Teamwork is the Key to HPV Vaccination Success

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Disclosure

No financial disclosures or conflicts of interest
Objectives

1. Understand why HPV vaccination is important.
2. Identify the types of Human Papilloma Virus and the cancers associated with them.
3. Identify the appropriate HPV vaccination schedule based on patient age.
4. Identify reassuring, confident, and concise responses to commonly asked parental questions about HPV vaccination.
5. Understand how teamwork is essential in attaining HPV vaccination success.
6. Identify helpful resources to use to improve your HPV vaccination rates.
CDC’s Top Ten Tips for HPV Vaccination Success
TIP 1: Appreciate the Significance of Achieving High HPV Vaccination Success

BY BOOSTING HPV VACCINATIONS RATES YOU WILL BE PREVENTING CANCER.
Human Papilloma Virus

DNA Virus

Papilloma Family

Infects Keratinocytes (cells in the outer layer of skin and mucous membranes)

Infects humans

Most cases subclinical=most people do not know they are infected

Chronic infection can cause cancers of the cervix, vagina, vulva, oropharynx, anus, or penis
Papilloma = common, benign, epithelial tumor
HPV Types Differ in Their Disease Associations

- **Mucosal sites of infection**
  - High risk (oncogenic)
    - HPV 16, 18 most common
  - Low risk (non-oncogenic)
    - HPV 6, 11 most common

- **Cutaneous sites of infection**
  - Genital Warts
    - Laryngeal Papillomas
    - Low-Grade Cervical Disease
  - "Common" Hand and Foot Warts

- **~ 40 Types**
  - Cervical Cancer
    - Anogenital Cancers
    - Oropharyngeal Cancer
    - Cancer Precursors
    - Low-Grade Cervical Disease

- **~ 80 Types**
HPV Infection

- Most females and males will be infected with at least one type of mucosal HPV at some point in their lives
  - Estimated 79 million Americans currently infected
  - 14 million new infections/year in the US
  - HPV infection is most common in people in their teens and early 20s
- Most people will never know that they have been infected
Chronic HPV Infection

- Premalignant lesions infect cervix, vulva, vagina, penis, oropharynx, anus
- Over 170 types of HPV
- HPV 16 and 18 known to cause 70% of all cervical cancers
- High risk HPV infection causes nearly all cases of cervical cancer
Number of HPV-Associated and HPV-Attributable Cancer Cases per Year, U.S., 2011–2015

<table>
<thead>
<tr>
<th>Cancer site</th>
<th>Number of HPV-associated cancers</th>
<th>Percentage probably caused by any HPV type</th>
<th>Number probably caused by any HPV type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
</tr>
<tr>
<td>Cervix</td>
<td>11,866</td>
<td>91%</td>
<td>10,751</td>
</tr>
<tr>
<td>Vagina</td>
<td>846</td>
<td>75%</td>
<td>635</td>
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<tr>
<td>Vulva</td>
<td>3,934</td>
<td>69%</td>
<td>2,707</td>
</tr>
<tr>
<td>Penis</td>
<td>1,269</td>
<td>63%</td>
<td>0</td>
</tr>
<tr>
<td>Anus*</td>
<td>6,530</td>
<td>91%</td>
<td>4,008</td>
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<tr>
<td>Oropharynx</td>
<td>18,226</td>
<td>70%</td>
<td>2,160</td>
</tr>
<tr>
<td>TOTAL</td>
<td>42,671</td>
<td>79%</td>
<td>20,260</td>
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</table>

*Includes anal and rectal squamous cell carcinomas

HPV-Associated Cancer Rates by Sex, Race, and Ethnicity, United States, 2011–2015

https://www.cdc.gov/cancer/hpv/statistics
Cervical Cancer

- Cervical cancer is the most common HPV-associated cancer among women
  - 528,000 new cases and 266,000 deaths worldwide in 2012
  - In 2015 approx. 12,800 new cases and 4,000 deaths in the U.S.

- Half of cervical cancers occur in women <50 years
  - A quarter of cervical cancers occur in women 25-39 years

1940’s Cervical Cancer was the number 1 cancer killer of women in the United States

DEVELOPMENT OF THE PAP SMEAR DECREASED CERVICAL CANCER BY 75%

CERVICAL CANCER STILL A MAJOR PROBLEM IN MANY PARTS OF THE WORLD
Cervical Pre-Cancer in U.S. Females

- ~300,000 high grade cervical lesions every year

HPV vaccine is cancer prevention.

