

**Supplementary Table 1. Estimated vaccination coverage with selected vaccines and doses among adolescents aged 13–17\* years, by metropolitan statistical area (MSA)<sup>†</sup> and by poverty level— National Immunization Survey–Teen (NIS-Teen), United States, 2021.**

Vaccines	MSA, % (95% CI) <sup>§</sup>			Below Poverty Level, % (95% CI) <sup>§</sup>			At or Above Poverty Level, % (95% CI) <sup>§</sup>		
	Non-MSA	MSA Non-Principal City	MSA Principal City	Non-MSA	MSA Non-Principal City	MSA Principal City	Non-MSA	MSA Non-Principal City	MSA Principal City
	(n = 3,142)	(n = 7,901)	(n = 7,335)	(n = 478)	(n = 640)	(n = 1,035)	(n = 2,576)	(n = 6,996)	(n = 6,061)
<b>Tdap<sup>¶</sup> ≥ 1 dose</b>	88.3 ( 85.8 to 90.4)	89.9 ( 88.4 to 91.3)	89.5 ( 88.0 to 90.9)	91.0 ( 85.9 to 94.4)	89.3 ( 84.0 to 92.9)	89.2 ( 84.9 to 92.3)	87.2 ( 84.1 to 89.8)	89.9 ( 88.2 to 91.5)	89.4 ( 87.6 to 91.0)
<b>MenACWY<sup>**</sup></b>									
≥1 dose	86.3 ( 83.9 to 88.3) <sup>††</sup>	89.3 ( 87.6 to 90.8)	89.3 ( 87.5 to 90.8)	86.4 ( 80.1 to 90.9)	87.4 ( 82.7 to 91.0)	88.4 ( 82.4 to 92.5)	85.9 ( 83.2 to 88.2) <sup>††</sup>	89.7 ( 87.8 to 91.4)	89.3 ( 87.4 to 90.8)
≥2 doses <sup>§§</sup>	51.7 ( 44.1 to 59.3) <sup>††</sup>	59.0 ( 54.2 to 63.6)	63.5 ( 57.8 to 68.7)	59.9 ( 41.4 to 76.0)	49.0 ( 33.4 to 64.8)	60.6 ( 45.6 to 73.8)	50.0 ( 41.6 to 58.3) <sup>††</sup>	60.2 ( 55.1 to 65.2)	63.8 ( 57.5 to 69.7)
<b>HPV<sup>¶¶</sup> vaccine</b>									
<b>All Adolescents</b>									
≥1 dose	71.4 ( 68.0 to 74.5) <sup>††</sup>	75.2 ( 73.1 to 77.2) <sup>††</sup>	80.4 ( 78.4 to 82.3)	80.2 ( 73.4 to 85.6)	78.6 ( 72.6 to 83.6) <sup>††</sup>	85.8 ( 81.4 to 89.3)	68.9 ( 65.0 to 72.6) <sup>††</sup>	75.0 ( 72.8 to 77.1) <sup>††</sup>	78.9 ( 76.6 to 81.0)
HPV UTD <sup>***</sup>	55.8 ( 52.0 to 59.4) <sup>††</sup>	60.6 ( 58.4 to 62.7) <sup>††</sup>	64.6 ( 62.1 to 67.0)	64.0 ( 54.9 to 72.2)	62.2 ( 55.3 to 68.6)	70.1 ( 64.0 to 75.5)	53.2 ( 49.2 to 57.1) <sup>††</sup>	60.5 ( 58.1 to 62.8)	63.1 ( 60.4 to 65.8)
<b>FEMALES</b>									
≥1 dose	74.2 ( 69.4 to 78.4) <sup>††</sup>	77.6 ( 74.5 to 80.3)	80.8 ( 77.7 to 83.5)	85.2 ( 75.5 to 91.5)	77.4 ( 67.5 to 85.0)	86.0 ( 79.4 to 90.8)	71.4 ( 65.8 to 76.5) <sup>††</sup>	77.7 ( 74.3 to 80.7)	78.8 ( 75.2 to 82.0)
HPV UTD	57.8 ( 52.6 to 62.9) <sup>††</sup>	63.5 ( 60.3 to 66.6)	65.5 ( 61.9 to 69.0)	71.7 ( 59.7 to 81.3)	62.3 ( 52.2 to 71.5)	70.2 ( 61.2 to 77.8)	54.5 ( 48.6 to 60.3) <sup>††</sup>	64.0 ( 60.5 to 67.4)	63.6 ( 59.5 to 67.6)
<b>MALES</b>									
≥1 dose	68.7 ( 63.7 to 73.3) <sup>††</sup>	73.1 ( 70.1 to 75.9) <sup>††</sup>	80.1 ( 77.4 to 82.6)	75.8 ( 64.8 to 84.2)	79.7 ( 72.0 to 85.6)	85.7 ( 79.1 to 90.4)	66.4 ( 61.0 to 71.5) <sup>††</sup>	72.5 ( 69.4 to 75.3) <sup>††</sup>	78.9 ( 76.0 to 81.5)
HPV UTD	53.8 ( 48.4 to 59.2) <sup>††</sup>	57.8 ( 54.7 to 60.9) <sup>††</sup>	63.7 ( 60.3 to 67.0)	57.1 ( 42.4 to 70.7)	62.1 ( 52.5 to 70.8)	70.0 ( 61.4 to 77.4)	51.8 ( 46.4 to 57.1) <sup>††</sup>	57.1 ( 53.9 to 60.3) <sup>††</sup>	62.6 ( 59.0 to 66.1)
<b>MMR ≥2 doses</b>	91.6 ( 89.2 to 93.4)	92.9 ( 91.4 to 94.1)	91.7 ( 89.9 to 93.2)	94.9 ( 88.6 to 97.8)	91.5 ( 86.4 to 94.8)	89.7 ( 84.5 to 93.2)	90.7 ( 87.9 to 92.9)	93.7 ( 92.3 to 94.8)	92.0 ( 90.0 to 93.6)
<b>Hepatitis A vaccine ≥2 doses<sup>†††</sup></b>	80.2 ( 77.3 to 82.8) <sup>††</sup>	84.2 ( 82.4 to 85.9) <sup>††</sup>	87.1 ( 85.2 to 88.8)	85.4 ( 79.0 to 90.1)	83.5 ( 77.6 to 88.1)	86.3 ( 81.3 to 90.2)	78.6 ( 75.3 to 81.6) <sup>††</sup>	85.1 ( 83.3 to 86.8)	87.5 ( 85.4 to 89.3)
<b>Hepatitis B vaccine ≥3 doses</b>	92.6 ( 90.5 to 94.3)	92.7 ( 91.3 to 93.9)	91.7 ( 90.0 to 93.1)	95.7 ( 91.3 to 98.0) <sup>††</sup>	90.0 ( 84.8 to 93.6)	90.0 ( 84.9 to 93.5)	91.5 ( 88.8 to 93.6)	93.0 ( 91.5 to 94.3)	92.0 ( 90.1 to 93.5)
<b>Varicella</b>									
History of varicella <sup>§§§</sup>	11.5 ( 9.3 to 14.2) <sup>††</sup>	7.3 ( 6.1 to 8.7)	6.3 ( 5.1 to 7.8)	13.2 ( 8.1 to 20.7) <sup>††</sup>	10.4 ( 7.1 to 14.9) <sup>††</sup>	5.3 ( 3.3 to 8.6)	11.1 ( 8.6 to 14.1) <sup>††</sup>	6.4 ( 5.1 to 7.9)	6.5 ( 5.1 to 8.3)
<b>No history of varicella disease</b>									
≥1 dose vaccine	94.7 ( 92.6 to 96.3)	95.1 ( 93.6 to 96.2)	94.8 ( 93.3 to 96.0)	97.4 ( 92.6 to 99.1)	92.7 ( 86.8 to 96.1)	94.8 ( 91.0 to 97.0)	94.0 ( 91.3 to 95.9)	95.8 ( 94.7 to 96.7)	94.7 ( 92.9 to 96.1)
≥2 doses vaccine	90.3 ( 87.6 to 92.4)	91.9 ( 90.3 to 93.2)	91.4 ( 89.6 to 92.9)	93.5 ( 86.4 to 97.0)	89.0 ( 83.3 to 93.0)	90.5 ( 85.6 to 93.8)	89.6 ( 86.5 to 92.0)	92.7 ( 91.2 to 94.0)	91.6 ( 89.5 to 93.3)
History of varicella or received ≥2 doses varicella vaccine	91.4 ( 89.0 to 93.3)	92.5 ( 91.0 to 93.7)	92.0 ( 90.3 to 93.4)	94.3 ( 88.1 to 97.4)	90.2 ( 84.9 to 93.7)	91.0 ( 86.4 to 94.2)	90.8 ( 88.0 to 92.9)	93.2 ( 91.8 to 94.3)	92.1 ( 90.2 to 93.7)

