



**CPCRN**  
Cancer Prevention and  
Control Research Network

# FQHCs as a Key Partner in Community-Clinical Linkages to Support HPV Vaccination

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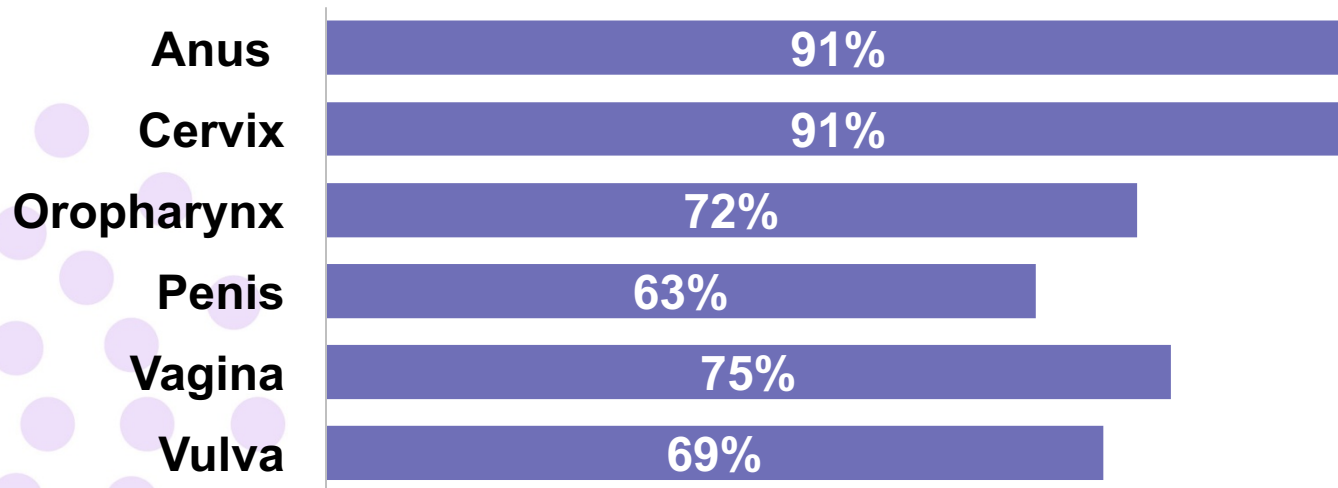
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# HPV & Cancer

Persistent infections of high-risk strains of HPV (namely types 16 and 18) are recognized as a **major cause of cervical, anal, vaginal, vulvar, penile, and oropharyngeal cancers.**

## % OF CANCERS PROBABLY CAUSED BY HPV EACH YEAR



# HPV Vaccination Guidelines

- HPV4 vaccination was introduced in 2006
- HPV9 vaccination was introduced in late 2014
- ACIP recommends routine HPV vaccination for ages 11-12
- Females: ages 9-26
- Males: ages 9-21 (permissive recommendations for ages 22-26).
- If initiated before age 15: 2 doses
- If initiated after age 15: 3 doses

# National HPV Vaccination Rates

- Healthy People 2020 goal: 80% of adolescents have completed the HPV vaccination series
  - National rates of initiation and completion remain below this goal

NATIONAL CANCER INSTITUTE

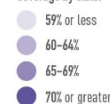
Improving HPV Vaccination Rates Will Help Save Lives

**NATIONWIDE**  
**6 OUT OF 10**  
GIRLS HAVE STARTED  
THE HPV VACCINE SERIES

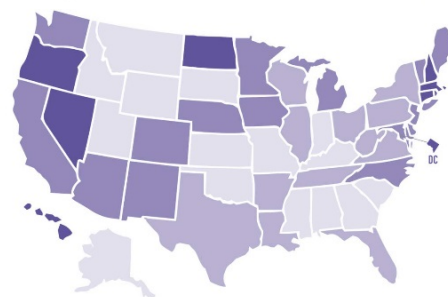


National coverage is 63%

Coverage by state:



Percentage of Adolescent Girls Who Have Received One or More Doses of HPV Vaccine\*



