Coordinated Efforts to Strengthen HPV Vaccination

Judy Mendel, MPH
Public Health Advisor
National Vaccine Program Office
BACKGROUND

• High rates of HPV-related cancers; low HPV vaccine uptake
• Racial/ethnic, SES, and geographic differences (cancers and vaccine uptake)
• HPV vaccine recommended by ACIP for girls and boys
  ▪ adjusted from 3-dose to 2-dose series for girls and boys under age 15 (2016)
• Variety of system-wide challenges and gaps related to HPV vaccination:
  ▪ coalition-building, measurement and accountability, data sharing, communications, serving rural areas
• Lots of good work going on– but we can do better!
THIS SESSION

Coordinated Efforts to Strengthen HPV Vaccination
Judy Mendel, NVPO

New Coverage Data
Jim Singleton, CDC

The Rationale Behind the Next President’s Cancer Panel Report
Dr. Abby Sandler, NCI

Promising Ploys to Prevent HPV Cancers
- Marla Dalton, National Foundation for Infectious Diseases
- Jill Wasserman, HHS Office on Women’s Health
- Dr. Noel Brewer, National HPV Vaccination Roundtable
RECOMMENDATION FOCUS AREAS

1. Identifying additional national partners;

2. Guiding coalition-building for states;

3. Engaging integrated health care delivery networks; and

4. Addressing provider needs in rural areas.
OASH HPV WG

• Convened by ASH, with NVPO as lead, to assess and implement NVAC 2018 HPV recommendations

• Currently comprised of:
  ▪ National Vaccine Program Office
  ▪ Office of Adolescent Health
  ▪ Office of Minority Health
  ▪ Office of Population Affairs
  ▪ Office on Women’s Health
  ▪ Regional Offices

• Many stakeholders served and partners reached through variety of platforms and channels which lend themselves to supporting certain recommendations
# HOW OASH AFFECTS CHANGE

<table>
<thead>
<tr>
<th>Data and Information</th>
<th>Awareness</th>
<th>Innovation and Resources</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Unique data and information resources that serve HHS, the federal government, states and localities, and the public in general</td>
<td>• Convenes federal agencies, state and local partners, professional societies, non-profits, academia, patient advocates</td>
<td>• Innovates, scales, and disseminates through partnerships</td>
</tr>
<tr>
<td></td>
<td>• Gains situational awareness, identifies gaps, builds teams, sets a common agenda, plans novel programs, collects data, or enables infrastructure</td>
<td>• Funds initiatives that test a new paradigm, partnership, or approach that can be transitioned to OPDIVS if successful, or fill a gap until more robust programs can be developed</td>
</tr>
<tr>
<td></td>
<td>• Provides advice to the immediate office of the Secretary</td>
<td>• Uses the Commissioned Corps as an agent of change and innovation</td>
</tr>
</tbody>
</table>
RECOMMENDATION EXAMPLES

1.1 To promote inclusion of new health care partners, the ASH should encourage further development, dissemination, and implementation of evidence-based practitioner resources and support collaborative relationships.

4.1 The ASH should request further research be conducted to better understand the needs of rural providers in supporting the administration of or referral to vaccination services in rural environments and to identify and determine barriers to accessing vaccination services for patients in rural settings.

4.3 The ASH should support a stronger HHS-wide social media presence to improve the reach of communication strategies and directly engage parents and adolescents to build trust and recognition about the importance of HPV vaccination and how to best engage patients in rural communities.
Vaccination Coverage among U.S. Adolescents: Results from the 2017 National Immunization Survey-Teen (NIS-Teen)

Presented at NVAC September 13, 2018 by Jim Singleton

Slides Prepared by Tanja Y. Walker, MPH
Epidemiologist
Assessment Branch, Immunization Services Division
September 7, 2018
Outline

- Review of recommended immunizations for adolescents
- NIS-Teen overview
- 2017 NIS-Teen results
  - Published August 24, 2018
- Conclusions
# Recommended Immunizations for Adolescents

