

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

National Cancer
Advisory Board

February 27, 2014



Accelerating HPV Vaccine Uptake: Urgency for Action to Prevent Cancer



HPV Vaccines *Prevent Cancers.*
Why Are *So Few* U.S. Adolescents Vaccinated?



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

PCP 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 rapid execution of the Program shall immediately be brought to the attention of the President.*

PCP Members

□ Barbara K. Rimer, DrPH

- ✦ *Univ. of North Carolina at Chapel Hill (Chair)*

□ Hill Harper, JD

- ✦ *Cancer Survivor, Actor, and Best-Selling Author (Member)*



□ Owen N. Witte, MD

- ✦ *Univ. of California Los Angeles (Member)*



Overview

- **2012-2013 Series**

*Accelerating Progress in Cancer Prevention:
The HPV Vaccine Example*

- **2012-2013 Report to the President**

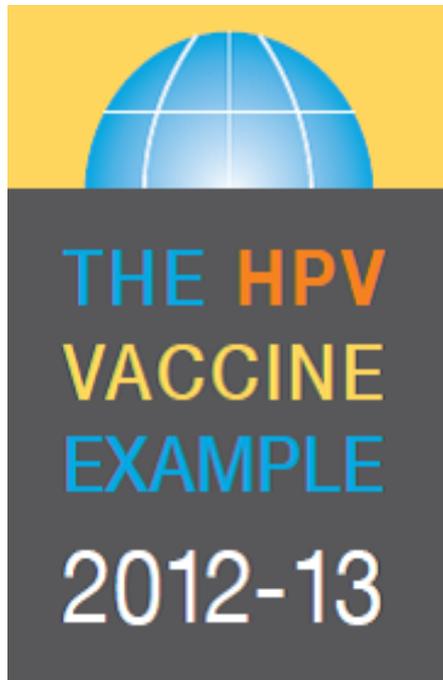
*Accelerating HPV Vaccine Uptake: Urgency for
Action to Prevent Cancer*

- **2014 Series**

*Cancer Communication in the Digital Era:
Opportunities & Challenges*

- **Discussion**

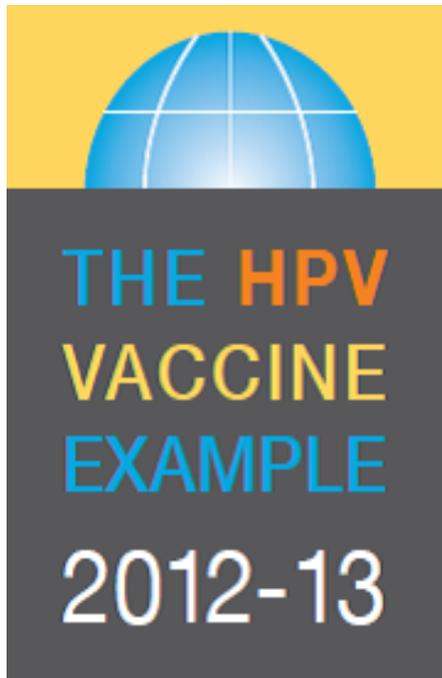
Accelerating Progress in Cancer Prevention: The HPV Vaccine Example



Increasing HPV vaccination is one of the most profound opportunities for cancer prevention.

THE PRESIDENT'S
CANCER PANEL

Accelerating Progress in Cancer Prevention: The HPV Vaccine Example



THE PRESIDENT'S
CANCER PANEL

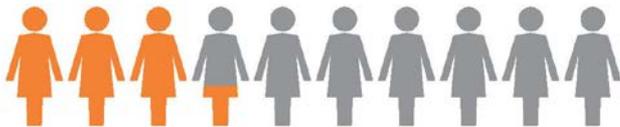
2012-2013 Series Workshops

1. HPV Vaccination as a Model for Cancer Prevention
2. Achieving Widespread HPV Vaccine Uptake
3. Creating an Integrated HPV Vaccination and Screening Program
4. Global HPV Vaccination: Opportunities and Challenges

