at ages 11 and 12 when the child's

## NYS HPV Vaccination Guide for School-Based Health Centers

immune system is robust and before exposure to the virus. “How many of our kids will die prematurely or be diagnosed with cancers later in life that could have been prevented through vaccination?”

- ✓ **MESSENGERS:** Who must be mobilized to deliver the message? Clearly parents are key stakeholders but not the only influential voices with a school administrator. For example, finding a parent or student’s relative who is a survivor of HPV-related cancer or a prominent health-care provider in the community to carry the message could be very powerful.
- ✓ **DELIVERY:** How can we get those with power to hear the message? This process requires patience and an articulate spokesperson to frame the need for action. Perhaps you could plan to meet individually with the decision-maker followed by a meeting which includes several allies such as parents or a PTA representative. If the administrator is still not on board, it might make sense to have an advocate approach the Superintendent followed by the local School Board. Obviously, every political situation is different, and the strategy will need to be weighed carefully to assess the costs versus potential benefits.
- ✓ **RESOURCES:** What do we already have? Who else do we have for internal and external allies? Consider a variety of communication vehicles which can reach a wide audience, such as a local paper or local social-media platform.
- ✓ **NEEDS:** What additional resources do we need to develop? Should information be tailored to specific communities within the school to generate more support and bring more parents into the discussion? Has any focus group been conducted to identify effective messages?
- ✓ **FIRST EFFORTS:** How do we begin? Going through the questions above should provide an answer. Perhaps the first step is to schedule an appointment with the Principal or other decision-maker to determine his or her support for the proposal and whether the ultimate decision-maker maintains an office elsewhere.
- ✓ **EVALUATION:** How will we know it is working? The most important evaluation tool is the routine data collection system you set up to calculate your vaccination rate. This might be something you report every June and discuss with your stakeholder team. During the iterative process of measure, review, and repeat, you will identify improvements in your processes which support and streamline patient and parent education, outreach and reminder systems, and data capturing via statewide registries. In addition to this quantitative cycle, it is important to capture qualitative feedback. You might consider putting out comment cards or doing a quick anonymous survey using a free tool like Google forms to take the pulse of your stakeholder team. They might have suggestions and observations that are helpful to capture and track. Even if your goal was not yet achieved, you likely will have increased awareness and positively impacted HPV vaccination uptake in the process.

## NEW YORK CASE STUDIES: HPV Vaccination in School-Based Health Centers

### North Country Family Health Center, Watertown, NY

**Name:**

Anna Belle Hyde, FNP-C

**Barriers:**

I practice in an area where several years ago a young woman passed away after having received two HPV immunizations. Of course, the vaccine was not responsible for her death, but the parents were active in discussions with the media. While her death is a tragedy in itself, the family’s campaign to stop people from receiving this vaccine set back the whole perspective of a “cancer preventing” vaccine in this area.

Even though there is more information out there about this amazing vaccine, many parents still decline it because “there is no family history of cervical cancer in my family.” I do a fair amount of teaching with these parents, discussing that only about 30% of cervical cancer is hereditary and most of the rest of the cases occur because of HPV exposure. Sometimes I can get the parents to change their minds.



**Lessons Learned:**

TEACH, TEACH, TEACH. I don’t give up on many parents who decline the vaccine the first few times. I continue to advocate for this vaccine. Often, I will tell parents this is the only vaccine we have to help prevent cancer in your children—and this is an opportunity to protect them in the future.

I have 5<sup>th</sup> to 8<sup>th</sup> graders in my two clinic sites—prime vaccine time for these patients. This would, of course, include the Tdap and MCV4 and why not add the HPV as well. I start and complete many patients’ HPV series over the course of their 5<sup>th</sup> through 8<sup>th</sup> grade years.

Keep TEACHING about the vaccine and many times the parents will change their mind.

Urban Health Plan, Bronx, NY

**Name:**

Elizabeth Etienne, MD.  
Supervising Physician

**Barriers:**

Children are sometimes not in the vaccination registry making it difficult to determine who needs the HPV vaccine.

Our SBHC often seeks out different sources of vaccination information, such as physician records, for those born out-of-state or who are new to the country to ensure, as much as we can, that our patient's vaccination records are up to date.

**Lessons Learned:**

Two important lessons that we have learned over the years include:

- Increase awareness of the vaccine starting when the child reaches age 9;
- Promote the HPV vaccine as a cancer prevention tool rather than something that will prevent sexually transmitted disease.