Talk to the doctor about vaccinating your 11–12 year old sons and daughters against HPV.

#UCanStopHPV

EVIDENCE-BASED HPV DISEASE PREVENTION

HPV VACCINE
What is the HPV Vaccine?
HPV Prophylactic Vaccines

- Recombinant L1 capsid proteins that form "virus-like" particles (VLP)
- Non-infectious and non-oncogenic
- Produce higher levels of neutralizing antibody than natural infection

HPV Virus-Like Particle
HPV Vaccine Comparison

<table>
<thead>
<tr>
<th>HPV Types Included in Vaccine</th>
<th>6</th>
<th>11</th>
<th>16</th>
<th>18</th>
<th>31</th>
<th>33</th>
<th>45</th>
<th>52</th>
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<tbody>
<tr>
<td>Bivalent</td>
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<tr>
<td>Quadrivalent</td>
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<td>9-valent</td>
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</tbody>
</table>

- **Genital warts**: 63% of cancers in body parts where HPV DNA is often found
- **10% of cancers in body parts where HPV DNA is often found**

Adapted from Petrosky et al. MMWR, 2015.
What Are the Current HPV Vaccination Recommendations?
HPV Vaccine Recommendation

CDC recommends routine vaccination at age 11 or 12 years to prevent HPV cancers

- The vaccination series can be started at age 9 years.
- If started prior to 15th birthday, 2 doses of vaccine are recommended.
- The second dose of the vaccine should be administered 6 to 12 months after the first dose.
HPV Vaccine Recommendations: Catch-Up/Late

- Vaccination for females through age 26 years and for males through age 21 years who were not previously adequately vaccinated. Males aged 22 through 26 years may be vaccinated.
- Vaccination is also recommended through age 26 for gay, bisexual, and other men who have sex with men (MSM), transgender people, and people with certain immunocompromising conditions (including HIV infection).
Dosing Schedules

STARTING THE VACCINE SERIES BEFORE THE 15TH BIRTHDAY

Recommended schedule is 2 doses of HPV vaccine
- Second dose should be administered 6–12 months after the first dose
  - (0, 6–12 month schedule)
- Minimum interval between dose 1 and dose 2 in a 2-dose schedule is 5 months

STARTING THE VACCINE SERIES ON OR AFTER THE 15TH BIRTHDAY*

Recommended schedule is 3 doses of HPV vaccine
- Second dose should be administered 1–2 months after the first dose, and the third dose should be administered 6 months after the first dose
  - (0, 1–2, 6 month schedule)
- Minimum interval between dose one and dose three in a 3-dose schedule is 5 months

*And immunocompromised persons 9-26 years

Meites et al. MMWR. 2016.
HPV vaccine protects against cancers and other diseases caused by human papillomavirus (HPV). Follow the chart below to determine whether your patient needs two or three doses of HPV vaccine.

**PREVENTING CANCER JUST GOT EASIER**

**IS THE PATIENT AGE 11—12?**

- **NO**
  - Has the patient received any doses of HPV vaccine?
    - **NO**
      - More than one?
        - **NO**
          - Two doses or three doses?
            - **NO**
              - Administered at least 5 months apart?
                - **YES**
                  - **VACCINATE**
                  - The patient should receive the second dose of HPV vaccine 6-12 months after the first dose to complete the series.

  - **YES**
    - **VACCINATE**
    - The patient should receive the second dose of HPV vaccine 6-12 months after the first dose.

- **YES**
  - Has the patient received any doses of HPV vaccine?
    - **NO**
      - More than one?
        - **NO**
          - Two doses or three doses?
            - **NO**
              - Administered at least 5 months apart?
                - **YES**
                  - **VACCINATE**
                  - The patient should receive the second dose of HPV vaccine 6-12 months after the first dose.