Report Released

February 10, 2014

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

President's Cancer Panel Annual Report 2012-2013

ACCELERATING HPV VACCINE UPTAKE: URGENCY FOR ACTION TO PREVENT CANCER

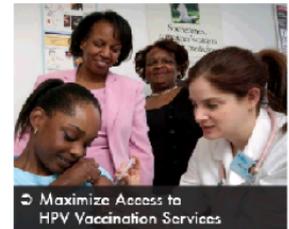
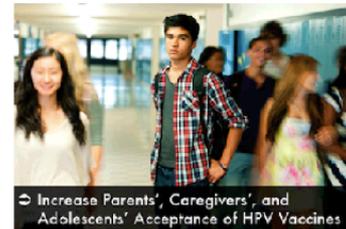
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Human papillomaviruses (HPV) cause most cases of cervical cancer and large proportions of vaginal, vulvar, anal, penile, and oropharyngeal cancers. HPV also causes genital warts and recurrent respiratory papillomatosis. HPV vaccines could dramatically 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.

Click below to read more.

- Letter to President Obama
- Executive Summary
- Recommendations at a Glance
- Download Full Report (PDF)

HOW TO ACCELERATE HPV VACCINE UPTAKE IN THE U.S.



INCREASE GLOBAL HPV VACCINATION

CONDUCT HIGH-PRIORITY RESEARCH

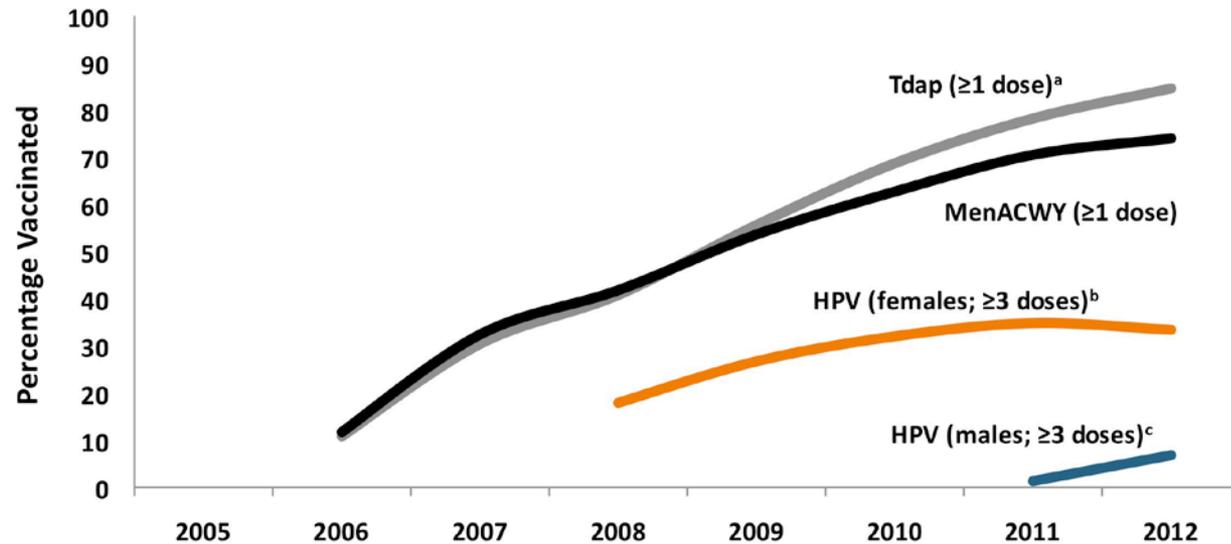
HPV Vaccines Are Underused in the United States.

In 2012:

- ✦ 33.4% of girls ages 13-17 completed three-dose series (state rates vary widely and are as low as 12%).*
- ✦ 6.8% of boys ages 13-17 completed three-dose series.