### RESOURCES

The following select HPV education materials come from national, reputable sources and are easily printed out or emailed to those who would benefit from the information.

#### Parents and Caregivers

##### **Take a Shot at Cancer**

The American Cancer Society produced a 2-page educational infographic for parents. Includes the ability to add the initial vaccination date, a follow up appointment date, and the provider's name and phone number.

<https://www.cancer.org/content/dam/cancer-org/online-documents/en/pdf/flyers/hpv-take-a-shot-at-cancer.pdf>

##### **Middle School Health Toolkit**

A 10-page guide created by the National HPV Vaccination Roundtable to educate parents about the preventive healthcare needs of middle school children. The resource has a variety of handy features including the "Healthy Year Checklist" so parents know when to get which tests or recommended vaccines for their kids.

<https://schoolnursenet.nasn.org/HigherLogic/System/DownloadDocumentFile.ashx?DocumentFileKey=f22e6c1f-f724-65ae-1e81-a5b96f01164b&forceDialog=0>

##### **Protecting Our Children from HPV Cancers**

A simple 1-page infographic handout by the American Cancer Society which covers the key educational messages: 1) HPV vaccination is Cancer Prevention, 2) the vaccine is safe and effective, 3) it is for boys and girls, and 4) it should be administered at ages 11 or 12 years.

<https://www.cancer.org/content/dam/cancer-org/online-documents/en/pdf/flyers/protecting-our-children-from-hpv-cancers.pdf>

##### **HPV Vaccine Safety Fact Sheet**

A 1-page, easy-to-read fact sheet developed by the Centers for Disease Control and Prevention for parents. It presents HPV vaccine safety, effectiveness, and duration of protection.

<https://www.cdc.gov/vaccines/partners/downloads/teens/vaccine-safety.pdf>

##### **Several CDC HPV educational handouts for parents in Spanish**

<https://www.cdc.gov/hpv/hcp/spanish-resources.html>

### Providers

#### **Steps for Increasing HPV Vaccination in Practice: An Action Guide to Implement Evidence-Based Strategies for Clinicians**

An 8-page American Cancer Society Guide designed to prepare practices and providers to maximize HPV vaccination using a 4-step process.

<https://www.cancer.org/content/dam/cancer-org/online-documents/en/pdf/flyers/steps-for-increasing-hpv-vaccination-in-practice.pdf>

#### **Cancer Prevention through HPV Vaccination in Your Practice: An Action Guide for Physicians, Physician Assistants, and Nurse Practitioners**

A National HPV Vaccination Roundtable tool that clearly explains the evidence-based strategies and other tactics that providers are recommended to take to increase HPV vaccination in a clinical setting.

<http://hpvroundtable.org/wp-content/uploads/2018/04/PROVIDERS-Action-Guide-WEB.pdf>

### Students and Advisors

#### **HPV Vaccine Campaign: Starting A Cancer Prevention Campaign in Your School**

A toolkit designed by Kings County Department of Health to provide SBHC staff and students the tools to develop and sustain a campaign to promote HPV vaccination in a school.

[https://www.kingcounty.gov/depts/health/communicable-diseases/immunization/~/\\_media/depts/health/communicable-diseases/documents/immunizations/hpv-vaccine-campaign-toolkit.ashx](https://www.kingcounty.gov/depts/health/communicable-diseases/immunization/~/_media/depts/health/communicable-diseases/documents/immunizations/hpv-vaccine-campaign-toolkit.ashx)

#### **Adolescent Immunization Resource Guide: Engaging Teens Directly**

This comprehensive guide developed by the National Association of Immunization Managers provides strategies from different states to engage and empower teens to increase HPV and other adolescent vaccines.

[https://cdn.ymaws.com/www.immunizationmanagers.org/resource/resmgr/Adolescent\\_Resource\\_Guide/Chapter\\_2/AIM\\_ADOLESCENT\\_IMMUNIZATION\\_.pdf](https://cdn.ymaws.com/www.immunizationmanagers.org/resource/resmgr/Adolescent_Resource_Guide/Chapter_2/AIM_ADOLESCENT_IMMUNIZATION_.pdf)

## Sample Forms

### Parental HPV Consent Forms

<http://www.jhf.org/admin/uploads/Template%20-%20Informed-Consent-HPV-Vaccine-Series.pdf>

<https://www.toronto.ca/wp-content/uploads/2018/09/98a6-tph-gr7-sip-consent-form-Sept-2018.pdf>

### Parental Refusal Form

<http://www.vaclib.org/exempt/files/AAPmodified.pdf>

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