**NATIONWIDE**  
**5 OUT OF 10**  
BOYS HAVE STARTED  
THE HPV VACCINE SERIES

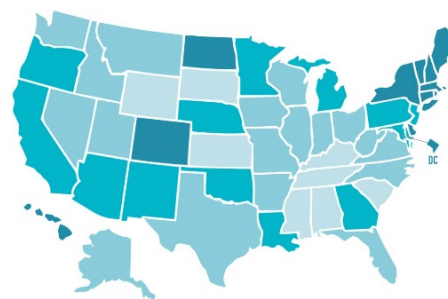


National coverage is 50%

Coverage by state:



Percentage of Adolescent Boys Who Have Received One or More Doses of HPV Vaccine\*



HPV VACCINATION IS THE BEST WAY TO PREVENT SEVERAL TYPES OF CANCER,  
YET MANY ADOLESCENTS HAVEN'T STARTED THE HPV VACCINE SERIES.

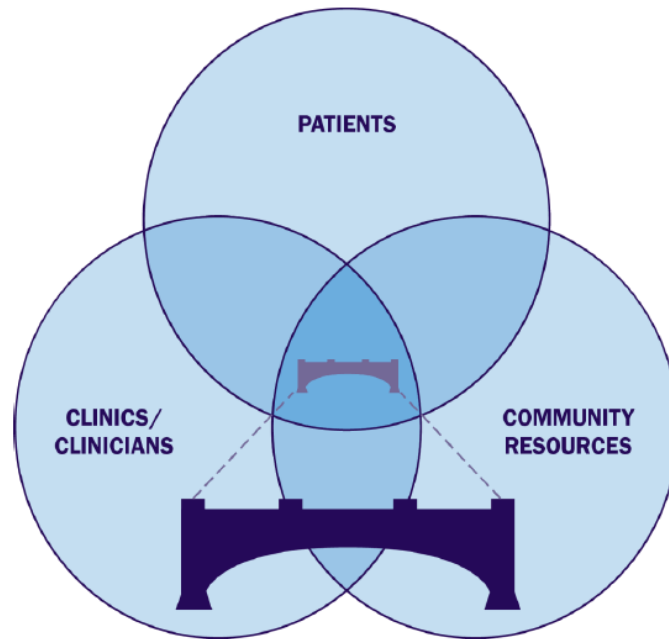
\*Estimated coverage with  $\geq 1$  dose of human papillomavirus (HPV) vaccine among adolescents age 13-17 years (Source: National Immunization Survey—Teen, United States, 2015)

Adapted from [cdc.gov/hpv](http://cdc.gov/hpv)

Source: *MMWR* August 26, 2016  
cancer.gov

# Community-Clinical Linkages

**Community-clinical linkages (CCLs)** are defined by the CDC as “...collaborations between health care practitioners in the clinical settings and programs in the community – both working to improve the health of the people and the communities in which they live.”



# Community-Clinical Linkages

- CCLs can serve as an evidence-based recommended strategy for increasing vaccine uptake.
- Community Preventive Services Task Force
  - “Partnerships between community organizations and vaccination providers are likely to be an essential component of effective, sustained community-based efforts.”
- President’s Cancer Panel 2012-2013
  - “The range of settings in which HPV vaccines may be administered to adolescents should increase.”
- However, further evaluation is needed to understand what types of organizations participate in CCLs and how CCLs function.

# Study Purpose

- Cancer Prevention and Control Research Network (CPCRN) HPV Vaccination workgroup
  - Oregon Health and Science University, University of Iowa, University of Kentucky, University of South Carolina, and University of Washington
  - Workgroup aim: To contribute to the science and evidence-base supporting innovative CCLs to increase HPV vaccination rates among adolescents and young adults.
- Investigators explored the role of CCLs in this respective communities in improving HPV vaccination rates.



