

Americans Are Uninformed About and Undervaccinated for HPV

HPV accounts for 70% of all throat cancers, but only one-third of the public is aware that the common virus causes throat cancer.

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The human papillomavirus (HPV), a common sexually transmitted infection, accounts for 70% of all throat cancers, according to the National Cancer Institute. While commonly associated with cervical cancer, throat cancer is now the most common type of HPV-related cancer.

However, the majority of American adults are unaware that HPV can cause throat cancer and are not taking advantage of the one proven method for prevention — the HPV vaccine.

These are the conclusions of two recent studies from the [USC Head and Neck Center](#), part of [Keck Medicine of USC](#) and the [USC Caruso Department of Otolaryngology – Head and Neck Surgery](#), that examined public knowledge of the link between HPV and throat cancer and HPV vaccination rates among adults, respectively.

The research suggests that less than one-third of Americans associate HPV with throat cancer and less than 7% of adults eligible for the vaccine have completed the full course of the HPV vaccine, which is three doses for adults.

“This data is very worrisome because knowledge is the first step toward disease prevention,” said [Daniel Kwon, MD](#), a head and neck surgeon with Keck Medicine and lead author of a [study](#) examining trends in HPV vaccination rates for adults. “The public is missing crucial information about the link between throat cancer and HPV, as well as the fact that vaccines may prevent HPV-related throat cancer.”

The need for greater HPV-related throat cancer awareness

Each year, some 43 million Americans are infected with HPV, and most sexually active adults will contract HPV at some time in their lives. Most HPV infections are asymptomatic and resolve on their own. However, in some cases, the infection can lead to cancer, including throat cancer.

In 2006, an HPV vaccine was made available to females ages 9-26, then expanded to males ages

9-26 in 2009. In 2018, the vaccine was expanded to adults ages 27-45. While HPV vaccination for this older group may provide less benefit because most have already been exposed to HPV, there still may be benefits of vaccination, according to the [Centers for Disease Control and Prevention \(CDC\)](#).

To determine public awareness of HPV-related throat cancer, Dr. Kwon and fellow researchers compared data between the 2018 and 2020 iterations of the National Cancer Institute Health Information National Trends Survey, which tracks Americans' knowledge about cancer and health information related to cancer.

They focused on adults ages 27-45, who were newly eligible for the vaccine in 2018, to see how much of an impact the expansion of eligibility had on knowledge of HPV and throat cancer.

Study authors compared data from 3,504 adults in the 2018 survey with data from 3,865 adults in the 2020 survey assessing people's knowledge of HPV, the vaccine, the link between HPV and throat cancer and changes in awareness between 2018 and 2020.

While they found that most respondents were aware of HPV in both years studied, they were disappointed to discover that knowledge of the connection between HPV and throat cancer remained poor. In 2018, 27% of respondents reported they were aware of the link between HPV and throat cancer; in 2020, that number barely moved upward to 29.5%.

"These results are particularly disheartening because since the vaccine eligibility was expanded in 2018, health advocates have issued many guidelines and recommendations about HPV and throat cancer," said Kwon. "Clearly, more efforts are needed to educate the public about this risk."

Cervical cancer used to be the most widespread HPV-related cancer, but cervical cancer rates have declined through concerted efforts of the health care industry, according to Kwon. "HPV-related cervical cancer cases have decreased in large part due to successful HPV awareness campaigns targeting women," he said. He also notes that women get screenings for cervical cancer through regular Pap smears, but there is no screening available for throat cancer.

He emphasized the need for more education about the risk of HPV and throat cancer in men, as throat cancer affects men at a higher rate than women, he added.

Investigating HPV vaccination rates

In a second [study](#), researchers from the USC Head and Neck Center examined HPV vaccination rates among a nationally representative cohort of more than 26,000 adults ages 30-44 who completed questions on HPV vaccination from 2018-2022 through the Behavioral Risk Factor Surveillance System survey, a nationwide telephone survey conducted by the CDC.

The authors discovered that only 6.5% of those surveyed were fully vaccinated, and only 15.8% had completed any HPV vaccination.

Many factors play into the low HPV vaccination rate, according to the lead author of the study, [Niels Kokot, MD](#), a head and neck surgeon with Keck Medicine. He cites not only a lack of general knowledge of the link between HPV and cancer, but also a lack of advertising about the HPV vaccine in comparison to other well-publicized campaigns such as for the flu or COVID-19 vaccines and growing vaccine hesitancy in the United States.

Socioeconomic status, race, education level, access to health care, sexual orientation and gender also play roles in who is getting vaccinated, he added, with men, Asian Americans, African Americans, Hispanics and those not having a personal health care provider among those less likely to be vaccinated.

Kokot hopes these findings will help spur greater public education on the HPV vaccine. He also recommends that any eligible adult who has not yet been vaccinated talk to a health care provider about vaccinations. “Every patient’s circumstances are different, and the subject is worth a discussion to see if an individual would benefit from the vaccine,” he said.

Besides cervical and throat cancer, HPV can also cause anal, penile, vaginal and vulvar cancers. Learn more about HPV and cancer [here](#).

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