- **YES**
  - Has the patient received any doses of HPV vaccine?
    - **NO**
      - More than one?
        - **NO**
          - Two doses or three doses?
            - **NO**
              - Administered at least 5 months apart?
                - **NO**
                  - **VACCINATE**
                  - The patient should receive a third dose of HPV vaccine 6-12 months after the first dose to complete the series.

**CDC RECOMMENDS TWO HPV DOES FOR YOUNGER ADOLESCENTS**

- Two-dose schedule is recommended for adolescents starting the schedule at ages 9 through 14 years. For this age group, follow the decision tree on the reverse side.
- Adolescents aged 15 through 14 years who have already received two doses of HPV vaccine less than 5 months apart will require a third dose. The third dose should be given 6-12 months after the first dose to complete the series.
- A three-dose schedule is recommended for those aged 9 through 14 years.
- Adolescents who have previously received two doses of HPV vaccine should receive a third dose. If the second dose was given less than 5 months apart, the third dose should be given 6-12 months after the first dose.

**TALKING TO PATIENTS AND THEIR PARENTS ABOUT 2-DOSE SCHEDULES FOR HPV VACCINATION**

With patients aged 11–12 years, start the vaccine discussion with their parents by making the following recommendation: "Now that your child is 11 or 12 years old, they are due for three vaccines today to help protect them from the infections that cause genital warts and cervical cancer—HPV vaccination is a normal part of adolescent vaccination. Parents may be interested in vaccinating, get still have questions. Some parents might just need additional information from you, the clinician they trust. Clarify the parent’s question or what additional information they need.

For parents who have a question or need more information about "why now? why 11-12?"

"As with all vaccine-preventable diseases, we want to protect your child early. If we start now, it’s one less thing for you to worry about. Also, your child will only need two doses of HPV vaccine at this age. If you wait, your child may need three doses in order to get complete protection. We’ll give the first dose today and then you’ll need to bring your child back in 6 to 12 months from now for the second dose."

If a parent asks, or needs more information about “How long can we wait and still give just two doses?”

"The two-dose schedule is recommended if the series is started before the 15th birthday. However, I don’t recommend waiting to give this cancer-preventing vaccine. As children get older and have busier schedules, it becomes more difficult to get them back in. I’d feel best if we started the series today to get your child protected as soon as possible."

For patients aged 9–14 who have already had two doses given less than 5 months apart:

The recommended schedule is two doses given 6 to 12 months apart. The minimum amount of time between those doses is 5 months. Because your child received two doses less than 5 months apart, we’ll need to give your child a third dose."

For parents asking about the duration of protection or how well the vaccine will work with just two doses:

"Studies have shown that two doses of HPV vaccine work very well in younger adolescents and we expect the same long-lasting protection with two doses that we expect with three doses. You can also access guidance on answering parents’ questions about HPV vaccine by using our tip sheet, Talking to Parents about HPV Vaccine, at www.cdc.gov/HIV.


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Is the HPV Vaccine Safe?
# United States Vaccine Safety System

<table>
<thead>
<tr>
<th>System</th>
<th>Collaborators</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vaccine Adverse Event Reporting System (VAERS)</td>
<td>CDC and FDA</td>
<td>Frontline, spontaneous reporting system to detect potential vaccine safety issues</td>
</tr>
<tr>
<td>Vaccine Safety Datalink (VSD)</td>
<td>CDC and 8 integrated health care systems</td>
<td>Large-linked database system used for active surveillance and research ~9.4 million members (~3% of US pop)</td>
</tr>
<tr>
<td>Clinical Immunization Safety Assessment (CISA) Project</td>
<td>CDC and 7 academic centers</td>
<td>Expert collaboration that conducts individual clinical vaccine safety assessments and clinical research</td>
</tr>
<tr>
<td>Post-Licensure Rapid Immunization Safety Monitoring Program (PRISM)</td>
<td>FDA and 6 partner organizations</td>
<td>Large distributed database system used for active surveillance and research ~170 million individuals (~53 of US pop)</td>
</tr>
</tbody>
</table>
Over 10 Years of HPV Vaccine Safety Data

- HPV vaccines are safe
- Reactions after vaccination may include:
  - Injection site reactions: pain, redness, and/or swelling in the arm where the shot was given
  - Systemic: fever, headaches
- HPV vaccines should not be given to anyone who has had a previous allergic reaction to the HPV vaccine or who has an allergy to yeast
- Brief fainting spells (syncope) and related symptoms (such as jerking movements) can happen soon after any injection, including HPV vaccine
- Patients should be seated (or lying down) during vaccination and remain in that position for 15 minutes
HPV Vaccine Safety Studies Have Been Very Reassuring: HPV Vaccine Has a Good Safety Profile.