**Healthy People 2020 goal: 80 percent of girls ages 13-15 complete HPV vaccine series.*

U.S. Uptake of Adolescent Vaccines Through 2012



Routine Vaccination Recommended by ACIP:



(a) After age 10 years.

(b) ≥ 3 doses HPV vaccine, either Cervarix® or Gardasil®, among females. ACIP recommends either Cervarix® or Gardasil® for females.

(c) ≥ 3 doses HPV vaccine, either Cervarix® or Gardasil®, among males. ACIP recommends Gardasil® for males but some males may have received Cervarix®.

Source: Centers for Disease Control and Prevention. National and state vaccination coverage among adolescents aged 13-17 years—United States, 2012. MMWR. 2013 Aug 30;62(34):685-93.

U.S. Uptake Behind That of Several Countries



Note: National data on HPV vaccine coverage in Canada are not available. However, Canadian provinces report three-dose coverage among target age groups between 50 and 85 percent.

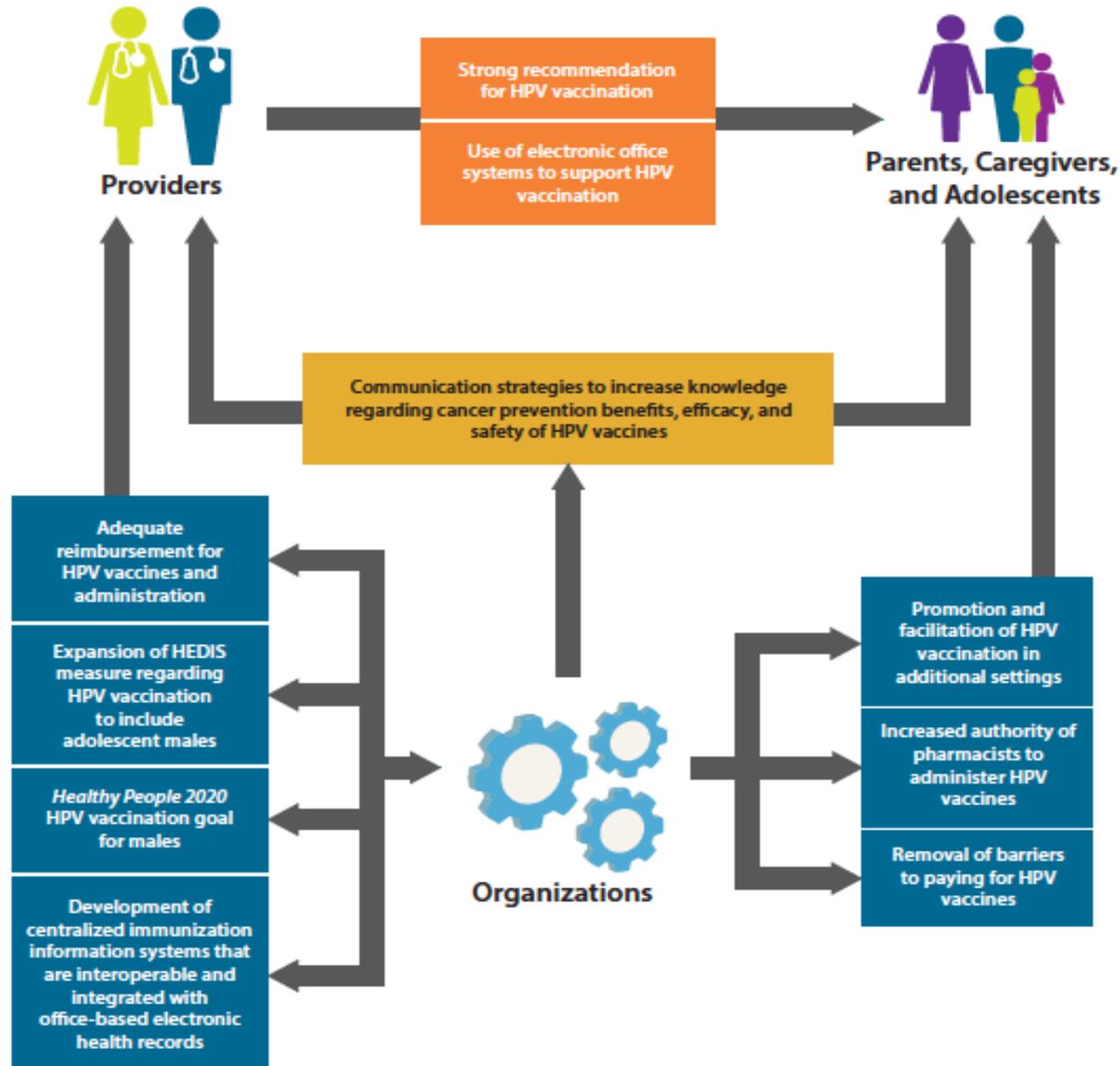
Sources: Australia (girls turning 15 in 2011): Australian Government Department of Health and Ageing. Human papillomavirus (HPV) [Internet]. Woden (AU): the Department; [updated 2013 Feb 14; cited 2013 Aug 16]. Available from: <http://www.health.gov.au/Internet/immunise/publishing.nsf/Content/immunise-hpv>; United Kingdom (12- to 19-year-old girls): Sheridan A, White J. Annual HPV vaccine coverage in England in 2009/2010. London (UK): Health Protection Agency, UK; 2010 Dec 22. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/215800/dh_123826.pdf; United States (13- to 17-year-old girls): Centers for Disease Control and Prevention. Human papillomavirus vaccination coverage among adolescent girls, 2007-2012, and postlicensure vaccine safety monitoring, 2006-2013—United States. *MMWR*. 2013;62(29):591-5; Canada: Saralya M, Steben M, Watson M, Markowitz L. Evolution of cervical cancer screening and prevention in United States and Canada: Implications for public health practitioners and clinicians. *Prev Med*. 2013;57(5):426-33.

