Get Into the Routine of Recommending Cancer Prevention

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Continuing Education

• The Illinois Chapter, American Academy of Pediatrics is accredited by the Illinois State Medical Society (ISMS) to provide continuing medical education for physicians.

• The Illinois Chapter, American Academy of Pediatrics designates this live activity for a maximum of 1 AMA PRA Category 1 Credit(s)™.
Disclosures

• I have no financial disclosures related to this presentation

Objectives

1. Define the importance of HPV vaccination for cancer prevention and the rationale for vaccinating at ages 11 or 12.
2. List the recommendations for HPV vaccine for girls and for boys.
3. Provide useful and compelling information about HPV vaccine to parents to aid in making the decision to vaccinate.
4. Locate resources relevant to current immunization practice.
We may discuss the use of vaccines in a manner not approved by the Food and Drug Administration (FDA), but that is in accordance with Advisory Committee on Immunization Practices (ACIP) recommendations.

“HOW MANY WOMEN AND MEN ARE BEING AFFECTED BY HPV CANCERS IN THE U.S.?”
HPV Types Differ in their Disease Associations

- **Mucosal sites of infection (~40 Types)**
  - High risk (oncogenic) HPV 16, 18 most common
  - Cervical Cancer
  - Anogenital Cancers
  - Oropharyngeal Cancer
  - Cancer Precursors
  - Low Grade Cervical Disease

- **Cutaneous sites of infection (~80 Types)**
  - Low risk (non-oncogenic) HPV 6, 11 most common
  - Genital Warts
  - Laryngeal Papillomas
  - Low Grade Cervical Disease
  - “Common” Hand and Foot Warts

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

Every year in the United States, 27,000 people are diagnosed with a cancer caused by HPV.

That’s one case every 20 minutes

New Cancers Caused by HPV per Year
United States 2006-2010

Women (n = 17,600)

- Cervix: 10,400 (59%)
- Vulva: 2,200 (13%)
- Anus: 2,600 (15%)
- Vagina: 600 (3%)
- Oropharynx: 1,800 (10%)

Men (n = 9,300)

- Oropharynx: 7,200 (77%)
- Penis: 700 (8%)
- Anus: 1,400 (15%)

CDC, United States Cancer Statistics (USCS), 2006-2010
“IT NEVER OCCURRED TO ME THAT INVASIVE CERVICAL CANCER WOULD BE FOUND IN A FORMER PATIENT OF MINE AT SUCH A YOUNG AGE.”

Rates of HPV-Associated Cancer and Median Age at Diagnosis Among Females, United States, 2004–2008

*The vaginal cancer statistics for women between the ages of 20 and 39 is not shown because there were fewer than 16 cases.

SOMEONE YOU LOVE
THE HPV EPIDEMIC

this film could save your life or someone you love
“IA’M NOT JUST PREVENTING HPV CANCERS IN MY FEMALE PATIENTS, I’M ALSO PREVENTING INVASIVE TESTING AND TREATMENT.”
Cervical Cancer

- Cervical cancer is the most common HPV-associated cancer among women
  - 500,000+ new cases and 275,000 attributable deaths world-wide in 2008
  - 11,000+ new cases and 4,000 attributable deaths in 2011 in the U.S.
  - 37% cervical cancers occur in women who are between the ages of 20 and 44
    - 13% (or nearly 1 in 8) between 20 and 34
    - 24% (or nearly 1 in 4) between 35 and 44

Cervical Precancer in U.S. Females

- 1.4M new cases of low grade cervical dysplasia
- 330K new cases of high grade cervical dysplasia
"I’m preventing devastating cancers caused by HPV infection in my male patients."

Cancer Cases Most Likely Caused by HPV

- Anus: 2,000 cases per year
- Oropharynx (Male): 10,000 cases per year
- Penis: 2,000 cases per year
- Anus: 2,000 cases per year
- Oropharynx (Female): 12,000 cases per year
- Cervix: 10,000 cases per year
- Vagina: 1,000 cases per year
- Vulva: 1,000 cases per year

Legend: Attributable to HPV
INCIDENCE OF **HPV-RELATED** OROPHARYNGEAL CANCER HAS INCREASED **BY 225%** OVER THE PAST 30 YEARS
No indication for oropharyngeal cancer?

