

## HPV and HPV Vaccine Awareness among US Adults

The human papillomavirus (HPV) can cause several types of cancer, including cervical, anal, and oropharyngeal cancers. In the United States, an estimated 36,500 new cancer cases per year are attributable to HPV. HPV vaccines have been shown to be highly effective at protecting against HPV infection and reducing the risk of HPV-associated cancers. Although HPV vaccines do not eliminate the need for cervical cancer screening, vaccination may decrease the need for medical care, biopsies, and invasive procedures associated with follow-up of abnormal screening results. Furthermore, as no approved screening tests exist for noncervical HPV cancers, preventing these cancers through HPV vaccination may be especially important.

HPV vaccination can begin as early as age 9 but is routinely recommended at age 11 or 12 for all children regardless of sex. Catch-up vaccination is recommended for all individuals through age 26 if they have not been fully vaccinated previously. Although vaccination is not generally recommended for those over age 26, adults aged 27–45 who are not fully vaccinated and may be at risk for new HPV infections are encouraged to discuss vaccination with their health care provider.

Despite 15 years of research demonstrating that HPV vaccination is safe and effective, HPV vaccination coverage in the United States remains below target levels. Research has demonstrated that provider recommendation is the strongest predictor of HPV vaccination. However, communication efforts remain necessary to educate the public about the benefits of HPV vaccination because although awareness is likely insufficient to prompt vaccination uptake on its own, it is an important first step toward considering vaccination.

## Quick Facts

- HPV can cause certain types of cancer, including cervical, anal, oropharyngeal, penile, vulvar, and vaginal cancers.
- HPV vaccination protects against infection with certain strains of HPV and could prevent more than 90% of all cancers caused by HPV (an estimated 33,700 cases per year in the US).
- HPV vaccines were first introduced in the US in 2006. Years of safety monitoring data show that the vaccines cause no serious side effects.
- Routine HPV vaccination is recommended for adolescents at age 11 or 12, and catch-up HPV vaccination is recommended for individuals aged 13–26. Shared decision-making with a provider regarding vaccination is recommended for adults aged 27–45.
- In 2020, only 64% of US adults had ever heard of HPV and only 60% had ever heard of the HPV vaccine.

### Have you ever heard of HPV? HPV stands for “human papillomavirus.”



### Have you ever heard of the cervical cancer vaccine or HPV shot?



Source: HINTS 5 Cycle 4, 2020

## Changes in Public Awareness of HPV and HPV Vaccines from 2008 to 2018

In a recently published study, researchers analyzed five cycles of HINTS data to examine changes in awareness of HPV and the HPV vaccine among American adults from 2008 to 2018. The study showed that after an initial increase in awareness between 2008 and 2013 (from 65% to 67%), awareness of both HPV and HPV vaccines declined after 2013, with approximately 60% of US adults reporting being aware of both HPV and the HPV vaccine in 2018. Notable declines in awareness after 2013 were observed among males, those with lower educational attainment, and those with lower incomes. The study also examined disparities in HPV and HPV vaccine awareness over time, finding that awareness was consistently lower among racial/ethnic minority populations, rural residents, males, those aged 65 years and older, those with household incomes below \$35,000, and those with a high school education or less.

### How Can This Inform Your Work?

HINTS data show that HPV and HPV vaccine awareness has declined since 2013 and remains relatively low among American adults overall, and may be even lower in certain underserved populations. These findings suggest a need for both individual-level and population-level education efforts. Mass media and social media campaigns that emphasize HPV vaccination as a safe and effective tool for cancer prevention, and counter HPV and HPV vaccine–related misperceptions, could help increase awareness, knowledge, and acceptance of HPV vaccination. Although HPV vaccination has been shown to be higher among some traditionally underserved groups, persistent disparities in awareness, including among racial/ethnic minorities, individuals of lower socioeconomic status (SES), rural residents, and men, suggest that dedicated efforts tailored to the specific needs of these groups may be needed. For example, partnering with community organizations that serve low-income populations to deliver vaccine education might be an effective way to reach individuals with low SES, while messages that emphasize HPV-related cancers that are more likely to affect men might be needed for efforts aimed at increasing awareness and vaccine acceptance among boys and their caregivers.

Additionally, as research has consistently shown provider recommendation to be one of the most significant determinants of HPV vaccine initiation and completion, health care providers have an important role to play in raising awareness and increasing uptake of HPV vaccines among those who are eligible. Research suggests that the quality of provider communication about vaccination is important: Parents who receive high-quality recommendations for HPV vaccination (characterized by messages that convey the importance, urgency, and cancer prevention potential of vaccines) are less likely to refuse or delay vaccination compared to those who receive a low-quality recommendation (e.g., one that frames the HPV vaccine as optional or suggests deferring HPV vaccination to a future visit). Communication training for providers may help improve the quality of their vaccine recommendations and ultimately increase vaccine uptake among eligible adolescents and adults.

### About HINTS

[hints.cancer.gov](https://hints.cancer.gov)

The National Cancer Institute (NCI) created the Health Information National Trends Survey (HINTS) to monitor changes in the rapidly evolving field of health communication. The survey data can be used to understand how adults use communication channels to obtain health information for themselves and their loved ones. HINTS data can also help practitioners create more effective health communication strategies. The HINTS survey has been fielded 13 times to date.

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 resulting from analyses of how certain demographic characteristics influence specific outcomes. Many Briefs summarize research findings from recent peer-reviewed journal articles that have used HINTS data.

### For More Information on Cancer

- Call the NCI Cancer Information Service at 1-800-4-CANCER
- Visit <https://www.cancer.gov>
- Order NCI publications at <https://pubs.cancer.gov/ncipl/home.aspx>
- Visit [Facebook.com/cancer.gov](https://www.facebook.com/cancer.gov) and <https://www.youtube.com/ncigov>

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