Increasing HPV Vaccine Uptake Must Be a Public Health Priority.

- ✦ Increasing HPV vaccination rates from current levels to 80%* would prevent an additional 53,000 future cervical cancer cases among girls now 12 years or younger (CDC).
- ✦ Thousands of non-cervical HPV-associated cancers likely could also be prevented.
- ✦ A growing proportion of future HPV-associated cancers (esp. oropharyngeal cancers) will occur in males. Benefits of vaccination accrue to males and females.

**Healthy People 2020 goal: 80 percent of girls ages 13-15 complete HPV vaccine series.*

Key Audiences and Objectives for Increasing U.S. HPV Vaccine Uptake



Accelerating HPV Vaccine Uptake in the United States

Three Goals

- 1. Reduce Missed Clinical Opportunities to Recommend and Administer HPV Vaccines.**
- 2. Increase Parents', Caregivers', and Adolescents' Acceptance of HPV Vaccines.**
- 3. Maximize Access to HPV Vaccination Services.**

Goal 1: Reduce Missed Clinical Opportunities to Recommend and Administer HPV Vaccines

- **Objective 1.1:** CDC should develop, test, disseminate, and evaluate the impact of integrated, comprehensive communication strategies for physicians and other relevant health professionals.

Goal 1: Reduce Missed Clinical Opportunities to Recommend and Administer HPV Vaccines

- **Objective 1.2:** Providers should strongly encourage HPV vaccination of age-eligible males and females whenever other vaccines are administered.

Goal 1: Reduce Missed Clinical Opportunities to Recommend and Administer HPV Vaccines

- **Objective 1.3:** Healthcare organizations and practices should use electronic office systems, including electronic health records (EHRs) and immunization information systems (IIS), to avoid missed opportunities for HPV vaccination.