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>Births</th>
<th>1 mo</th>
<th>2 mos</th>
<th>4 mos</th>
<th>6 mos</th>
<th>9 mos</th>
<th>12 mos</th>
<th>15 mos</th>
<th>18 mos</th>
<th>19-23 mos</th>
<th>2-3 yrs</th>
<th>4-6 yrs</th>
<th>7-10 yrs</th>
<th>11-12 yrs</th>
<th>13-15 yrs</th>
<th>16 yrs</th>
<th>17-18 yrs</th>
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<tbody>
<tr>
<td>Hepatitis B (HepB)</td>
<td>1st</td>
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<td>Rotavirus (RV) RV1 (2-dose array)/RV3 (3-dose series)</td>
<td>1st</td>
<td>2nd</td>
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<tr>
<td>Diphtheria, tetanus, &amp; acellular pertussis (DTaP; &lt;7 yrs)</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>4th</td>
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<tr>
<td>Hemophilus influenza type b (Hib)</td>
<td>1st</td>
<td>2nd</td>
<td>3rd</td>
<td>See footnote 4</td>
<td>4th</td>
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<td>Pneumococcal conjugate (PCV13)</td>
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<td>Inactivated poliovirus (IPV; &lt;16 yrs)</td>
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<td>Influenza (IV)</td>
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<td>Annual vaccination (IV)</td>
<td>1 or 2 doses</td>
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<td>Measles, mumps, rubella (MMR)</td>
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<td>1st</td>
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<td>Varicella (VAR)</td>
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<tr>
<td>Hepatitis A (HepA)</td>
<td>2-dose series, See footnote 10</td>
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<td>Meningococcal C (MenACWY-CRM 43)</td>
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<td>Tetanus, diphtheria, &amp; acellular pertussis (Tdap; 7 yrs)</td>
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<td>Human papillomavirus (HPV)</td>
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<td>Meningococcal B (MenB)</td>
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<tr>
<td>Pneumococcal polysaccharide (PPSV23)</td>
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NIS-Teen Objectives

- Assess national, state, selected local area, and territorial vaccination coverage among adolescents
- Monitor vaccination coverage trends and progress towards Healthy People 2020 targets
- Identify disparities in vaccination coverage by selected sociodemographic characteristics
- Evaluate ongoing strategies to improve vaccination coverage
- Monitor adherence to ACIP vaccine recommendations for adolescents
NIS-Teen Methodology

- Conducted annually since 2006
- Conducted among parents and guardians of eligible adolescents identified using a random-digit-dialed sample of landline and cellular telephone numbers
- Two phases:
  - Household interview
  - Mailed survey to vaccination providers to collect vaccination history
- All vaccination coverage estimates based on provider-reported vaccination histories
NIS-Teen Methodology

- Data weighted to adjust for non-response and phoneless households
- T-tests were used to assess differences in vaccination coverage between 2017 and 2016 and between demographic subgroups
- Weighted linear regression to estimate annual percentage point increases by
  - survey year
  - year of birth
- Differences reported are statistically significant at p<0.05
Serogroup B Meningococcal Vaccine (MenB)

- Advisory Committee on Immunization Practices (ACIP) recommendation in 2015
  - May administer series to adolescents and young adults aged 16–23 years, with a preferred age of 16–18 years
Sociodemographic Characteristics

- Race/Ethnicity
  - White, non-Hispanic
  - Black, non-Hispanic
  - Hispanic

- Poverty Level
  - Below poverty level
  - At or above poverty level

- Metropolitan Statistical Area (MSA)
  - MSA principal city
  - MSA non-principal city
  - Non-MSA

- Health Insurance Status
  - Private Insurance Only
  - Any Medicaid
  - Other Insurance
  - Uninsured
2017 NIS-Teen Results

- National sample: 20,949 adolescents from 50 states and DC
  - Landline phone: 3,572 (17%)
  - Cell phone: 17,377 (83%)
  - Guam, Puerto Rico, and U.S. Virgin Islands sampled separately, but not included in the national estimate

- Overall household CASRO* response rate: 25.7%
  - Landline phone: 51.5%
  - Cell phone: 23.5%

- Proportion of adolescents with adequate provider data: 48.1%
  - Landline phone: 53.6%
  - Cell phone: 47.1%

* Council of American Survey Research Organizations Response Rate = product of resolution rate, screening rate and cooperation rate
### Estimated Vaccination Coverage among Adolescents Aged 13-17 Years, NIS-Teen, United States, 2016 vs. 2017