CDC and FDA continue to monitor and evaluate the safety of HPV vaccines, along with all vaccines.

Clinicians can reassure parents who may have concerns that HPV vaccination is safe.

Is the HPV Vaccine Effective?
MONITORING IMPACT OF HPV VACCINE PROGRAMS ON HPV-ASSOCIATED OUTCOMES

HPV VACCINE IMPACT
Post-licensure evaluations are important to evaluate real-world effectiveness of vaccines.

Population impact against early and mid outcomes has been reported in many countries, including:

- **HPV prevalence**
  - Australia, Norway, Denmark, Sweden, Switzerland, UK, U.S.

- **Genital warts**
  - Australia, Belgium, New Zealand, Denmark, Sweden, Germany, Quebec, U.S.

- **Cervical lesions**
  - Australia, British Columbia, Denmark, Scotland, Sweden, U.S.
Impact of HPV Vaccination in Australia

Proportion of Australian-born females and males diagnosed as having genital warts at first visit, by age group, 2004-11

Systematic Review and Meta-Analysis: Population-Level Impact of HPV Vaccination

- Review of 20 studies in 9 high-income countries
- In countries with >50% coverage, among 13-19 year-olds
  - HPV 16/18 prevalence decreased at least 68%
  - Anogenital warts decreased by ~61%
- Evidence of herd effects
- Some evidence of cross protection against other types

Drolet et al. Lancet Infect Dis. 2015
How Long Does HPV Vaccination Last? Are Booster Shots Recommended?
HPV Vaccine
Duration of Protection

- Studies suggest that vaccine protection is **long-lasting**
- No evidence of waning protection
- Available evidence indicates protection for **at least** 10 years
- Multiple studies are in progress to monitor

HPV Vaccination Is Safe, Effective, and Provides Lasting Protection

HPV Vaccine Is **SAFE**
- Benefits far outweigh any potential risks
- Safety studies findings for HPV vaccination are reassuring and similar to MenACWY and Tdap vaccine safety reviews

HPV Vaccine **WORKS**
- Population impact against early and mid outcomes has been reported in multiple countries

HPV Vaccine Protection **LASTS**
- Studies suggest that vaccine protection is long-lasting
- No evidence of waning protection
Tip 2: Acknowledge the importance your recommendation has when it comes to parents choosing to get their children to vaccinate

Clinician recommendation is the number one reason parents decide to vaccinate. This is especially important for HPV vaccination. Every member of the clinic staff need to be supportive of HPV vaccination.
Parents of unvaccinated girls – top reasons for not starting HPV vaccine series

- Not sexually active
- Not recommended
- Safety concern/side effects
- Not needed or necessary
- Lack of knowledge

Percent

Stokley et al., MMWR, 2014.
Clinicians Underestimate the Value Parents Place on HPV Vaccine

Adapted from Healy et al., Vaccine, 2014.
Give an Effective Recommendation to Receive HPV Vaccine at Age 11 or 12

An effective recommendation from you is the main reason parents decide to vaccinate

Many moms in focus groups stated that they trust their child’s clinician and would get the vaccine for their child as long as they received a recommendation from the clinician

Adolescent Vaccination Coverage
United States, 2006-2017

FIGURE. Estimated coverage with selected vaccines and doses* among adolescents aged 13–17 years, by survey year and ACIP recommendations† — National Immunization Survey-Teen, United States, 2006–2017§

Abbreviations: ACIP = Advisory Committee on Immunization Practices; HPV = human papillomavirus; MenACWY = quadrivalent meningococcal conjugate vaccine; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; UTD = up to date.