# Study Methods

- Case study approach
  - Collect information describing two CCLs for each CPCRN site that promote and/or deliver HPV vaccination.
  - CCLs were selected from landscape assessment that identified HPV-vaccination related CCLs in CPCRN states.
- Representatives of CCL dyads were interviewed to gather the descriptive information, including:
  - Type of CCL integration (i.e., mutual, community-focused, clinically-focused)
  - CCL impetus
  - HPV vaccination services offered
  - Barriers and facilitators to effective linkages
  - Evaluation activities

# Study Methods

- Each site independently completed abstract form
- Abstract forms were reviewed by 2 investigators to confirm accuracy of information

*Table 1. Construct Table and Interview Guide Questions for Community and Clinical Linkage Leaders*

Construct/Domain	Related Questions
Descriptive Information	<ol style="list-style-type: none"> <li>1. How would you describe the mission of your organization?</li> <li>2. Who are the primary staff in your organization?</li> <li>3. What locations does your organization serve?</li> <li>4. What is the target population of your organizational setting?</li> </ol>
Type of Integration <ul style="list-style-type: none"> <li>• Mutual</li> <li>• Community-focused</li> <li>• Clinically-focused</li> </ul>	<ol style="list-style-type: none"> <li>5. Please tell me the extent to which your site offers the following services related to HPV vaccination:               <ul style="list-style-type: none"> <li>• Information and counseling for parents and children/adolescents</li> <li>• Making arrangements for children/adolescents to receive vaccinations</li> <li>• Administering vaccinations</li> <li>• Providing referral and/or feedback to a partner organization</li> <li>• Other (specify)</li> </ul> </li> </ol>
Impetus	<ol style="list-style-type: none"> <li>6. To what extent is your involvement in HPV vaccination in response to leadership/policies at the national, state or local level?</li> </ol>
Types of Services Offered	<ol style="list-style-type: none"> <li>7. What types of HPV vaccination are offered?</li> <li>8. Describe any <i>past</i> efforts to address HPV vaccination.*</li> <li>9. Describe any <i>planned</i> efforts to address HPV vaccination.*</li> <li>10. What resources are devoted to <i>current</i> efforts to address HPV vaccination? (E.g., resources are funding, staff time, other).               <ul style="list-style-type: none"> <li>• What resources were devoted to <i>past</i> efforts?*</li> <li>• What resources will be devoted to <i>planned</i> efforts?*</li> </ul> </li> <li>11. What type of training, such as professional development or education, have you offered on HPV vaccination?</li> </ol>
Spanning Support	<ol style="list-style-type: none"> <li>12. Who is the person in your organization responsible for working with {partnering site}?               <ul style="list-style-type: none"> <li>• What is his/her role in the organization?</li> </ul> </li> <li>13. What would help you in your work with {partnering site} to address HPV vaccination?</li> </ol>
Facilitators	<ol style="list-style-type: none"> <li>14. What do you think is working well to make your partnership successful?</li> </ol>
Barriers	<ol style="list-style-type: none"> <li>15. What challenges have you experienced in your partnership?</li> </ol>
Evaluation	<ol style="list-style-type: none"> <li>16. What evaluation activities have been conducted of your HPV program?               <ul style="list-style-type: none"> <li>• If applicable, briefly describe the focus on your evaluation</li> </ul> </li> </ol>

# CCL Study Findings

Case study of nine CCLs involved with HPV vaccination

- Five had FQHCs as the clinical partner

CCLs with FQHCs had:

- Clinically-focused integration
- Community partner was a non-profit organization
- Four FQHCs formed CCLs due to national/state initiatives

Main reason for CCL: need for improvement in HPV vaccination rates.

Critical components: designated staff person to support CCL and funding.

# Implications

*FQHCs emerged as important clinical sites in cultivating HPV vaccination-focused CCLs.*

- Established patient based
- Well-respected within their communities
- Maintain numerous connections with local organizations
  - may aid in establishing and sustaining CCLs.

*Case study findings will guide future HPV vaccination promotion, education, and interventional efforts across CPCRNC sites.*

# Implications

*Contribute to research focused on CCLs as an evidence-based implementation strategy to improve HPV vaccination.*

- Understand the role of CCLs in dissemination and implementation of evidence-based approaches to increase HPV vaccination, e.g.,
  - Identify role of and best practices for CCLs
  - Generalizability, scalability, sustainability, cost, outcomes
  - Understand the mechanisms through which CCLs operate to disseminate evidence-based practices

# Acknowledgments

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*The findings and conclusions in this presentation are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.*

# Thank you!



**[ HPV VACCINE IS  
CANCER PREVENTION. ]**

## Questions?