<table>
<thead>
<tr>
<th>Vaccine Series</th>
<th>2016</th>
<th>2017</th>
<th>Difference</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>(n=20,475)</td>
<td>(n=20,949)</td>
<td></td>
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<tr>
<td>% (95% CI)</td>
<td>% (95% CI)</td>
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<tr>
<td>≥1 Tdap</td>
<td>88.0 (87.1 – 88.9)</td>
<td>88.7 (87.8 – 89.6)</td>
<td>+0.7</td>
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<tr>
<td>MenACWY</td>
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<tr>
<td>≥1 dose</td>
<td>82.2 (81.2 – 83.2)</td>
<td>85.1 (84.2 – 86.1)*</td>
<td>+2.9</td>
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<tr>
<td>≥2 doses†</td>
<td>39.1 (36.1 – 42.1)</td>
<td>44.3 (41.4 – 47.2)*</td>
<td>+5.2</td>
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<tr>
<td>≥1 MenB†</td>
<td>NA</td>
<td>14.5 (12.3–17.1)</td>
<td>NA</td>
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<tr>
<td>HPV vaccine§</td>
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<tr>
<td>≥1 dose</td>
<td>60.4 (59.2 – 61.6)</td>
<td>65.5 (64.3 – 66.7)*</td>
<td>+5.1</td>
</tr>
<tr>
<td>HPV UTD</td>
<td>43.4 (42.1 – 44.7)</td>
<td>48.6 (47.3 – 49.9)*</td>
<td>+5.2</td>
</tr>
</tbody>
</table>

* Statistically different from 2016 estimates (p<0.05)  † Calculated among adolescents aged 17 years at interview (n=3,807).
§ Percentages reported include females (n=9,845) and males (n=11,104).
### Estimated Vaccination Coverage among Adolescents Aged 13-17 Years, NIS-Teen, United States, 2016 vs. 2017

<table>
<thead>
<tr>
<th></th>
<th>2016</th>
<th>2017</th>
<th>Difference</th>
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<tr>
<td></td>
<td>(n=20,475)</td>
<td>(n=20,949)</td>
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<tr>
<td>% (95% CI)</td>
<td>% (95% CI)</td>
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<tr>
<td><strong>HPV vaccine</strong></td>
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<tr>
<td>Females (n=9,845)</td>
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<tr>
<td>≥1 dose</td>
<td>65.1 (63.3 – 66.8)</td>
<td>68.6 (66.9 – 70.2)*</td>
<td>+3.5</td>
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<tr>
<td>HPV UTD</td>
<td>49.5 (47.6 – 51.4)</td>
<td>53.1 (51.2 – 55.0)*</td>
<td>+3.6</td>
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<tr>
<td>Males (n=11,104)</td>
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<tr>
<td>≥1 dose</td>
<td>56.0 (54.3 – 57.7)</td>
<td>62.6 (60.9 – 64.2)*</td>
<td>+6.6</td>
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<tr>
<td>HPV UTD</td>
<td>37.5 (35.8 – 39.2)</td>
<td>44.3 (42.6 – 46.0)*</td>
<td>+6.8</td>
</tr>
</tbody>
</table>

* Statistically different from 2016 estimates (p<0.05)
Estimated Vaccination Coverage among Adolescents Aged 13-17 Years, NIS-Teen, United States, 2006-2017

- APD = Adequate provider data
- †≥2 doses MenACWY among adolescents aged 17 years

* ACIP recommendation 2011–2015
** ACIP recommendation 2016–2017

* APD = Adequate provider data
†≥2 doses MenACWY among adolescents aged 17 years
HPV Vaccination Initiation (≥1 dose) and HPV up-to-date (UTD) status estimates among adolescents by age 13 Years, by birth cohort — NIS-Teen, United States, 2016–2017
Estimated HPV Vaccination Coverage among Adolescents Aged 13-17 Years, NIS-Teen, United States, 2017

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Difference from ≥1 HPV dose coverage</th>
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<tbody>
<tr>
<td></td>
<td>% (95% CI)</td>
<td>Percentage Point</td>
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<td>HPV vaccine</td>
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</tr>
<tr>
<td>≥1 dose</td>
<td>65.5 (64.3 – 66.7)</td>
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<tr>
<td>≥1 Tdap</td>
<td>88.7 (87.8 – 89.6)</td>
<td>+23.2</td>
</tr>
<tr>
<td>≥1 MenACWY</td>
<td>85.1 (84.2 – 86.1)</td>
<td>+19.6</td>
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</tbody>
</table>

N = 20,949 adolescents
Coverage with ≥1 Tdap and ≥1 MenACWY among Adolescents Aged 13-17 Years, by Age at Interview, NIS-Teen, United States, 2017

* Statistically different from adolescents aged 13 years at interview (p<0.05)
Coverage with ≥1 HPV Vaccine Dose among Adolescents Aged 13-17 Years, by Age at Interview, NIS-Teen, United States, 2017