- Due to long latent period before cancer development, direct study to prove efficacy in preventing oropharyngeal cancer is unlikely.
- Although data on efficacy against oropharyngeal disease endpoints are not available from clinical trials, HPV vaccination is also likely to be effective for prevention of HPV-attributable oropharyngeal cancer.
Removing Barriers for Parents

- Lack of knowledge, not needed
- Concerns about safety and side effects
- Proof of effectiveness
- Permission for sexual activity
- 11 or 12 too young
- Don’t receive a recommendation

- Needed for cancer prevention
- Extensive safety research
- Impact information
- Not linked with sexual activity
- Explaining why 11 or 12
- Receive a bundled recommendation
Impact of Eliminating Missed Opportunities by Age 13 Years in Girls Born in 2000

Missed opportunity: Healthcare encounter when some, but not all ACIP-recommended vaccines are given. HPV-1: Receipt of at least one dose of HPV. MMWR. 63(29);620-624.

“I FIND IT VERY HELPFUL TO KNOW HOW WELL HPV VACCINATION WORKS AND HOW LONG IT SHOULD LAST.”
HPV Vaccination Is Safe, Effective, and Provides Lasting Protection

• HPV Vaccine is SAFE
  – Benefits of HPV vaccination far outweigh any potential risks
  – Safety studies findings for HPV vaccination similar to safety reviews of MCV4 and Tdap vaccination

• HPV Vaccine WORKS
  – Population impact against early and mid outcomes have been reported in multiple countries

• HPV Vaccine LASTS
  – Studies suggest that vaccine protection is long-lasting
  – No evidence of waning protection

HPV Vaccine Technology

• Recombinant L1 capsid proteins that form “virus-like” particles (VLP)
• Same vaccine technology and adjuvant as Hepatitis B vaccine
HPV Vaccine Impact on HPV Prevalence

The chart shows a significant decline in HPV prevalence, with a 56% decline from 2003-2006 to 2007-2010, and a 64% decline from 2003-2006 to 2009-2012.

"I was surprised to learn that parents value HPV vaccine as much as other adolescent vaccines."
Don’t anticipate opposition

- It is important for providers to NOT anticipate opposition to HPV vaccination
- Parents value HPV vaccine as much as they value other adolescent platform vaccines

How Parents Feel

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Median Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meningitis</td>
<td>9.4</td>
</tr>
<tr>
<td>Hepatitis</td>
<td>9.5</td>
</tr>
<tr>
<td>Pertussis</td>
<td>9.5</td>
</tr>
<tr>
<td>Influenza</td>
<td>9.3</td>
</tr>
<tr>
<td>HPV</td>
<td>9.3</td>
</tr>
<tr>
<td>Adolescent vaccines</td>
<td>9.2</td>
</tr>
</tbody>
</table>
How Providers Think Parents Feel

The Difference
THE PERCEIVED AND REAL CONCERNS OF PARENTS INFLUENCE HOW THE PROVIDER RECOMMENDS AND ADMINISTERS HPV VACCINE.

“"I THOUGHT I WAS MAKING A STRONG RECOMMENDATION, BUT PATIENTS WERE LEAVING UNVACCINATED AGAINST HPV CANCERS.""
Resistance Doesn’t Mean Refusal

• Interpret questions as a request for reassurance and information

• For HPV vaccine-hesitant parents, it is important to remain engaged with them and to ask questions before giving answers

A word on risk profiling: *Don’t do it*

80% of people will be exposed to HPV
You can’t predict who or when
Make an Effective Recommendation

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

• **Same day:** Recommend HPV vaccine **today**
  Recommend HPV vaccination the **same day** you recommend Tdap & meningococcal vaccines.
Now that Sophia is 11, she is due for three vaccines. These will help protect her from meningitis, HPV cancers, and pertussis. We’ll give those shots at the end of the visit.
HPV Vaccine Recommendation

Girls & Boys can start HPV vaccination at age 9

Preteens should finish HPV vaccine series by 13\textsuperscript{th} birthday

HPV Vaccine Conversations:

Call to Action

1) Strong, bundled recommendation to all parents of girls and boys age 11–12
2) Use cervical cancer screening to talk to moms about HPV vaccines for their kids
3) Reinforce the message that HPV vaccine IS cancer prevention, for girls AND boys
“WHAT SHOULD I SAY TO PARENTS WHO RESIST OR BRING UP SAFETY CONCERNS?”

“All three vaccines are equally and strongly recommended by the CDC, and by pediatric, adolescent, and family physician groups.

