Improving HPV Vaccination – Why We Must and How We Can Do Better

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Increasing HPV Vaccination in the United States: A Collaboration of NCI-funded Cancer Centers
Huntsman Cancer Institute, Salt Lake City, Utah
June 7, 2018
HPV vaccine is cancer prevention.

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

#UCanStopHPV
Estimated Vaccination Coverage among Adolescents Aged 13-17 Years, NIS-Teen, United States, 2006-2016

* APD = Adequate provider data
†≥2 doses MenACWY among adolescents aged 17 years
## Estimated HPV vaccination coverage among adolescents 13-17 years of age
National Immunization Survey-Teen, United States, 2016

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
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<tbody>
<tr>
<td><strong>Females</strong></td>
<td></td>
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<tr>
<td>≥1 HPV</td>
<td>65.1% (63.3-66.8%)</td>
</tr>
<tr>
<td>HPV UTD</td>
<td>49.5% (47.6-51.4%)</td>
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<tr>
<td><strong>Males</strong></td>
<td></td>
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<tr>
<td>≥1 HPV</td>
<td>56.0% (54.3-57.7%)</td>
</tr>
<tr>
<td>HPV UTD</td>
<td>37.5% (35.8-39.2%)</td>
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<tr>
<td><strong>All adolescents</strong></td>
<td></td>
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<tr>
<td>≥1 HPV</td>
<td>60.4% (59.2-61.6%)</td>
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<tr>
<td>HPV UTD</td>
<td>43.4% (42.1-44.7%)</td>
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UTD: up to date. 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 time between the first and second dose was at least 5 months minus 4 days.
Estimated Up-to-Date HPV Vaccination Coverage among Adolescents, 2016
National Coverage = 43%

Source: CDC. National, state, and local area vaccination coverage among adolescents aged 13-17 years---United States, 2016
**Reasons for Not Vaccinating Adolescents with HPV Vaccine, Unvaccinated Adolescents* Aged 13-17 Years, NIS-Teen, United States, 2016**

<table>
<thead>
<tr>
<th></th>
<th>Parents of Girls</th>
<th>Parents of Boys</th>
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<tbody>
<tr>
<td></td>
<td>% (95% CI)</td>
<td>% (95% CI)</td>
</tr>
<tr>
<td>Safety concerns/ side effects</td>
<td>21.3 (18.7-24.1)</td>
<td>21.0 (18.4-23.9)</td>
</tr>
<tr>
<td>Not needed/necessary</td>
<td>19.3 (16.6-22.4)</td>
<td>15.6 (12.9-18.7)</td>
</tr>
<tr>
<td>Lack of knowledge</td>
<td>11.3 (8.5-15.0)</td>
<td>13.1 (11.2-15.3)</td>
</tr>
<tr>
<td>Not recommended</td>
<td>9.5 (7.4-12.1)</td>
<td>12.8 (10.9-15.0)</td>
</tr>
<tr>
<td>Not sexually active</td>
<td>5.3 (3.4-8.1)</td>
<td>8.7 (7.0-10.7)</td>
</tr>
</tbody>
</table>

*Analysis limited to adolescents with zero HPV vaccine doses, whose parents reported that they were not likely (including not too likely, not likely at all, and not sure/don’t know) to seek HPV vaccination for their adolescent in the next 12 months. Those who refused to respond were not included in the denominator.
Why don’t adolescents finish the HPV vaccine series?

Reasons given by parents for incomplete vaccination (%)

- Inconvenience: 24%
- Expect clinic reminder: 65%
- Conscious decision: 11%

Provider expectations for vaccine completion (%)

- Expect parent to schedule appointment: 52%
- Schedule second dose at time of 1st dose: 41%
- Opportunistic: 7%

Perkins RB et al. Human Vaccines and Immunotherapeutics, 2016
What can we do about it?
Now that Sophia is 11, she is due for vaccinations today to help protect her from meningitis, HPV cancers, and pertussis.
Systems Strategies to Improve HPV Vaccine Coverage

- Establish standing orders for HPV vaccination beginning at age 11-12 years in your practice
- Conduct reminder/recall beginning at 11-12 years of age
- Assess HPV vaccine coverage at every visit and prompt clinical staff to give HPV vaccine at that visit
- Schedule return visit for next dose before the patient leaves the office
- Document each dose in the child’s medical record and the state’s immunization information system
Tactics for Successful HPV Vaccine Delivery, Denver Health

- Routine use of a robust immunization registry for multiple functions, including recording vaccine history and recommended needed vaccines at every visit
- Medical assistants check vaccine registry for recommended vaccines at every visit
- Standing order for routine immunizations
- Vaccines are given early in the visit when possible
- Education for providers to present Tdap, MCV, and HPV as a standard “bundle” of adolescent immunizations
- Provider-level “report cards” with adolescent vaccination coverage rates
- Vaccination drives at school-based health centers

Farmer et al, Pediatrics 2016
What Can Cancer Centers Do?

- Connect with your state’s HPV vaccination coalition
  - If there isn’t one, work with other stakeholders to start one
- Get the message to pediatricians that it is important and urgent to prevent HPV cancers by vaccination
- Treat HPV cancers in young people as sentinel events
- Identify survivors or family members who are willing to tell their stories and connect them with the immunization effort
- Reach out to health system leadership to encourage HPV vaccination initiatives
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

www.cdc.gov/vaccines
www.cdc.gov/hpv
www.cdc.gov/vaccinesafety