* ≥1 dose Tdap at or after age 10 years; ≥1 dose MenACWY or meningococcal-unknown type vaccine; ≥2 doses MenACWY or meningococcal-unknown type vaccine, calculated only among adolescents aged 17 years at time of interview. Does not include adolescents who received their first and only dose of MenACWY at or after 16 years of age; HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV), or bivalent (2vHPV). The routine ACIP recommendation for HPV vaccination was made for females in 2006 and for males in 2011. Because HPV vaccination was not recommended for males until 2011, coverage for all adolescents was not measured before that year; HPV UTD includes those with ≥3 doses and those with 2 doses when the first HPV vaccine dose was initiated before age 15 years and at least 5 months minus 4 days elapsed between the first and second dose.

† ACIP revised the recommended HPV vaccination schedule in late 2016. The recommendation changed from a 3-dose to 2-dose series with appropriate spacing between receipt of the first and second dose for immunocompetent adolescents initiating the series before their 15th birthday. Three doses are still recommended for adolescents initiating the series between the ages of 15 and 26 years. Because of the change in recommendation, the graph includes estimates for ≥3 doses HPV from 2011 to 2015 and the HPV UTD estimate for 2016 and 2017. Because HPV vaccination was recommended for boys in 2011, coverage for all adolescents was not measured before that year.

§ NIS-Teen implemented a revised adequate provider data definition (APD) in 2014, and retrospectively applied the revised APD definition to 2013 data. Estimates using different APD definitions may not be directly comparable.
Impact of Eliminating Missed Opportunities by Age 13 Years in Girls Born in 2000
South Dakota HPV Vaccination Rates

<table>
<thead>
<tr>
<th></th>
<th>All Adolescents</th>
<th>Females</th>
<th>Males</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>≥1 HPV</td>
<td>HPV UTD†††</td>
<td>≥1 HPV</td>
</tr>
<tr>
<td>2017-US</td>
<td>65.5</td>
<td>48.6</td>
<td>68.6</td>
</tr>
<tr>
<td>2017-SD</td>
<td>63.2</td>
<td>44.8</td>
<td>67.9</td>
</tr>
<tr>
<td>2016-US</td>
<td>60.4</td>
<td>43.4</td>
<td>65.1</td>
</tr>
<tr>
<td>2016-SD</td>
<td>55.9</td>
<td>38.6</td>
<td>61.7</td>
</tr>
</tbody>
</table>

†††HPV UTD includes those with ≥3 doses, and those with 2 doses when the first HPV vaccine dose was initiated at age <15 years and at least 5 months minus 4 days elapsed between the first and second dose. This update to the HPV recommendation occurred in December of 2016.
Tip 3: Use an effective approach by bundling your vaccine recommendation

RECOMMEND THE HPV VACCINE THE SAME DAY AND THE SAME WAY YOU RECOMMEND ALL OTHER VACCINES.
Same Way
Same Day
Make an Effective Recommendation

- **Same way: Effective recommendations group all of the adolescent vaccines**
  Recommend HPV vaccination the same way you recommend Tdap and meningococcal vaccines

- **Same day: Recommend HPV vaccine TODAY**
  Recommend HPV vaccination the same day you recommend Tdap and meningococcal vaccines
More effective to place HPV recommendation in the middle not at the end of the vaccination recommendation.

YOUR PRETEEN NEEDS THREE VACCINES TODAY TO PROTECT AGAINST MENINGITIS, HPV CANCERS AND PERTUSSIS.
Now that Sophia is 11, she is due for three vaccines. These will help protect her from the infections that can cause meningitis, HPV cancers, and pertussis. We’ll give those shots today.
Now that Sophia is 11, she is due today for three important vaccines.

The first is to help prevent an infection that can cause meningitis, which is very rare, but potentially deadly. The second is to prevent a very common infection, HPV, that can cause several kinds of cancer. The third is the tetanus booster which also protects against pertussis, so she doesn’t get whooping cough.

We’ll give those shots at the end of the visit. Do you have any questions for me?
Some Parents Need Reassurance

- Many parents simply accept this bundled recommendation
- Some parents may be interested in vaccinating, yet still have questions. Interpret a question as they need additional reassurance from YOU, the clinician they trust with their child’s health care
- Ask parents about their main concern (be sure you are addressing their real concern)

Unpublished CDC data, 2013.
Tip 4: Motivate your team and encourage their immunization conversations with parents.