* Statistically different from adolescents aged 13 years at interview (p<0.05)
Vaccination Coverage Estimates among Adolescents Aged 13-17 Years by Poverty Status, NIS-Teen, United States, 2017

* Statistically different from adolescents at or above the poverty level (p<0.05).
Adolescents with unknown poverty status (n=779) were excluded from analysis.
Vaccination Coverage Estimates among Adolescents Aged 13-17 Years by MSA status, NIS-Teen, United States, 2017

<table>
<thead>
<tr>
<th>Vaccine</th>
<th>MSA Principal City</th>
<th>MSA Non-Principal City</th>
<th>non-MSA</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥1 Tdap</td>
<td>89</td>
<td>89</td>
<td>88</td>
</tr>
<tr>
<td>≥1 MenACWY</td>
<td>86</td>
<td>86</td>
<td>79</td>
</tr>
<tr>
<td>≥1 HPV</td>
<td>70</td>
<td>63</td>
<td>59</td>
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<tr>
<td>HPV UTD</td>
<td>52</td>
<td>47</td>
<td>42</td>
</tr>
</tbody>
</table>

* Statistically different from adolescents living in MSA principal cities (p<0.05).

MSA = Metropolitan statistical area
Vaccination Coverage Estimates among Adolescents Aged 13-17 Years by Race/Ethnicity, NIS-Teen, United States, 2017

- ≥1 Tdap: White, Non-Hispanic 90, Black, Non-Hispanic 90, Hispanic 86
- ≥1 MenACWY: White, Non-Hispanic 85, Black, Non-Hispanic 86, Hispanic 86
- ≥1 HPV: White, Non-Hispanic 60, Black, Non-Hispanic 70, Hispanic 75
- HPV UTD: White, Non-Hispanic 45, Black, Non-Hispanic 50, Hispanic 56

* Statistically different from White, Non-Hispanic adolescents (p<0.05).
Vaccination Coverage Estimates among Adolescents Aged 13-17 Years by Health Insurance Status, NIS-Teen, United States, 2017

* Statistically different from adolescents with private insurance only (p<0.05).
Estimated Vaccination Coverage with ≥1 Tdap, Adolescents Aged 13-17 Years, NIS-Teen, United States, 2017

Coverage ranged from 78.9% (Alaska) to 96.2% (Massachusetts)
Estimated Vaccination Coverage with ≥1 MenACWY, Adolescents Aged 13-17 Years, NIS-Teen, United States, 2017

Coverage ranged from 60.7% (Wyoming) to 95.3% (Georgia)
Estimated Vaccination Coverage with ≥1 HPV among Adolescents Aged 13-17 Years, NIS-Teen, United States, 2017

*Human Papillomavirus (HPV) Vaccine, nine-valent, quadrivalent or bivalent. Percentages reported among females and males combined.
Estimated Vaccination Coverage with ≥1 HPV among Females Aged 13-17 Years, NIS-Teen, United States, 2017

National Coverage = 60%
(sample size=9,845)

*Human Papillomavirus (HPV) Vaccine, nine-valent, quadrivalent or bivalent. Percentages reported among females only.

†Includes female adolescents born January 1999 through February 2005.
Estimated Vaccination Coverage with ≥1 HPV among Males Aged 13-17 Years, NIS-Teen, United States, 2017

*Human Papillomavirus (HPV) Vaccine, nine-valent, quadrivalent or bivalent. Percentages reported among males only.

†Includes male adolescents born January 1999 through February 2005.
Average Annual Increase in Coverage with ≥1 HPV, Adolescents Aged 13-17 Years, NIS-Teen, United States, 2013-2017

The greatest statistically significant average annual increases were in Virginia (8.5), DC (7.5), Montana (7.4), Arkansas (7.3), Iowa (7.3), Utah (7.3), and El Paso, Texas (7.3).
HPV UTD Estimates among Females Aged 13-17 Years, NIS-Teen, United States, 2017

*Human Papillomavirus (HPV) Vaccine, nine-valent, quadrivalent or bivalent. Includes ≥3 doses or (≥2 doses with 1st dose at age <15 years and at least 5 months minus 4 days between 1st and 2nd doses). Percentages reported among females only.

HPV UTD Estimates among Males Aged 13-17 Years, NIS-Teen, United States, 2017

*Human Papillomavirus (HPV) Vaccine, nine-valent, quadrivalent or bivalent. Includes ≥3 doses or (≥2 doses with 1st dose at age <15 years and at least 5 months minus 4 days between 1st and 2nd doses). Percentages reported among males only.

