Health Information National Trends Survey

hints briefs

NUMBER 26

Preventing Cancer through Increased Human Papillomavirus (HPV) Vaccine Uptake

The President's Cancer Panel recently released a report describing the underuse of the human papillomavirus (HPV) vaccine as a "serious, but correctable threat to our progress against cancer." Almost all cervical cancer cases result from persistent HPV infection, making it one of the most preventable forms of cancer, yet only one third of girls aged 13–17 have received all three recommended doses of the vaccine. This falls far short of the *Healthy People 2020* goal of having 80 percent of girls aged 13–15 fully vaccinated. A recommendation for vaccinating boys was not made until 2011, and uptake has been slow. In 2012, less than 7 percent of boys aged 13–17 were fully vaccinated.

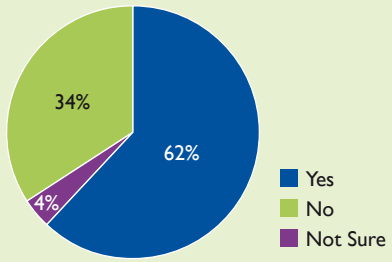
Not all types of HPV cause cancer, and the HPV vaccine does not protect against all types of HPV. Most high-risk HPV infections occur without any symptoms and go away on their own within one to two years. In some cases, these high-risk HPV infections persist and, if left untreated, progress to cancer. Discussions are needed between health care providers, parents, and adolescents to clearly convey the importance and benefits of HPV vaccination for cancer prevention. The vaccines are recommended for adolescents aged 11–12, and are most effective prior to the advent of sexual activity. Many parents of young adolescents are not prepared for or comfortable discussing HPV vaccination, and many health care providers sometimes delay or avoid making vaccine recommendations.

Despite these challenges, since the HPV vaccine became available in 2006, awareness of HPV has increased significantly, but remains lower than desired. In 2013, equal proportions (68 percent) of the general adult population reported having heard of HPV and the HPV vaccine. Prior to the vaccine's release, only 38 percent of women were familiar with HPV, and awareness among all adults was likely lower.

Familiarity with HPV does not necessarily translate into knowledge of the potential health consequences of the infection. Data from HINTS 4, cycle 3 collected in late 2013 indicate that about two thirds of HPV-aware adults in the United States knew of the link between HPV and cervical cancer (62 percent), and 64 percent were unaware that HPV infections will often go away on their own without treatment. While knowledge and awareness alone do not lead to action, they are critical components of any health promotion strategy.

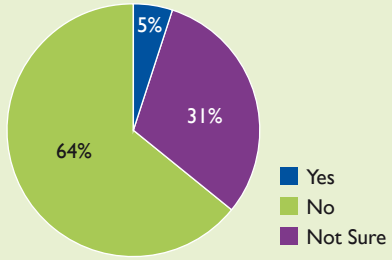
Do you think HPV can cause cervical cancer?

2013 Estimated U.S. Population Among Aware of HPV.



Do you think that HPV will often go away on its own without treatment?

2013 Estimated U.S. Population Among Aware of HPV.



Quick Facts

- Nearly 80 million people in the United States are infected with at least one strain of HPV.
- HPVs are a group of more than 150 related viruses, and 40 of these can easily be spread through direct skin-to-skin contact. About 12 high-risk virus types have been identified as cancer causing, and the two most virulent types (HPV 16 and 18) account for 70 percent of the cases of cervical cancer as well as cancers of the vulva, vagina, anus, and penis.
- In 2006, the Food and Drug Administration (FDA) approved two HPV vaccines that collectively have proven highly effective in preventing infections with HPV types 16 and 18, resulting in substantially reduced rates of cervical and other cancers.
- If current vaccination levels increased to 80 percent, an additional 53,000 future cases of cervical cancer would be prevented among girls who are now 12 years old and younger over the course of their lifetimes.
- HPV vaccines are effective. Despite lower than expected vaccination rates, the rate of HPV infection from the four strains targeted by the vaccines decreased 56 percent among girls aged 15–19 from 2007 to 2010.

In this HINTS *Brief*, we explore the sociodemographic factors associated with awareness and knowledge of HPV and the HPV vaccine in the United States.