Goal 1: Reduce Missed Clinical Opportunities to Recommend and Administer HPV Vaccines

- **Objective 1.4:** Healthcare payers should reimburse providers adequately for HPV vaccines and for vaccine administration and services.
- **Objective 1.5:** The current Healthcare Effectiveness Data and Information Set (HEDIS) quality measure for HPV vaccination of adolescent females should be expanded to include males.
- **Objective 1.6:** Create a *Healthy People 2020* HPV vaccination goal for males.

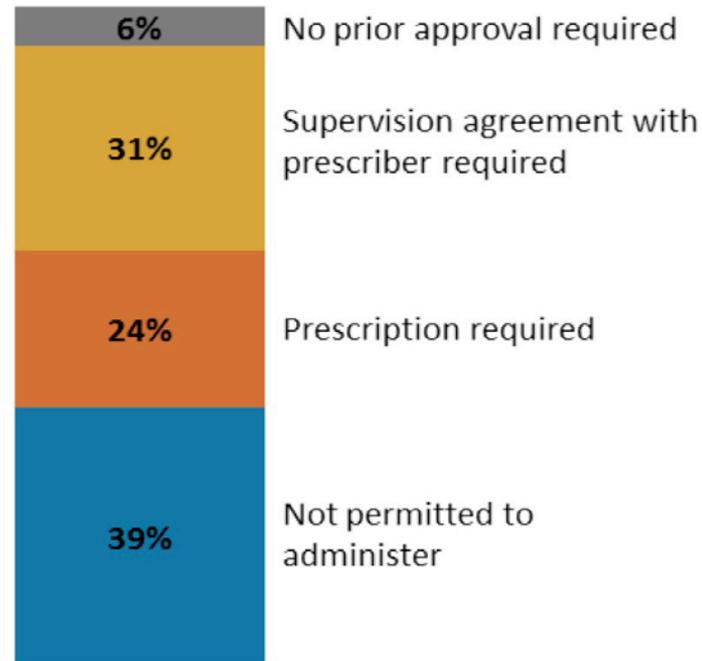
Goal 2: Increase Parents', Caregivers', and Adolescents' Acceptance of HPV Vaccines

- **Objective 2.1:** CDC should develop, test, and collaborate with partner organizations to deploy integrated, comprehensive communication strategies directed at parents and other caregivers, and also at adolescents.

Goal 3: Maximize Access to HPV Vaccination Services

- **Objective 3.1:** Promote and facilitate HPV vaccination in venues outside the medical home.
- **Objective 3.2:** States should enact laws and implement policies that allow pharmacists to administer vaccines to adolescents, including younger adolescents.
- **Objective 3.3:** Overcome remaining barriers to paying for HPV vaccines, including payment for vaccines provided outside the medical home and by out-of-network or nonphysician providers.