## Reasons for Not Vaccinating Adolescents with HPV Vaccine, Unvaccinated Adolescents Aged 13-17 Years, NIS-Teen, United States, 2017

<table>
<thead>
<tr>
<th>Reason</th>
<th>Parents of Girls % (95% CI)</th>
<th>Parents of Boys % (95% CI)</th>
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<tbody>
<tr>
<td>Safety concerns/side effects</td>
<td>24.5 (21.6-27.8)</td>
<td>16.8 (14.5-19.4)</td>
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<tr>
<td>Not needed/necessary</td>
<td>14.5 (11.8-17.8)</td>
<td>15.2 (12.6-18.2)</td>
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<tr>
<td>Not recommended</td>
<td>7.6 (5.9-9.7)</td>
<td>14.2 (12.0-16.7)</td>
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<tr>
<td>Lack of knowledge</td>
<td>7.5 (5.7-9.6)</td>
<td>9.2 (7.3-11.5)</td>
</tr>
<tr>
<td>Not sexually active</td>
<td>7.3 (5.7-9.4)</td>
<td>7.7 (5.7-10.2)</td>
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</tbody>
</table>
Limitations

- Survey response rates are low
- Bias might remain after adjustment for household and provider nonresponse and phoneless households
- Nonresponse bias might change over time affecting comparability of estimates between survey years
NIS Total Survey Error (TSE) Model

- Estimated bias in vaccine coverage estimates from systematic errors
  - Incomplete sample frame (excludes phoneless households)
  - Vaccination rates may differ in responders vs. non-responders
  - Not all vaccinations are reported by providers or not all vaccinating providers are contacted or report

- Model input
  - National Health Interview Survey, IIS-NIS match results

- Method
  - Monte Carlo replication to generate plausible range for difference in estimated vaccination coverage rate and “true” rate (bias)
Comparison of Estimated Mean Total Error for ≥1 Tdap, ≥ 1 MenACWY, and ≥ 1 HPV Vaccine Dose among Females by Survey Year, 2012-2013 NIS-Teen

* Statistically different from zero at the alpha = 0.05 level.
Conclusions

- HPV vaccination initiation and completion continue to increase
  - HPV vaccination initiation has increased an average of 5.1 percentage points annually since 2013.
  - On-time vaccination (receipt of ≥2 or ≥3 doses of HPV vaccine by age 13 years)
- Continue to see high national level Tdap and MenACWY vaccines coverage
- Coverage with ≥1-dose HPV vaccine and ≥ 1 MenACWY varied by MSA status and was lowest among adolescents living in non-MSAs (mostly rural areas) and highest among those living in MSA principal cities (mostly urban areas)
Acknowledgements

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- Shannon Stokley
The Rationale Behind the Next President’s Cancer Panel Report

Abby Sandler, PhD
Executive Secretary
President’s Cancer Panel

National Vaccine Advisory Committee
September 13, 2018
President’s Cancer Panel: Brief Overview

2012-2013 Report to the President
Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer

Key HPV Vaccination Policy & Program Initiatives, 2014-2018

Reporting on Progress & Opportunities for HPV Vaccination
President’s Cancer Panel: Brief Overview
Mission

The Panel shall monitor the development and execution of the activities of the National Cancer Program, and shall report directly to the President.

Any delays or blockages in the rapid execution of the Program shall immediately be brought to the attention of the President.

Authority: 42 U.S.C. 285a-4; Sec. 415 of the Public Health Service Act, as amended
Barbara K. Rimer, DrPH  
(Chair)  
*University of North Carolina at Chapel Hill*

Hill Harper, JD*  
*Cancer Survivor, Actor, and Best-Selling Author*

Owen N. Witte, MD**  
*University of California, Los Angeles*

*Service ended March 2018  
**Service ended August 2017*
2012-2013 Report to the President

Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer
Accelerating HPV Vaccine Uptake: 2012-2013 Report to the President

Accelerating HPV Vaccine Uptake:
Urgency for Action to Prevent Cancer

A Report to the President of the United States
from
The President's Cancer Panel

Human papillomavirus (HPV) causes most cases of cervical cancer and large proportions of vaginal, vulvar, anal, penile, and oropharyngeal cancers. HPV also causes genital warts and recurrent respiratory papillomatosis. HPV vaccines could dramatically reduce the incidence of HPV-associated cancers and other conditions among both females and males, but uptake of the vaccines has fallen short of target levels. The President's Cancer Panel finds underuse of HPV vaccines a serious but correctable threat to progress against cancer. In this report, the Panel presents four goals to increase HPV vaccine uptake: three of these focus on the United States and the fourth addresses ways the United States can help to increase global uptake of the vaccines. Several high-priority research questions related to HPV and HPV vaccines also are identified.
Accelerating HPV Vaccine Uptake: 2012-2013 Report to the President

