

HPV vaccine uptake is highest among girls in high poverty and majority Hispanic communities

January 14 2016



HPV4 (Gardasil) vaccine. Credit: UMich

Adolescent girls living in high-poverty communities and majority Hispanic communities were more likely to have received at least one dose of a human papillomavirus (HPV) vaccine than those living in low-poverty communities and in communities of other racial and ethnic compositions.

The study was published in *Cancer Epidemiology, Biomarkers & Prevention*, a journal of the American Association for Cancer Research

HPV causes most cases of cervical cancer and a large proportion of

vaginal, vulvar, anal, penile, and oropharyngeal cancers. The Centers for Disease Control and Prevention (CDC) recommend girls and boys ages 11 and 12 receive three doses of an HPV vaccine.

"HPV vaccines could dramatically reduce the incidence of HPV-associated cancers, but uptake of these vaccines is far lower than for other routine childhood and teen immunizations," said Henry. "The main goal of our study was to understand if geographic factors—that is, characteristics about a person's community—affect vaccination uptake, because this knowledge could inform current efforts to increase vaccination and prevent cancer," said Kevin A. Henry, PhD, an assistant professor in the Department of Geography and Urban Studies at Temple University in Philadelphia and member of Fox Chase Cancer Center's Cancer Prevention and Control program.

Henry and colleagues analyzed data from the 2011 and 2012 National Immunization Survey-Teen, an annual survey conducted by the CDC to monitor vaccination uptake in the United States. They restricted the analysis to the 20,565 girls ages 13 to 17 for whom there were provider-verified vaccination records. In each year, 53 percent of the girls had received at least one dose of HPV vaccine and were said to have initiated vaccination.

According to Henry, the most important geographic factor affecting HPV vaccine initiation was the racial and ethnic composition of the community. The highest HPV vaccine initiation rate was among girls living in [communities](#) where the majority of the population was Hispanic (69 percent), and the lowest rates were among girls living in majority non-Hispanic white communities (50 percent) and non-Hispanic black communities (54 percent).

The researchers also found that the HPV vaccination rates among Hispanic girls differed depending on the racial composition of the

community in which the girls lived. About 49 percent of Hispanic girls living in majority non-Hispanic white communities initiated vaccination, whereas approximately 68 percent of Hispanic girls living in majority Hispanic or mixed race communities initiated vaccination.

The poverty level of the community was also an important factor in HPV vaccination, regardless of the racial composition of the community. The odds of HPV vaccine initiation among girls living in communities where 20 percent or more of the population was living below the poverty level were 1.18 times greater than for those living in the least impoverished communities.

"The higher HPV vaccination rates among girls living in poor communities and majority Hispanic communities, which also tend to have high poverty rates, are encouraging because these communities often have higher cervical cancer rates, but continued cervical cancer screening of vaccinated and unvaccinated women is needed because the vaccine does not cover all cancer-causing HPV types and sexually active women could have been infected prior to vaccination." said Henry. "The higher HPV vaccination rates in these groups also provide some evidence supporting successful health care practice and community-based interventions.

"What is not encouraging is that girls living in predominantly high-poverty non-Hispanic black communities have HPV [vaccination rates](#) that are lower than rates for Hispanics," added Henry. "Additional research is needed to better understand why these differences exist."

The senior author of the study, Deanna Kepka, PhD, MPH, a Huntsman Cancer Institute investigator and assistant professor in the College of Nursing at the University of Utah, added that, "We are interested in looking at cultural values that may make certain demographic groups in the United States, such as Latinos, more supportive of adolescent

vaccination than other demographic groups. We have a [cancer](#) prevention vaccine that is severely underutilized in the United States. We need to explore how to improve targeted public health messaging to promote this [vaccine](#) among sociodemographic groups who are least likely to receive it."

Henry explained that the major limitations of the study are that the survey response rates can bias the data and that the geographic measures are based on U.S. census ZIP code tabulation areas (ZCTA), which have been shown to be more variable than other geographic measures such as census tracts.

The study was supported in part by the Huntsman Cancer Institute Foundation, Primary Children's Hospital Foundation, the Beaumont Foundation, and the National Institutes of Health. Henry and Kepka have no conflicts of interest to declare.

Provided by American Association for Cancer Research

Citation: HPV vaccine uptake is highest among girls in high poverty and majority Hispanic communities (2016, January 14) retrieved 9 April 2024 from <https://medicalxpress.com/news/2016-01-hpv-vaccine-uptake-highest-girls.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--