Starting with your front office, ensure each team member is aware of HPV vaccine’s importance and is educated on proper vaccination practices and recommendations, ready to answer parents’ questions, and/or regularly remind and recall parents. Be sure staff regularly check immunization records, place calls to remind families about getting vaccines and let you know if parents have additional questions.
Keeping All Staff On the Same Page

- Align communication with mission
  - Give staff a cancer-prevention mission
  - All staff need to be saying the same thing
  - Share talking points
  - Use the Tip Sheet
  - Educate staff about HPV vaccine recommendations including schedule, administration, storage and handling

www.cdc.gov/hpv/hcp/forhcp-tipsheet-hpv.pdf
Tip 5: Implement systems to ensure you never miss an opportunity to vaccinate

Establish a policy to vaccinate at every visit. Create a system to check immunization status ahead of all visits. Before seeing the patient, staff should indicate if the patient is due for immunization, with special consideration to HPV vaccination. Use standing orders.
Tip 6: Use your local resources

USE THE RESOURCES OF THE SOUTH DAKOTA DEPARTMENT OF HEALTH, SOUTH DAKOTA COMPREHENSIVE CANCER CONTROL COALITION, CENTER FOR DISEASE CONTROL, AREA HEALTH EDUCATION CENTERS, AND LOCAL HEALTH SYSTEMS TO ACHIEVE YOUR GOALS OF PROTECTING YOUR PATIENTS.
IMMUNIZATION PROGRAM

The South Dakota Immunization Program aims to protect all South Dakotans against vaccine preventable disease by increasing immunization coverage levels of children and adults.

The program provides vaccine, materials, training, and support to both public and private immunization providers throughout the state. It increases public awareness of immunizations by providing educational materials to all vaccine providers and working in partnership with local and statewide coalitions. The program also monitors immunization levels of children in South Dakota and is involved with vaccine preventable disease surveillance and outbreak control.

Within the program is the South Dakota Immunization Information System (SDIIS), a computer software system that allows health care providers to share immunization records.

- South Dakota Medicine Special Edition - The Story of Immunization
- Infographics
  - Prevent Cancer with the HPV Vaccine
  - Implementing Evidence-based Interventions to Increase HPV Vaccination in South Dakota
- Centers for Disease Control and Prevention
  - Vaccine Safety Information
  - Get the Picture: Childhood Immunizations - short video answers common parent questions about childhood vaccinations
HPV Vaccination Outcomes Report

The South Dakota Department of Health (SDDOH) Cancer Programs partnered with two unique health systems to implement provider and client reminders to reduce the burden of HPV associated cancers. Both health systems saw an increase in HPV vaccination initiation and series completion rates. Other health systems in SD interested in implementing similar interventions are encouraged to reach out to the SDDOH for assistance.

View the Outcomes Report
Sanford Health’s HPV Improvement Project

ANDREA POLKINGHORN, BSN, RN
IMMUNIZATION STRATEGY LEADER
Completed Client Reminders by Type

Year 1 (7 sites)
- Televox: 20,871
- Mail: 20,705
- Phone call: 0

Year 2 (39 sites)
- Televox: 20,120
- Mail: 40,106
- Phone call: 2,769
Number of HPV Vaccine Doses Administered by Project Year

- Year 1 (7 sites): Baseline Year - 1,554 doses, End of Project Year - 2,986 doses
- Year 2 (39 sites): Baseline Year - 6,883 doses, End of Project Year - 10,234 doses
Ensure ALL Your Patients are Protected

- Align office/clinic policy with mission
  - Immunize at every opportunity
  - Implement and utilize standing orders
  - Prompt the clinician to assess and administer the vaccine
  - EMRs, IIS, etc.
  - Reminder and recall

[Image: Top 10 Tips for HPV Vaccination Success]

Multiple education products available free through the CDC website:

- Immunization courses (webcasts and online self-study)
- Netconferences
- You Call the Shots self-study modules
- Continuing education available

CDC immunization education and training: [www.cdc.gov/vaccines/ed/index.html](http://www.cdc.gov/vaccines/ed/index.html)
Ensure ALL Your Patients are Protected

- Know your coverage rates—CDC’s AFIX can help
- Clinic-level rates are great, but rates for individual clinicians are even better
- Other than coverage assessment and feedback (including AFIX), rates can come from:
  - Data from EHR
  - Immunization Information Systems (IIS) inputs
Human Papillomavirus (HPV)

For Clinicians

[ROUTINELY RECOMMEND CANCER PREVENTION]

WHY IS HPV VACCINE IMPORTANT?
HPV is so common that almost everyone will be infected with HPV at some point in their lives. Although most HPV infections are asymptomatic, some persistent infections can lead to cancer in both men and women. Hear stories of people who have been affected by HPV and clinicians who take care of them here.

