



# Human Papillomavirus (HPV) Vaccination Report: Arizona

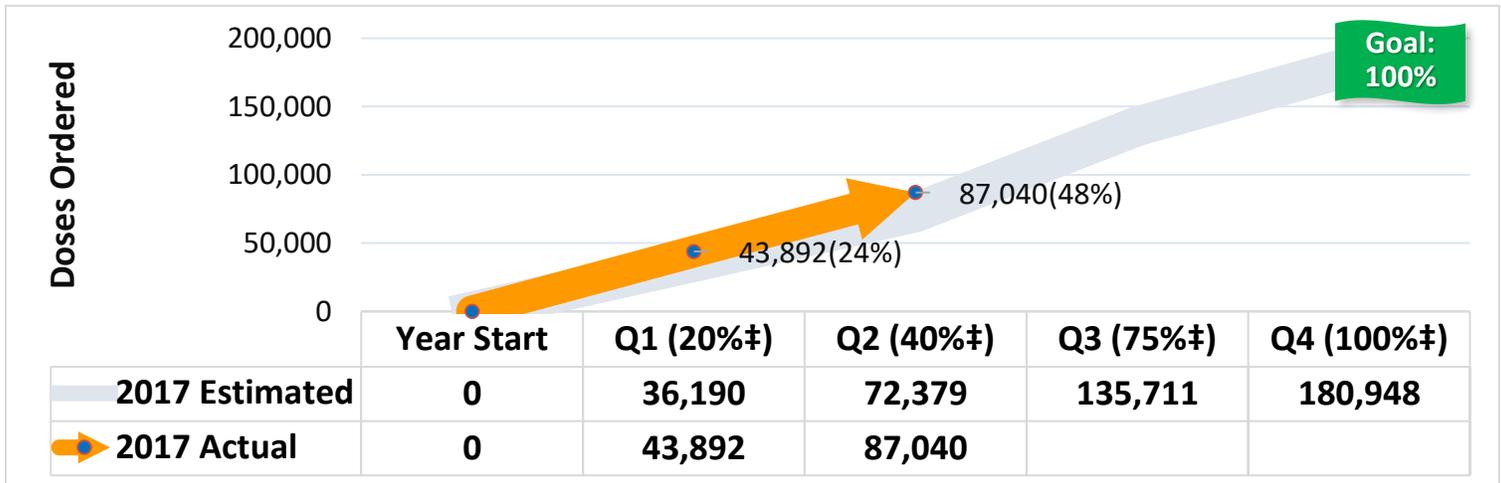
December 2017

*Working Together to Reach National Goals for HPV Vaccination*

As introduced in the August 2017 HPV Vaccination Quarterly Report, this report features CDC’s new method of displaying HPV vaccine ordering data. Your jurisdiction’s data for the first and second quarter of 2017 are shown below. For more information regarding this new methodology and on interpreting the results, please see your jurisdiction’s August 2017 HPV Vaccination Quarterly Report.

This quarter’s report also highlights results from the 2016 NIS-Teen survey that were recently published in CDC’s *Morbidity and Mortality Weekly Report*.<sup>1</sup> The NIS-Teen survey estimates vaccination coverage for adolescents aged 13–17 years in the 50 states, the District of Columbia, selected local areas, and territories. **In 2016, coverage increased nationally for each dose of HPV vaccine among teens (from 56.1% to 60.4% for ≥1 dose).**<sup>1</sup> **HPV vaccination coverage estimates for adolescent males and females were presented in combined measures because of the decreasing gap in national HPV vaccine coverage observed between them—from 33 percentage points in 2012 to 9 percentage points in 2016.**<sup>1</sup> **Additionally, a new HPV up-to-date measure was introduced to account for the revised HPV vaccination schedule.**<sup>1</sup> The new HPV up-to-date measure includes coverage estimates for teens who received ≥3 doses, and those who received 2 doses, provided that the first HPV vaccine dose was initiated before age 15 years and the time between the first and second dose met minimum interval requirements (at least 5 months minus 4 days). Despite these increases, HPV vaccination coverage among adolescents continues to lag behind that of the other routinely recommended adolescent vaccines. National coverage for ≥1-dose of HPV vaccine among teens was 60.4% in 2016, which was 27.6 percentage points lower than coverage for ≥1-dose of tetanus, diphtheria, and acellular pertussis vaccine (national coverage among adolescents: 88.0%) and 21.8 percentage points lower for ≥1-dose of meningococcal conjugate vaccine (national coverage among adolescents: 82.2%).<sup>1</sup> For the complete national profile, click the link for the 2016 NIS-Teen *MMWR* in the “References” section of this report. For NIS-Teen survey data specific to your jurisdiction, see page 2 of this report.

