

# HPV Vaccination and Health Equity Among Adolescents and Teens (Ages 9–17)



Data are presented to assist in the identification of opportunities to improve human papillomavirus (HPV) vaccination outreach and implementation research. They are reported from the National Health Interview Survey (NHIS) and the National Immunization Surveys for teens (NIS-Teen).<sup>1,2</sup>

## HPV Vaccination Recommendation

The American Cancer Society (ACS) recommends that adolescents (boys and girls) should get two doses of the HPV vaccine between the ages of 9 and 12. Teens and young adults ages 13-26 who have not been vaccinated, or who have not gotten all their doses, should get the vaccine as soon as possible. Vaccination of young adults will not prevent as many cancers as vaccination of adolescents and teens. Visit [cancer.org/hpv-vaccines](https://cancer.org/hpv-vaccines) to view the ACS HPV vaccination guidelines.

## HPV Vaccination Initiation

### HPV Vaccination and Race/Ethnicity

An analysis of 2019 NIS-Teen data reported that non-Hispanic White adolescents ages 13-15 were less likely to initiate HPV vaccination compared with adolescents of other racial and ethnic backgrounds, although the differences were not significant.<sup>1</sup>

### HPV Vaccination and Socioeconomic Status

Morbidity and Mortality Weekly Reports (MMWR) of NIS-Teen 2021 and 2022 data showed that HPV vaccination initiation was lower among adolescents who lived above the poverty level than those who lived below it.<sup>2,3</sup> Attitudinal differences toward vaccination are thought to bring about this disparity.<sup>2</sup>

### HPV Vaccination and Health Insurance Status

An analysis of NIS-Teen data from 2015-2022 showed that, historically, HPV vaccination was more likely to be initiated in adolescents if they were covered by Medicaid, compared with those who were privately insured, uninsured, or had other insurance. However, in 2022, vaccination uptake dropped among Medicaid-insured adolescents to similar coverage levels of adolescents who were privately insured. Vaccine initiation among uninsured adolescents has been historically lower than adolescents with other health insurance statuses and dropped significantly from 2020-2021.<sup>4</sup>

### Rural Disparities in HPV Vaccination Rates

Analysis of 2022 NHIS data of adolescents and teens ages 9-17 showed that those living in nonmetropolitan areas were less likely to have initiated HPV vaccination than those living in large metropolitan areas (30% versus 39.4%, respectively).<sup>5</sup>

### Sex Disparities in HPV Vaccination Rates

Analysis of NIS-Teen data of teens ages 13-17 showed that rates of HPV vaccination initiation between males and females have been similar since about 2021.<sup>6</sup> However, analysis of 2022 NHIS survey data of adolescents and teens ages 9-17 showed that males were less likely than females to have initiated HPV vaccination (34.6% versus 42.9%, respectively).<sup>5</sup> Because vaccination at age 9 is included in these data, it's possible that this gap is reflective of a gap in uptake at ages 9-12.

# HPV Vaccination Completion

## HPV Vaccination and Race/Ethnicity

An analysis of 2012-2022 NIS-Teen data reported that non-Hispanic White adolescents ages 13-15 were less likely to complete the HPV vaccination series compared with non-Hispanic Black or Hispanic adolescents with 55.5%, 61.4%, and 61.3% coverage respectively. However, these differences were not statistically significant.<sup>7</sup>

## HPV Vaccination and Socioeconomic Status

Analysis of 2017-2021 NIS-Teen data showed that parents of adolescents ages 13-17 in high socioeconomic status households were less likely to have their children complete the HPV vaccination series (44%) compared with parents in low socioeconomic status households (25%).<sup>8</sup>

## HPV Vaccination and Health Insurance Status

Analysis of 2015-2023 NIS-Teen data showed that prior to the COVID-19 pandemic, adolescents without private insurance were more likely to be up to date with HPV vaccination by age 13 than those with private insurance. However, adolescents born in 2010 (those who were eligible during the pandemic) without private insurance were less likely to be up to date than those with private insurance.<sup>9</sup>

## Rural Disparities in HPV Vaccination Rates

Analysis of 2022 NIS-Teen data showed that adolescents born in metropolitan cities were slightly more likely to have completed the HPV vaccination series by age 13 than those living in nonmetropolitan areas, although the differences were not significant.<sup>3</sup>

## Sex Disparities in HPV Vaccination Rates

Analysis of 2012-2022 NIS-Teen data of adolescents ages 13-17 showed that the gap between males and females for HPV vaccine series completion largely closed since about 2021.<sup>6,7</sup>

### Data Sources:

**NHIS** is a survey conducted by the United States National Center for Health Statistics that collects data on health topics, including vaccination.<sup>1</sup>

**NIS-Teen** assesses vaccination rates among teens ages 13-17. The NIS-Teen uses phone surveys in 50 states; Washington, D.C.; and some territories to provide current estimations of vaccine coverage.<sup>2</sup>

## References

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