**GOAL 1**
Reduce missed clinical opportunities to recommend and administer HPV vaccines

**GOAL 2**
Increase parents', caregivers', and adolescents' acceptance of HPV vaccines

**GOAL 3**
Maximize access to HPV vaccination services

**GOAL 4**
Promote global HPV vaccine uptake
HIGH-PRIORITY RESEARCH TO ADVANCE PREVENTION OF HPV-ASSOCIATED CANCERS

- Investigate More Convenient Dosing Schedules for Current Vaccines
- Develop Next-Generation Vaccines That Provide Broader Protection and/or Are Easier to Store and Administer
- Determine How Best to Integrate HPV Vaccination with Cervical Cancer Screening
- Develop More Effective Ways to Communicate About HPV-Associated Diseases and HPV Vaccines
- Explain the Natural History of Oropharyngeal HPV Infections
Key HPV Vaccination Policy & Program Initiatives, 2014-2018
Statements of Support

- Leading medical organizations* united to release a “Dear Colleague Letter” to urge providers to give a strong recommendation for HPV vaccination (February 2014).

- NCI-Designated Cancer Centers released a consensus statement urging greater uptake of HPV vaccination (January 2016). An updated statement was released to endorse 2-dose Gardasil 9 recommendation (January 2017).

- American Society of Clinical Oncology released a statement urging aggressive efforts to increase HPV vaccination (May 2016).

*American Academy of Family Physicians, American Academy of Pediatrics, American College of Obstetricians and Gynecologists, American College of Physicians, Centers for Disease Control and Prevention, and the Immunization Action Coalition.

“Much of [provider groups’] current activity dates to 2013 when the President’s Cancer Panel, alarmed by how the HPV vaccination rate was leveling out, called for a drastic acceleration.”

Cancer doctors leading campaign to boost use of HPV vaccine

By Laurie McGinley June 19
In June 2015, NVAC voted to approve the 5 recommendations of its HPV Working Group:

1. Endorse the President’s Cancer Panel report and adopt the recommendations therein.
2. Endorse monitoring “the status of uptake and implementation of Panel recommendations” through an annual progress report from HPV immunization stakeholders.
3. ASH* should work with relevant agencies and stakeholders to develop evidence-based, effective, coordinated communications strategies to increase clinician recommendations for HPV vaccination to adolescents.
4. ASH should work with stakeholders to strengthen the immunization system in order to maximize access to adolescent vaccinations, including HPV vaccines.
5. ASH should encourage the review or development of available data that could lead to a simplified HPV vaccination schedule.

*HHS’s Assistant Secretary for Health.
NCI awarded two rounds of grant supplements in July 2014 and September 2017 to promote collaborations between NCI-Designated Cancer Centers and state/local cancer coalitions and HPV immunization programs.

CDC has awarded program grants for immunization and cancer prevention/control efforts, formed partnerships with provider organizations, and supported state and local public health activities to boost HPV vaccination. It has also funded communication campaign development, implementation, and evaluation efforts to reach providers and parents of vaccine-age adolescents.
NCI-Designated Cancer Center HPV Summits

- Moffit Cancer Center (January 2015)
- University of Texas MD Anderson Cancer Center (November 2015)
- The Ohio State University Comprehensive Cancer Center (June 2016)
- Hollings Cancer Center at the Medical University of South Carolina (May 2017)
- Huntsman Cancer Institute at the University of Utah (June 2018)
The National HPV Vaccination Roundtable is a coalition of public, private, and voluntary organizations with expertise relevant to increasing HPV vaccination rates in the United States as a way to reduce illness and death from HPV cancers, through coordinated leadership and strategic planning.
The Blue Ribbon Panel and the White House Cancer Moonshot Taskforce identified HPV vaccination as an urgent public health priority and a key element of cancer prevention and control strategies.

“In recent years, the President’s Cancer Panel energized efforts in HPV prevention by recommending a multipronged strategy for accelerating vaccine uptake in the United States and globally.”
HEDIS* 2017 incorporates an updated measure for HPV vaccination:

HPV vaccination for both males and females is now part of a single measure that reports receipt of all three recommended adolescent vaccines (HPV, meningococcal, and Tdap).