## Year-to-date total of HPV vaccine doses ordered<sup>†</sup> in Arizona, compared with doses needed to fully immunize 11-year-olds\* in Arizona, second quarter 2017



Based on an estimated 90,474\* 11-year-olds in Arizona, your jurisdiction ordered **48%** of the estimated total annual doses of HPV vaccine needed to vaccinate all 11-year-olds. If all the ordered doses are used for 11-year-olds, Arizona is on track for ordering a sufficient amount of vaccine for this age group in 2017 and should have extra doses for catch-up vaccination of older adolescents and young adults.

<sup>†</sup>These data represent an estimate of all HPV vaccine doses distributed in Arizona. The 9-valent HPV vaccine is currently the only HPV vaccine available in the United States.

<sup>\*</sup>The 11-year-old population estimate was obtained from the U.S. Census:

[https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP\\_2015\\_PEPSYASEX&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=PEP_2015_PEPSYASEX&prodType=table).

<sup>‡</sup>Estimated percentages of vaccine orders are based on the 11-year-old population estimate and national HPV vaccine ordering patterns over the last several years.



# Human Papillomavirus (HPV) Vaccination Report: Arizona

December 2017

*Working Together to Reach National Goals for HPV Vaccination*

**Estimated vaccination coverage with selected vaccines and doses among all adolescents aged 13–17 years, United States and Arizona, National Immunization Survey–Teen, 2015–2016**

	HPV UTD*	≥1 HPV†	≥1 Tdap‡	≥1 MenACWY§
	% (95% CI)	% (95% CI)	% (95% CI)	% (95% CI)
<b>US overall</b>				
<b>2015</b>		56.1 (±1.3)	86.4 (±1.0)	81.3(±1.0)
<b>2016</b>	43.4 (±1.3)	60.4 (±1.2)**	88.0 (±0.9)**	82.2(±1.0)
<b>Arizona</b>				
<b>2015</b>		59.7(±5.6)	86.6(±3.8)	87.6(±3.8)
<b>2016</b>	44.1(±6.8)	63.1(±6.3)	84.3(±4.9)	85.2(±4.8)

Abbreviations: CI = confidence interval; HPV = human papillomavirus vaccine; HPV UTD = HPV up-to-date; ≥1 HPV = ≥1 dose HPV vaccine; ≥1 Tdap = ≥1 dose tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; ≥1 MenACWY = ≥1 dose quadrivalent meningococcal conjugate vaccine.

\*HPV UTD - includes those with ≥ 3 doses and those with 2 doses when the first HPV vaccine dose was initiated prior to age 15 years and there were at least five months minus four days between the first and second dose as specified by Clinical Decision Support for Immunization (CDSi).

†HPV vaccine includes nine-valent (9vHPV), quadrivalent (4vHPV), and bivalent (2vHPV) vaccines.