CLINICIAN FACTSHEETS AND GUIDANCE
Discover CDC’s resources for clinicians that discuss the burden of HPV disease, HPV vaccine as a primary cancer prevention tool, effective communication with parents, state vaccination rates, and the most recent HPV vaccine recommendations.

SCHEDULES AND RECOMMENDATIONS
Get vaccination schedules to order or print, recommendations to consult, and other helpful tools to download.

ANSWERING THE QUESTIONS PARENTS MAY HAVE
Finding ways to answer parents’ HPV vaccination questions with straightforward messages based on CDC research with parents.
Tip 7: Know your rates of vaccination and refusal.

Deputize your staff to assist you with knowing your actual vaccination rates and learning more about why some patients are behind on their vaccines. They can also help you facilitate solutions on how to bring these patients in and get or keep immunization rates up.
If a Parent Doesn’t Say Yes Today...

<table>
<thead>
<tr>
<th><strong>Ask</strong></th>
<th>• Clarify and restate their concerns to make sure you understand</th>
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<tbody>
<tr>
<td><strong>Acknowledge</strong></td>
<td>• Emphasize it is the parents’ decision</td>
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<td></td>
<td>• Acknowledge risks and conflicting info sources</td>
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<td></td>
<td>• Applaud them for wanting what is best for their child</td>
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<tr>
<td></td>
<td>• Be clear that you are concerned for the health of their child–not just public health safety</td>
</tr>
<tr>
<td><strong>Advise</strong></td>
<td>• Allow time to discuss the pros and cons of the vaccine</td>
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<td>• Be willing to discuss parents’ ideas</td>
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<td></td>
<td>• Offer written resources for parents</td>
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<tr>
<td></td>
<td>• Tailor your advice using this presentation</td>
</tr>
</tbody>
</table>

Adapted from Henrickson, Vax Northwest 2014.
If a Parent **Declines Today**

- Declination is not final. The conversation can be revisited
- End the conversation with at least one action you both agree on
- Because waiting to vaccinate is the risky choice, many pediatricians ask the parent to sign a declination form
Tip 8: Maintain strong doctor-patient relationships to help with challenging immunization conversations

IT IS EXTREMELY GRATIFYING WHEN PARENTS WHO INITIALLY QUESTIONED IMMUNIZATION AGREE TO GET THEIR CHILD VACCINATED ON TIME. IT’S ALWAYS NICE TO HEAR: “OKAY THAT MAKES SENSE AND I TRUST YOU!”
Tip 9: Learn how to answer some of parents’ most common questions about HPV vaccine.

BE PREPARED TO ANSWER PARENTS’ QUESTIONS SUCCINCTLY, ACCURATELY, AND EMPATHETICALLY BY USING TERMS THAT THEY UNDERSTAND. A PARENT WILL OFTEN ACCEPT YOUR EXPLANATIONS IF PRESENTED WITH THEIR CHILDREN’S BEST INTERESTS IN MIND.
Answering Parental Questions About HPV Vaccination
There’s an iPad App for That!
HPV Vaccine, Same Day, Same Way
Why does my child need HPV vaccine?
HPV vaccination is important because it prevents cancer.

That’s why I’m recommending that your child start the HPV vaccine series today.
What cancers are caused by HPV infection?
Persistent HPV infection can cause cancer of the cervix, vagina, and vulva in females, cancer of the penis in males, and cancers of the anus and the throat in both.

We can help prevent infection with the HPV types that cause these cancers by starting the HPV vaccine series today.
Is my child really at risk for HPV?
HPV is a very common virus that infects both females and males. We can help protect your child from the cancers and diseases caused by the virus by starting HPV vaccination today.
Why at 11 or 12 years old?
When should the bike helmet go on?