Authority of Pharmacists in 2012 to Administer HPV Vaccines to Girls Age 12

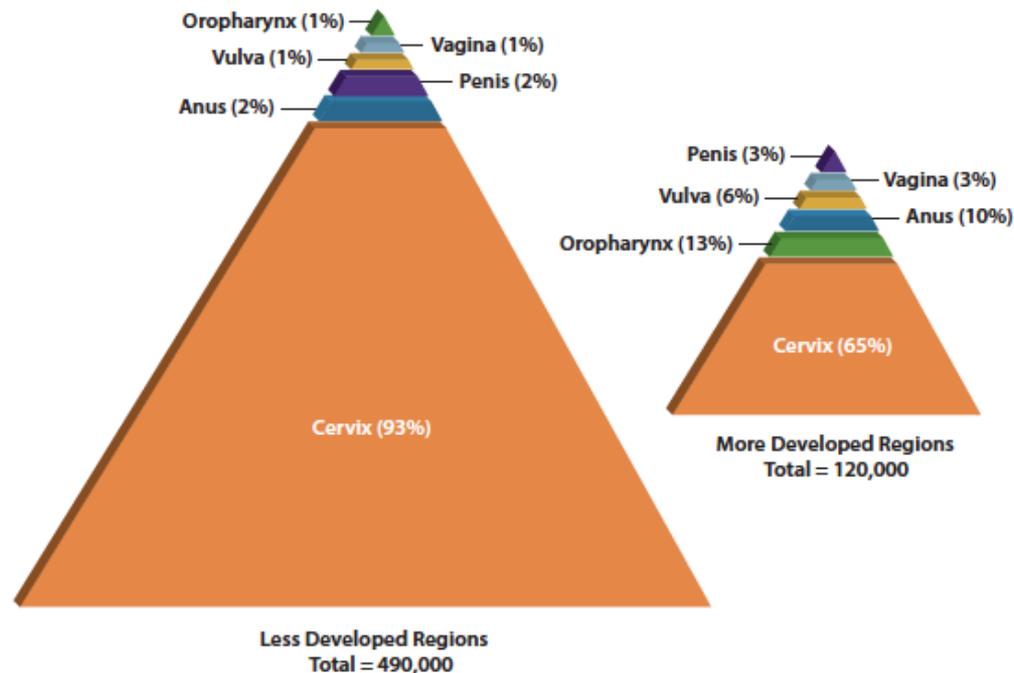


**Percentage of U.S. States
(including District of Columbia)**

Source: Brewer NT, Chung JK, Baker HM, Rothholz MC, Smith JS. Pharmacist authority to provide HPV vaccine: novel partners in cervical cancer prevention. *Gynecol Oncol.* [Epub 2013 Dec 19]

Increasing Global HPV Vaccination

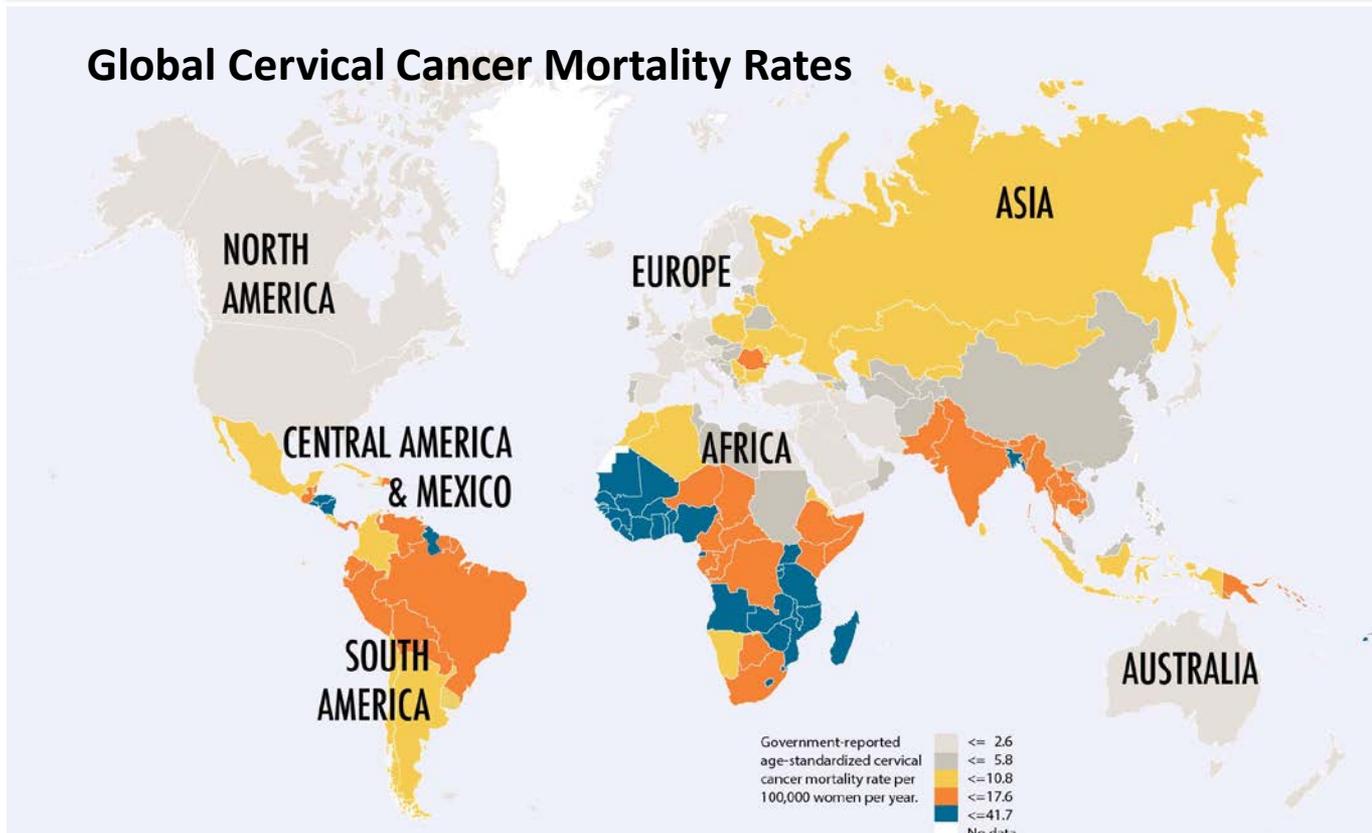
Numbers of HPV-Associated Cancers in Less Developed and More Developed Regions