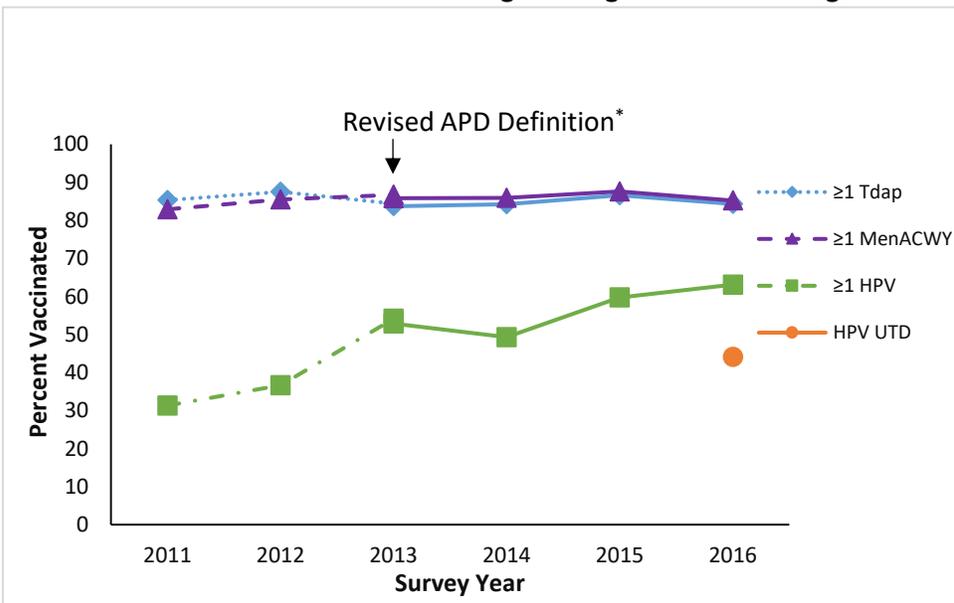
‡≥1 dose Tdap vaccine at or after age 10 years.

§≥1 dose of MenACWY or meningococcal-unknown type vaccine.

\*\*Statistically significant (p<0.05) percentage point increase from 2015.

\*\* Statistically significant (p<0.05) percentage point decrease from 2015.

## Estimated vaccination coverage among all adolescents aged 13-17 years, Arizona, NIS-Teen, 2011–2016



- In 2016, ≥1 dose HPV coverage in Arizona was 21.2 percentage points lower than coverage for ≥1 dose Tdap and 22.1 percentage points lower than ≥1 dose MenACWY.
- HPV UTD coverage was measured for the first time in 2016 and includes those with ≥ 3 doses and those with 2 doses when the first dose of HPV vaccine was initiated before age 15 and the second dose was administered at the appropriate interval.
- To account for the new HPV vaccination schedule, HPV UTD will be used to monitor coverage.

\*NIS-Teen estimates from 2011–2013 connected with dashed lines are previously published estimates using the previous adequate provider data (APD) definition. NIS-Teen estimates from 2013–2016 connected with solid lines use the revised APD definition. For complete footnotes, see reference 1.

### Reference

<sup>1</sup>Walker TY, Elam-Evans LD, Singleton JA, et al. National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years — United States, 2016. *MMWR Morb Mortal Wkly Rep* 2017; 66:874–882; <http://dx.doi.org/10.15585/mmwr.mm6633a2>.

### New Resources

- The **#HowIRecommend** video series allows you to see how other clinicians are raising their vaccination rates and addressing HPV vaccination questions in their practices: <https://www.cdc.gov/hpv/hcp/how-i-recommend.html>.
- **HPV Vaccine is Cancer Prevention Award** winners were recently recognized for protecting adolescents against HPV cancers by achieving high HPV vaccination rates among their 11- and 12- year-old patients: <https://www.cdc.gov/hpv/champions/winner-spotlights.html>.

Have questions? Contact us at [hvpquarterlyreport@cdc.gov](mailto:hvpquarterlyreport@cdc.gov)

**HPV VACCINE**  
IS CANCER PREVENTION