School entry requirements don’t always reflect the most current medical recommendations for your child’s health”
HPV Vaccination is safe
All aspects of living entail risk, but vaccinating against HPV is much safer than making the decision to not vaccinate

When should the bike helmet go on?

A  B  C
If a parent doesn’t say yes...

<table>
<thead>
<tr>
<th>Ask</th>
<th>Clarify &amp; restate their concerns to make sure you understand.</th>
</tr>
</thead>
</table>
| Acknowledge    | • Emphasize it is the parents’ decision.  
• Acknowledge risks & conflicting info sources.  
• Applaud them for wanting what is best for their child.  
• Be clear that you are concerned for the health of their child, not just public health safety. |
| Advise         | • Clarify their concerns: make sure you understand & are answering the question they actually care about.  
• Allow time to discuss the pros & cons of vaccines.  
• Be willing to discuss parents’ ideas.  
• Offer written resources for parents.  
• Tailor your advice using this presentation. |

In response to a parent supportive of vaccination but with HPV safety concerns:

• Instead of: “Actually, studies show that there are no serious side effects from the vaccine so I think you should let your daughter get it. It’s really important.”

• Coming to ‘Yes’: “It sounds like you are generally in support of vaccines, but you have concerns about the safety of HPV. Is that right?  
“So if you had information that convinced you the HPV vaccine was safe you might consider letting your daughter have it?”  
“I’d like to share with you what I know about the safety of the vaccine...”
If a parent declines...

• Declination is not final. The conversation can be revisited.

• End the conversation with at least 1 action you both agree on.

• Because waiting to vaccinate is the risky choice, many pediatricians ask the parent to sign a Declination Form.

“WE MADE SOME SIMPLE CHANGES TO OUR OFFICE PRACTICES TO RAISE HPV VACCINATION RATES.”
EVERYONE in the office/clinic/practice needs to be saying the same thing

The Opener by the Nurse/MA

• Encourage convenient same-day vaccination
  “Since Pat is 11 now, he should have 3 vaccines. They will help protect him from meningitis, the HPV cancers, and from tetanus, diphtheria, & pertussis. Do you have any questions for me?”

• If a parents hesitates, the MA/nurse should say
  “Our practice is so dedicated to cancer prevention that I’m sure the doctor will want to talk with you about your concerns.”
Reminders & Recall

• Most parents don’t know when they need to bring their child back for additional doses or how many doses are in the series
• Recent studies showed that doctors tend to think the parent is responsible for knowing that information, while parents believe the doctor’s office is going to let them know

Screen Someone You Love for Staff

"It's the best film on this subject in existence. A perfect mix of pathos, science, and medicine with a clear call to action."
- Dr. Paul Offit
Chief of the Division of Infectious Diseases - Children's Hospital of Philadelphia

"Remarkable Achievement!"
- LJ Tan, Immunization Action Coalition
Strategies used by jurisdictions with large increases in HPV vaccination coverage

- Joint initiatives with cancer prevention and immunization stakeholders (including clinical professional organizations like AAP & AAFP)
- Comprehensive public communication campaigns
- Immunization information system (IIS)-based reminder/recall
- Quality improvement projects or assessment and feedback (AFIX) activities, including clinician-to-clinician educational sessions emphasizing how clinicians can provide effective recommendations for patients aged 11 or 12 years
- Practice-focused strategies to educate key clinical and administrative staff about the importance of timely routine HPV vaccination

HPV Information & Resources

www.cdc.gov/hpv
Continuing Education

You Are the Key to HPV Cancer Prevention web-on-demand video
Training- Video and Case Study

Communicating the safety and efficacy of the HPV vaccine to parents

Videos for Training/In-Service

HPV Vaccine Video for Health Care Providers
Factsheets for Parents in English & Spanish

Free posters available for ordering in the following sizes: 8.5x11, 11x17, 18x24
REVIEW: Talking about HPV Vaccine

- Effective recommendation
  Presumptive, bundled recommendation

- Tip Sheet
  Share with all practice/clinic staff

- CDC’s HPV vaccination resources
  www.cdc.gov/HPV

Want to know when we have new resources and tools?

Send us an email to request our newsletter:
PreteenVaccines@cdc.gov

We can help provide speakers for grand rounds and continuing education events, as well.
"PREVENTING CANCER BY NOT SMOKING, WEARING SUNSCREEN, AND EATING BROCCOLI REQUIRES A LIFETIME OF ACTION. BUT HPV VACCINATION IS JUST THREE SHOTS. "