Sociodemographic Differences in HPV Knowledge and Awareness

Comprehensive communication strategies and tools are needed that promote opportunities for in-depth discussion about HPV vaccination among adolescents, their parents or caregivers, and health care providers. Women with children under age 18 are significantly less likely than women without children under 18 to have heard of HPV or the vaccine, according to a recent analysis of HINTS 4 data collected in late 2013. This finding is concerning given that mothers are often the decision makers for their families on health-related issues. The same study looked at other sociodemographic differences in HPV knowledge and awareness.

Heard of HPV

Sixty-eight percent of Americans have heard of HPV. Those with a high school degree are less likely than those with a college education to have heard of HPV. Males are about 75 percent less likely than females to have heard of HPV. Age is a primary driver of awareness, with those aged 18–34 being five times more likely than those over 65 to have heard of HPV.

Heard of HPV Vaccine

Sixty-eight percent of Americans have heard of the cervical cancer vaccine, or HPV shot. Those with a high school degree are less likely than those with a college education to have heard of the HPV vaccine, and males are about 75 percent less likely than females to have heard of the vaccine. Hispanics are half as likely as whites to have heard of the vaccine. Younger age is also a driver of vaccine awareness, with those aged 18–34 being three times more likely than those over 65 to have heard of the vaccine.

Knowledge That HPV Causes Cervical Cancer

Sixty-two percent of Americans know that HPV causes cervical cancer, 34 percent are unsure of that fact, and 4 percent inaccurately think that HPV does not cause cervical cancer. People in rural areas are significantly less likely than those in urban areas to know that HPV causes cervical cancer. People with less than high school education, high school graduates, and people with some college are significantly less likely than college graduates to know that HPV causes cervical cancer. Males are significantly less likely than females to think that HPV causes cervical cancer, and those aged 18–34 are twice as likely to know about the HPV-cancer link as those over 65.

How Can This Inform Your Work?

- Missed clinical opportunities are the most important reason why the United States has not achieved high rates of HPV vaccine uptake. According to the Centers for Disease Control and Prevention (CDC), if all missed opportunities during health care visits had been eliminated between 2007 and 2012, 93 percent of girls aged 13–17 would have received at least their first dose of the vaccine by 2012. Targeted efforts should be made to address factors that keep health care providers from strongly recommending HPV vaccines.
- Most parents believe that vaccines protect their children from potentially life threatening diseases. Work is still needed to improve parents', caregivers', and adolescents' understanding of HPV vaccines as a protective measure against cancer.
- Cancer prevention messages should incorporate the importance of early vaccination, reinforce the vaccine's safety and effectiveness, and emphasize the necessity of vaccinating both girls and boys.
- As public awareness of HPV and the importance of vaccination for girls and boys becomes more widely known, convenient access is imperative for ensuring the HPV vaccine series can be initiated and completed.

About HINTS

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HINTS was created to monitor changes in the rapidly evolving field of health communication. The survey data can be used to understand how adults use different communication channels to obtain health information for themselves and their loved ones. It can also help to create more effective health communication strategies across populations. The National Cancer Institute (NCI) fielded the first Health Information National Trends Survey (HINTS) in 2002–2003, surveying 6,369 Americans. Subsequent surveys followed in 2005 (5,586 Americans surveyed), 2008 (7,674 Americans surveyed), 2011–2012 (3,959 Americans surveyed), 2012–2013 (3,630 Americans surveyed), and 2013 (3,185 Americans surveyed).

HINTS *Briefs* provide a snapshot of noteworthy, data-driven research findings. They introduce population-level estimates for specific questions in the survey and summarize significant research findings that are a result of analyzing how certain demographic characteristics influence specific outcomes. Many *Briefs* summarize research findings from recent peer-reviewed journal articles using HINTS data.

For More Information on Cancer

- Call the NCI Cancer Information Service at 1-800-4-CANCER
- Visit http://cancer.gov
- Order NCI publications at https://pubs.cancer.gov/
- Visit Facebook.com/cancer.gov and http://www.youtube.com/ncigov

May 2014

References Used in This HINTS *Brief*

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