A. Before they get on their bike
B. When they are riding their bike in the street
C. When they see the car heading directly at them
D. After the car hits them
When do we put our seat belts on?

A. Before turning on car
B. When leaving driveway
C. After a near accident
As with all vaccine-preventable diseases, we want to protect your child early. If we start now, it’s one less thing for you to worry about.

Also, your child will only need 2 shots of HPV vaccine at this age. If you wait until 15, your child will need three shots.

We’ll give the first shot today and then you’ll bring your child back in 6 to 12 months for the second shot.
I’m just worried that my child will perceive this as a green light to have S-E-X.
Numerous research studies have shown that getting the HPV vaccine does NOT make kids more likely to be sexually active or start having sex at a younger age.

Starting the HPV vaccine series today will give your child the best possible protection for the future.
How long can we wait and still give just two doses?
The two-dose schedule is recommended if the series is started before the 15th birthday. However, I don’t recommend waiting to give this cancer-preventing vaccine. Older teens have busier schedules and it becomes more difficult to schedule an appointment. It’s best to start the series today so your child is protected as soon as possible.
I’m concerned about the safety of the vaccine—I read things online that say HPV vaccine isn’t safe.

Do you really know if it’s safe?
It sounds like you want what’s best for your child and have concerns about the safety of HPV vaccine. Is that right?

We both want what’s best for your child. Can you tell more about your concerns?

I have researched HPV vaccine including safety. Can I share with you what I have learned?
I know there are stories in both the media and online about vaccines. However, I want you to know that HPV vaccine has been carefully studied for many years by medical and scientific experts.

Based on all these studies, I believe HPV vaccine is very safe.
Vaccines, like any medication, can cause side effects. With HPV vaccination, this could include pain, swelling, and/or redness where the shot is given, or possibly a headache. No serious side effects have been associated with HPV vaccine.
Can HPV vaccine cause future fertility problems?
There is no evidence available to suggest that HPV vaccine will affect future fertility. However, women who develop cervical cancer could require treatment that would limit their ability to have children. Starting the HPV vaccine series today could prevent that from happening and protect your daughter’s ability to bear children.
How do you know if the vaccine works?
Ongoing studies continue to show that HPV vaccination works very well. HPV infections, genital warts, and cervical precancers in young people have all decreased in the years since the vaccine has been available. Starting the vaccine series today will help ensure your child gets the best protection possible.
Why do boys need to be vaccinated?
HPV infection can cause cancers of the penis, anus, and throat in men. HPV infection can also cause genital warts.

Getting HPV vaccine today for your son can help prevent the infection that can lead to these diseases.
We only want the vaccines needed for school.
School-entry requirements don’t always reflect the current recommendations to keep your child healthy.

HPV vaccine, along with other adolescent vaccines, will provide your child with the best protection.
I heard there is a new HPV vaccine that works better. Should I be getting that for my child who already was vaccinated?
Currently there is no recommendation for additional vaccination for someone who has already completed an HPV vaccine series.

All HPV vaccines protect against the infections that cause most of the cancers.
My child is less than 15 years old, so why does she need a third shot?
The recommended schedule is 2 shots given 6 to 12 months apart. The minimum amount of time between those shots is five months. Because your child received two shots less than five months apart, we’ll need to give your child a third shot.
Will my child be protected with just two shots?
Yes! Studies have shown that just two shots given at least six months apart, when the first dose is given between 9 and 14 years, worked as well or better than three shots given to older adolescents and young adults.
Tip 10: Use personal examples of how you choose to vaccinate children in your family

Providing personal examples shows you believe in the importance of immunizations, especially HPV vaccine. These examples—combined with an effective recommendation—can help parents better understand the benefits of HPV vaccination for cancer prevention.
Would you give HPV vaccine to your kids?
Yes, I have given HPV vaccine to all of my four daughters. I believe strongly in the importance of this cancer-preventing vaccine.

Also, the American Academy of Pediatrics, the American Academy of Family Physicians, NIH cancer centers, and CDC agree that HPV vaccination is very important for your child.
HPV VACCINE IS CANCER PREVENTION

And Teamwork is the Key!

#WeCanStopHPV
Questions?
References


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