*The Healthcare Effectiveness Data and Information Set (HEDIS) is a tool used by more than 90 percent of U.S. health plans to measure performance on important dimensions of care and service.
Gardasil 9, approved December 2014, protects against HPV 6, 11, 16, and 18 plus five additional cancer-causing HPV types (HPV 31, 33, 45, 52, and 58), which cause vast majority of HPV-associated disease.\(^1\)

Advisory Committee on Immunization Practices now recommends a 2-dose schedule with Gardasil 9 (December 2016).\(^2\)

Ongoing NCI RCT is evaluating protection against cervical cancer with 1 dose (versus 2 doses) of HPV vaccine.\(^3\)

Reporting on Progress & Opportunities for HPV Vaccination
Progress on HPV Vaccination Uptake in United States

Percentage-Point Change in HPV Vaccination Rates
2012-2017

Females
≥1 dose +14.8
≥3 doses/up to date +19.7

Males
≥1 dose +41.8
≥3 doses/up to date +37.5

Pressing Forward on HPV Vaccination

A report from the Chair of the President’s Cancer Panel will examine progress and highlight opportunities for improvement in HPV vaccination.
President’s Cancer Panel
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PresCancerPanel@nih.gov
@PresCancerPanel on Twitter
The Talk: HPV Awareness Campaign

7/16/18-9/17/18
About NFID

Non-profit 501(c)(3) organization dedicated to educating the public and healthcare professionals about causes, prevention, and treatment of infectious diseases across the lifespan

- Reaches consumers, healthcare professionals, and media through:
  - Coalition-building activities
  - Public outreach initiatives
  - Professional educational programs (ACCME accreditation with commendation)
  - Scientific meetings, research, and training
- Longstanding partnerships to facilitate rapid program initiation and increase programming impact
- Flexible and nimble organization
About DoSomething.org

- Largest organization for young people & social change
- 5M+ members 13-25 years old across the US in half of all high schools and colleges
- Successful grassroots campaigns on health-related issues (anti-smoking, nutrition, pregnancy, etc.)
- Reach 18M young people where they are and directly communicate with 5M members via SMS messaging and email
Program Goals

- Create impactful co-branded campaign to reach millions of young people with essential information on HPV vaccination

- Raise awareness about HPV and help teens/young adults initiate ‘The Talk’ with a parent/guardian about HPV and vaccination

- Empower young people to activate on unique call-to-action that will encourage them and their friends/classmates to get vaccinated

- Participants prompted to make a card telling parent/guardian they want to stay HPV-free

www.dosomething.org/us/campaigns/the-talk
Campaign

- Problem: HPV (human papillomavirus) is a group of over 150 viruses transmitted through intimate skin-to-skin contact that infects about 14MM people in the US every year.

- Solution: Talking to a parent/guardian about getting vaccinated against HPV can be suuuper awkward. But no worries—we’ve got you!

- Impact: Once you have participated, upload a photo of you and your card. You may inspire others to have The Talk, and will automatically be entered to win a $3,000 scholarship.
Resources

Accessible & digestible editorial content on HPV, and how to have the conversation with a parent/guardian about HPV vaccination—including answers to anticipated questions or concerns.
Social Impressions To Date: 39+ million*
Campaign Goal: 40 million

Messaging Channels:
- Weekly Email Messaging
- Newsletter
- Text Messaging
- Social Media Channels (NFID and DoSomething.org)

*as of 9/10/18; excludes web impressions
Impact

Total Sign-Ups To Date: 18,097*
Sign-Up Goal: 20,000

Campaign Highlights:
- 938 social media shares
- More than 30% of sign-ups are new DoSomething members (~5,400 members)
- 2,500+ views on Facebook Live

*as of 9/10/18
Megan (13)

“I think it is very important for parents to learn the facts about vaccinations so they can make an educated decision on whether or not to get their children vaccinated.”
“This campaign is important to me because of my family history of cancer. My mom and my grandma have had cancer and two of my grandparents died of cancer. This vaccine helps me and my parents take one cancer worry away. Also, I don't want to be someone who can spread this virus.”
“This mattered to me because cancer is a serious thing. Although I may not be sexually active at the moment, in the future, it will help protect me from harmful infections and possible diseases and harm in the future.”

Samantha (17)
“In a growing era of ignorance concerning the science of vaccinations, more people need to be speaking out in support of reliable research. This issue hits close to home as well considering I had a friend who died of cancer. Any movement that helps prevent needless loss and raises awareness has my support.”

