Hesitancy About This Vaccine Is Contributing to Throat Cancer

Rates of oropharyngeal cancer, largely preventable by the HPV vaccine, are rising, especially in the Midwest and Southeast.

December 29, 2021 By Jeanette L. Pinnace

We hear a lot about vaccine hesitancy when it comes to COVID-19. But resistance to a different, long-available vaccine may be contributing to rising levels of a common kind of throat cancer.

Researchers estimate that the HPV vaccine can prevent 90% of cases of oropharyngeal cancer, which affects the back of the throat, the base of the tongue and the tonsils. The HPV vaccine, which also protects against cervical cancer as well as several other types of cancer, was approved by the Food and Drug Administration in 2006 and is recommended for children as young as 9 and adults up to age 45.

A study published in JAMA Otolaryngology–Head & Neck Surgery found that in the past 20 years, the incidence of and deaths from oropharyngeal cancer rose in all 50 states for both men and women. But rates have risen highest in states in the Midwest and the Southeast, reports a press release from The University of Texas Health Science Center in Houston. These states have historically low rates of HPV vaccination and make up more than half of all cases of oropharyngeal cancer.

Of the more than 100 types of HPV, almost 40 kinds can spread to genital areas via direct sexual contact and to the mouth and throat via oral sex. It can take many years after HPV infection for cancers to develop.

For the inquiry, researchers examined data from U.S. Cancer Statistics, death certificate data from the National Center for Health Statistics and information about incidence-based mortality from the Surveillance, Epidemiology, and End Results Program to assess cases of oropharyngeal cancer. Scientists reviewed demographics, the characteristics of tumors at diagnosis and locations throughout the 50 states and Washington, DC.

Between 2001 and 2017, investigators noted 260,182 new case of oropharyngeal cancer and 111,291 deaths. They found that for men, incidence climbed 2.7% each year, with cases highest among non-Latino white men ages 65 and older and men living in the Midwest and Southeast. Among the 15 states with the most marked increases for men are South Dakota, Kansas, Iowa,

Ohio, Indiana, Minnesota, Missouri, Nebraska, Kentucky, West Virginia and Tennessee.

A breakdown showed that a total of 209,297 oropharyngeal cancer cases (80%) occurred in men; 168,674 of these (65%) were regional, meaning the cancer had spread to nearby lymph nodes, tissues or organs; and 142,068 of these cases (55%) were in the Midwest and Southeast.

Women showed an overall yearly increase of 0.5% in oropharyngeal cancer cases, with an uptick of 2.0% clustered in the Midwest and Southeast, specifically, Louisiana, Kentucky, Arkansas, Mississippi, Maryland, North Carolina, Indiana, Ohio, Iowa and Missouri.

“Our study is the first to assess comprehensively oropharyngeal cancer incidence and mortality trends in all 50 states according to demographics as well as tumor characteristics at diagnosis,” said Ashish A. Deshmukh, PhD, MPH, an associate professor in UTHealth’s department of management, policy and community health and the senior author of the study.

“The marked increases in [oropharyngeal cancer] incidence among elderly men and advanced-stage tumors as well as the concurrent increase in mortality in the last decade are troubling,” noted Haluk Damgacioglu, PhD, a postdoctoral fellow at UTHealth School of Public Health and the lead author of the inquiry.

“Overcoming vaccine hesitancy and collective efforts to scale up HPV vaccination in the Midwest and Southeast is a public health priority, particularly given that more than 50% of all oropharyngeal cancer cases are diagnosed in these two regions,” Deshmukh concluded.

To learn more about oropharyngeal cancer, see Cancer Health Basics: Oral Cancer.