Note: Global estimates of genital warts and RRP incidence are not available.

Source: de Martel C, Ferlay J, Franceschi S, Vignat J, Bray F, Forman D, et al. Global burden of cancers attributable to infections in 2008: a review and synthetic analysis. *Lancet Oncol.* 2012;13(6):607-15.

Goal 4: Promote Global HPV Vaccine Uptake



Modified from: Crow, JM. HPV: the global burden. *Nature*. 2012;488:S2-3. Data from: World Health Organization, Institut Catala d'Oncologia. Human papillomavirus and related cancers: summary report update. Barcelona (ES): WHO/ICO; 2010 Nov 15.

Goal 4: Promote Global HPV Vaccine Uptake

- **Objective 4.1:** The United States should continue its collaboration with and support of GAVI Alliance to facilitate HPV vaccine introduction and uptake in low-income countries.
- **Objective 4.2:** The United States should continue to support global efforts to develop comprehensive cancer control plans and cancer registries in low- and middle-income countries.

High-Priority Research to Advance Prevention of HPV-Associated Cancers

- 1. Investigate more convenient dosing schedules for current vaccines (e.g., extended dosing schedules, fewer doses).**
- 2. Develop next-generation vaccines that provide broader protection and/or are easier to store and administer.**
- 3. Explain the natural history of oropharyngeal HPV infections.**
- 4. Develop more effective ways to communicate about HPV-associated diseases and HPV vaccines.**
- 5. Determine how best to integrate HPV vaccination with cervical cancer screening.**

Implementation of Panel Recommendations



The Panel is committed to achieving the vision of increased HPV vaccine uptake. The Panel suggests that a credible organization, such as NVAC, be given responsibility for monitoring the status of uptake and implementation of these recommendations.

Implementation of Panel Recommendations



That accountability, in combination with the Panel's commitment to monitor implementation of recommendations outlined in this report, will increase the likelihood that the report and its recommendations will become agents for change.

Acknowledgements

Noel Brewer, PhD, UNC Gillings School of Global Public Health
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2014 Series



Cancer Communication in the Digital Era: Opportunities & Challenges

Workshop 1: March 3, 2014

Bethesda, MD ♦ NIH Campus ♦ Building 31



Goal of Workshop

Shape the direction of an overall series focused on the potential of new media, especially social and participative media technologies, to improve the control of cancer.

Workshop 1: March 3, 2014

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Workshop 1: March 3, 2014

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