



# Human Papillomavirus (HPV) Vaccination Coverage

## in Allegheny County, PA 2017-2021

Human papillomavirus (HPV) is a sexually transmitted virus, which can lead to cancer of the cervix, vulva, vagina, penis, anus, or throat.<sup>1</sup> Approximately 42 million people in the U.S. are currently infected with HPV, with more than 30,000 individuals per year diagnosed with cancers attributable to the virus.<sup>2,3</sup> Safe and effective vaccines prevent infection with the most common cancer-causing HPV strains. Despite strong recommendations by the Centers for Disease Control and Prevention (CDC) to vaccinate girls since 2006 and boys since 2011, coverage remains low. Data from the National Immunization Survey–Teen (NIS-Teen) in 2020 indicated that only 58.6 percent of adolescents in the U.S. were up to date with HPV vaccination.<sup>4</sup> Nationally, girls have a higher rate of coverage (61.4%) than boys (56.0%).<sup>4</sup> There are no corresponding data for Allegheny County from population-based provider surveys.

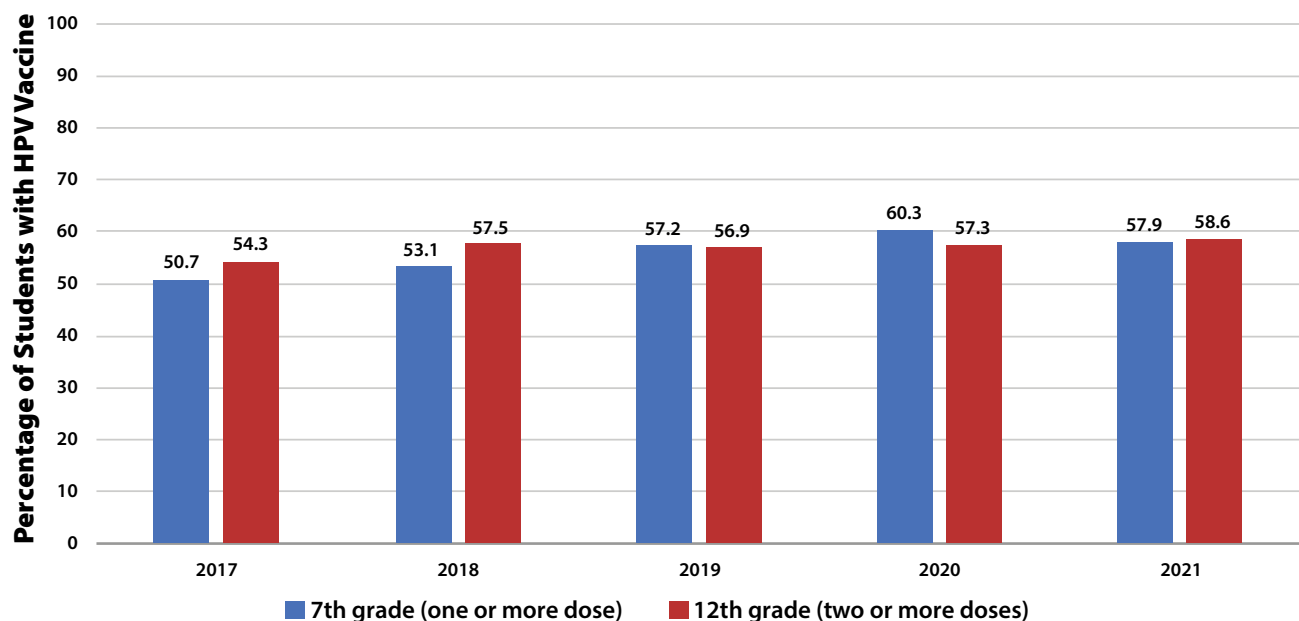
Monitoring coverage at the local level is important for assessing the impact of vaccination campaigns and targeting interventions. To estimate HPV vaccine coverage and assess trends among adolescents in the county, the ACHD examined data from the yearly school immunization survey.

The ACHD requires schools in Allegheny County to report summary data on vaccination coverage for all vaccines required for school entry. In 2017, the ACHD began mandating reporting of summary data on HPV vaccination coverage for 7th graders (percentage of students with >1 dose) and for 12th graders (>2 doses), even though the HPV vaccine is not required for school entry.

The percentage of 7th grade students reported by schools as receiving at least one HPV vaccine dose increased each year from 2017 through 2020 (Figure 1). The percentage of 12th grade students reported by schools as receiving at least two HPV vaccine doses increased between 2017 and 2018, but was similar from 2018 through 2021.

In December of 2021, 156 schools reported that of the 11,822 students enrolled in 7th grade, approximately 58 percent had received at least one HPV vaccine dose. Of the same students, 96 percent had received a tetanus, diphtheria, pertussis (Tdap) vaccine and 95 percent had received a meningococcal vaccine (MCV4), both required for school entry. Of

Figure 1. HPV vaccination coverage as reported by schools, Allegheny County, 2017-2021.



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the 11,849 students enrolled in 12th grade at 201 schools, approximately 59 percent had received two or more HPV vaccine doses by December 2021, compared with 95 percent who had received the two MCV4 doses required for school entry.

Although schools are required to report HPV vaccination data, HPV vaccination is not required for school entry. Because it is not required, parents may not provide their child's school with this information, which would result in underreporting on HPV vaccination coverage in Allegheny County. In addition, school software may not be designed for data entry for HPV vaccinations, requiring school nurses to tally vaccination status by hand. Despite these limitations, HPV vaccine coverage among teens in Allegheny County is similar to that found on the 2020 National Immunization Survey.<sup>4</sup>

School immunization data indicate that full vaccination coverage in Allegheny County is below the Healthy People 2030 objective of 80 percent for HPV vaccine coverage among adolescents 13-15 years of age. The school Immunization survey is not an ideal data source for assessing coverage, but may be useful for monitoring trends. A concerted effort is needed to increase HPV vaccination coverage in Allegheny County. Resources and tips for providers and parents are located on the [CDC website](#).<sup>5</sup>

## References

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4. Pingali C, Yankey D, Elam-Evans LD, Markowitz LE, Williams CL, Fredua B, McNamara LA, Stokley S, Singleton JA. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13-17 Years - United States, 2020. *MMWR Morb Mortal Wkly Rep*. 2021 Sep 3;70(35):1183-1190. doi: 10.15585/mmwr.mm7035a1. PMID: 34473682; PMCID: PMC8422873. [https://www.cdc.gov/mmwr/volumes/70/wr/mm7035a1.htm?s\\_cid=mm7035a1\\_w](https://www.cdc.gov/mmwr/volumes/70/wr/mm7035a1.htm?s_cid=mm7035a1_w).
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