Tyler (17)
“No one should feel too shy to protect themselves. "The Talk" campaign not only normalizes heavy topics such as the transmission of STIs, but celebrates communication among families. A sex-positive campaign like this teaches my generation to be comfortable asking for what we need. I believe that the society that is open to discussing what we need, is the society that progresses.”
“Cervical cancer is prevalent in my family, so I got my HPV vaccine. I think it’s important that everyone protect themselves as much as possible especially since things like this are available now.”
Nashlynn (18)

“I know that my mom wants the best for me and I can trust her if a situation appears. We now plan for me to get vaccinated against HPV.”
William (19)

“I just got my first dose of the HPV vaccine!”
HPV Vaccination Campaign
Targeting Young Adults

Jill Wasserman, MPH
Health Communications Specialist
Office on Women’s Health
HHS Office on Women’s Health: About Us

History
• Continuous focus on women’s health as a specialized issue for government attention and action.
• Public Law 111-148 section 3509 of the 111th Congress provides for legislative authority.

Vision
• All women and girls achieve the best possible health.

Mission
• The Office on Women’s Health provides national leadership and coordination to improve the health of women and girls through policy, education, and innovative programs.
HPV Vaccination Campaign for Young Adults: Why?

- Many adolescents and young adults are not initiating or completing the recommended series.

- Existing initiatives to increase HPV vaccination rates focus on educating health care providers and parents of adolescents.

- HPV vaccination rates vary across the nation, with an increased HPV-related cancer burden in women of color and the southern part of the United States.
HPV Vaccination Campaign for Young Adults

The overarching objectives of this health communications campaign are to:

• Increase awareness of HPV vaccination effectiveness among women and men, ages 18-26 in Mississippi, South Carolina and Texas.
• Increase awareness of HPV-associated cervical cancer rates among women and men, ages 18-26 in Mississippi, South Carolina and Texas.
• Increase HPV vaccination series completion among women and men, ages 18-26 in Mississippi, South Carolina and Texas.
HPV Vaccination Campaign for Young Adults

- Solicitation: August 1
- Base year with 2 option years
- Development and formative research activities
- Pre-launch activities
- Launch and implementation activities
- Evaluation and tracking activities
- Phase out/sustainability plan
A national coalition prevent HPV cancers through HPV vaccination
Roundtable Approach

- **Convene** stakeholder organizations
- Increase **exchange** of info
- Identify **gaps** & opportunities
- **Catalyze** efforts
Convene

National meetings
Task groups
Webinars
Increase information exchange

- 215 HPV vaccination resources
  hpvroundtable.org

- 25,000+ unique page views in 7 months
Increase information exchange

Social media

- Singular positive voice for the benefits of HPV vaccination as cancer prevention
- **Twitter**
  ~1,100 followers
  Sustained growth
  1.1 million potential impressions

- **Facebook**
  HPV Cancer Free Family
  Strong community of HPV cancer survivors
Find gaps

**Social Media**
- Use social media to increase vaccine confidence #1
- Address rumors in social media #4
- Address parent concerns #8

**Provider**
- Get providers to attend in-clinic QI efforts #2
- Intervene with entire medical team #6
- Increase vaccination at acute visits #10

**Health System**
- Best practices for health insurers #3
- Impact of connecting IIS/EHR #5
- Effective changes in large health systems #11
- Impact of quality standards #12

Catalyze efforts

Videos
- Survivors
- Oropharyngeal ca
- HPV vax champion yoga
Catalyze efforts

300+ new collaborations
formed from connections made
through the Roundtable

immunization

cancer prevention

cancer advocacy
Catalyze efforts

**Action Guides**
- Clinicians
- Large health systems

2,400 unique views in 5 months
Catalyze efforts

Campaigns

- We’re In
- Power to Prevent HPV Cancers
Catalyze efforts

Power to Prevent HPV Cancers

July 8-August 28, 2018
Week 1  Be Part of the Super 6! Launch Week
Week 2  Nurses & Medical Assistant
Week 3  Physicians, Pas, NPs
Week 4  Office Staff
Week 5  Small Practices
Week 6  Dental Health Care Providers
Week 7  NIAM: Preteen Vaccine Week
Week 8  Keep the Power All Year Long

Campaign webpage ~3,100 views
Action guides downloads
- RN,MA – 188
- MDs, PAs, NPs – 135
- Dental – 120

6,000 emails sent
30-40% opened
20% is industry benchmark