**Abbreviations:** CI = confidence interval; HPV = human papillomavirus; MenACWY = quadrivalent meningococcal conjugate vaccine; MMR = measles, mumps, and rubella vaccine; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; UTD = up to date.

\* Adolescents (N = 18,002) in the 2021 NIS-Teen were born January 2003 through January 2009.

<sup>†</sup> MSA status was determined based on household-reported county of residence, and was grouped in- three categories: MSA Principal city, MSA non-Principal city, and non-MSA. MSA and Principal city were as defined by the U.S. Census Bureau ([https://www.census.gov/geo/reference/gtc/gtc\\_cbsa.html](https://www.census.gov/geo/reference/gtc/gtc_cbsa.html)). Non-MSA areas include urban populations not located within an MSA as well as completely rural areas.

<sup>§</sup> Estimates with 95% confidence intervals > 20 may not be reliable.

<sup>¶</sup> Includes percentages receiving Tdap vaccine at age ≥10 years.

<sup>\*\*</sup> Includes percentages receiving MenACWY and meningococcal-unknown type vaccine.

<sup>††</sup> Statistically significant difference (p<0.05) in estimated vaccination coverage by metropolitan statistical area; referent group was adolescents living in MSA Principal City areas.

<sup>§§</sup> ≥2 doses of MenACWY or meningococcal-unknown type vaccine. Calculated only among adolescents who were aged 17 years at interview. Does not include adolescents who received 1 dose of MenACWY vaccine at age ≥16 years.

<sup>¶¶</sup> HPV vaccine, nine-valent (9vHPV), quadrivalent (4vHPV), or bivalent (2vHPV) in females and males combined.

<sup>\*\*\*</sup> HPV UTD includes those with ≥3 doses, and those with 2 doses when the first HPV vaccine dose was initiated before age 15 years and there was at least 5 months minus 4 days between the first and second dose (<https://www.cdc.gov/vaccines/programs/iis/cdsi.html>). This update to the HPV recommendation occurred in December 2016.

<sup>†††</sup> In July 2020, ACIP revised recommendations for HepA vaccination to include catch-up vaccination for children and adolescents aged 2–18 years who have not previously received HepA vaccine at any age. MMWR Recomm Rep 2020;69(No. RR-5):1–38.

<sup>§§§</sup> By parent/guardian report or provider records.