

Table 10. State-level estimates for HPV vaccine, MenACWY, and Tdap coverage (≥ 1 dose) among adolescents 13-17 years by sampling frame and year, National Immunization Survey-Teen, 2017

Area name	≥ 1 dose HPV vaccine			≥ 1 dose MenACWY			≥ 1 dose Tdap		
	Single	Dual	Difference*	Single	Dual	Difference	Single	Dual	Difference
Alabama	59.6 (53.3 , 65.9)	58.0 (52.0 , 64.0)	1.6 (-0.6 , 3.8)	79.1 (74.0 , 84.2)	78.3 (73.4 , 83.2)	0.8 (-1.1 , 2.7)	88.1 (83.9 , 92.3)	88.7 (84.9 , 92.5)	-0.6 (-1.3 , 0.1)
Alaska	63.8 (57.2 , 70.4)	64.5 (58.7 , 70.3)	-0.7 (-3.0 , 1.6)	69.5 (63.4 , 75.6)	68.4 (62.8 , 74.0)	1.1 (-1.2 , 3.4)	79.9 (74.4 , 85.4)	78.9 (73.7 , 84.1)	1.0 (-1.1 , 3.1)
Arizona	64.9 (57.9 , 71.9)	65.0 (58.6 , 71.4)	-0.1 (-2.0 , 1.8)	83.0 (77.7 , 88.3)	83.8 (78.9 , 88.7)	-0.8 (-1.7 , 0.1)	82.9 (77.5 , 88.3)	82.4 (77.3 , 87.5)	0.5 (-0.8 , 1.8)
Arkansas	60.7 (54.2 , 67.2)	61.1 (54.9 , 67.3)	-0.4 (-2.1 , 1.3)	91.9 (88.3 , 95.5)	91.7 (88.1 , 95.3)	0.2 (-0.7 , 1.1)	92.2 (89.0 , 95.4)	92.4 (89.3 , 95.5)	-0.2 (-1.0 , 0.6)
California	75.5 (68.6 , 82.4)	71.9 (65.8 , 78.0)	3.6 (0.5 , 6.7) †	81.5 (74.5 , 88.5)	82.2 (76.6 , 87.8)	-0.7 (-3.1 , 1.7)	83.4 (76.8 , 90.0)	83.5 (78.0 , 89.0)	-0.1 (-2.1 , 1.9)
Colorado	72.1 (66.1 , 78.1)	72.1 (66.5 , 77.7)	0.0 (-2.1 , 2.1)	81.9 (76.8 , 87.0)	82.4 (77.7 , 87.1)	-0.5 (-2.1 , 1.1)	88.1 (83.5 , 92.7)	88.6 (84.4 , 92.8)	-0.5 (-1.4 , 0.4)
Connecticut	68.7 (61.6 , 75.8)	71.3 (65.3 , 77.3)	-2.6 (-5.0 , -0.2) †	94.8 (91.7 , 97.9)	94.9 (92.2 , 97.6)	-0.1 (-0.9 , 0.7)	94.6 (91.7 , 97.5)	94.9 (92.5 , 97.3)	-0.3 (-1.2 , 0.6)
Delaware	73.7 (67.2 , 80.2)	75.3 (69.7 , 80.9)	-1.6 (-3.3 , 0.1)	90.2 (85.6 , 94.8)	90.5 (86.5 , 94.5)	-0.3 (-1.6 , 1.0)	89.6 (84.8 , 94.4)	89.6 (85.3 , 93.9)	0.0 (-1.3 , 1.3)
District of Columbia	90.9 (86.6 , 95.2)	91.9 (88.4 , 95.4)	-1.0 (-2.2 , 0.2)	91.9 (87.0 , 96.8)	91.3 (86.9 , 95.7)	0.6 (-0.6 , 1.8)	85.6 (79.6 , 91.6)	86.1 (81.0 , 91.2)	-0.5 (-2.4 , 1.4)
Florida	60.0 (52.9 , 67.1)	59.8 (53.3 , 66.3)	0.2 (-1.9 , 2.3)	80.2 (74.5 , 85.9)	80.2 (74.8 , 85.6)	0.0 (-1.7 , 1.7)	90.2 (86.2 , 94.2)	91.1 (87.7 , 94.5)	-0.9 (-1.6 , -0.2) †
Georgia	66.6 (59.7 , 73.5)	64.3 (57.7 , 70.9)	2.3 (0.3 , 4.3) †	95.7 (93.1 , 98.3)	95.3 (92.7 , 97.9)	0.4 (-0.8 , 1.6)	92.4 (88.6 , 96.2)	93.3 (90.1 , 96.5)	-0.9 (-1.2 , -0.6) †
Hawaii	70.3 (64.0 , 76.6)	69.4 (63.4 , 75.4)	0.9 (-1.0 , 2.8)	86.1 (81.2 , 91.0)	85.9 (81.3 , 90.5)	0.2 (-0.8 , 1.2)	85.4 (80.3 , 90.5)	84.8 (79.9 , 89.7)	0.6 (-0.7 , 1.9)
Idaho	61.9 (54.4 , 69.4)	62.4 (55.9 , 68.9)	-0.5 (-2.9 , 1.9)	89.6 (84.6 , 94.6)	90.5 (86.4 , 94.6)	-0.9 (-2.1 , 0.3)	85.4 (79.8 , 91.0)	87.3 (82.8 , 91.8)	-1.9 (-3.2 , -0.6) †
Illinois-City of Chicago	82.1 (73.6 , 90.6)	81.9 (75.0 , 88.8)	0.2 (-3.7 , 4.1)	90.7 (83.5 , 97.9)	90.9 (85.2 , 96.6)	-0.2 (-2.7 , 2.3)	89.2 (83.5 , 94.9)	90.5 (86.0 , 95.0)	-1.3 (-2.6 , 0.0)
Illinois-Rest of State	63.2 (57.6 , 68.8)	62.7 (57.5 , 67.9)	0.5 (-1.4 , 2.4)	89.8 (86.4 , 93.2)	88.9 (85.5 , 92.3)	0.9 (-0.4 , 2.2)	92.8 (89.6 , 96.0)	92.8 (89.8 , 95.8)	0.0 (-0.9 , 0.9)
Indiana	61.4 (54.6 , 68.2)	59.3 (52.9 , 65.7)	2.1 (0.4 , 3.8) †	92.1 (88.3 , 95.9)	93.1 (89.8 , 96.4)	-1.0 (-1.7 , -0.3) †	95.1 (92.7 , 97.5)	95.1 (92.8 , 97.4)	0.0 (-0.7 , 0.7)
Iowa	71.1 (65.2 , 77.0)	71.4 (65.9 , 76.9)	-0.3 (-2.1 , 1.5)	83.4 (78.4 , 88.4)	83.6 (79.0 , 88.2)	-0.2 (-1.8 , 1.4)	92.8 (89.4 , 96.2)	93.4 (90.5 , 96.3)	-0.6 (-1.2 , 0.0)

Area name	≥ 1 dose HPV vaccine			≥ 1 dose MenACWY			≥ 1 dose Tdap		
	Single	Dual	Difference*	Single	Dual	Difference	Single	Dual	Difference
Kansas	53.4 (46.4 , 60.4)	52.4 (45.9 , 58.9)	1.0 (-1.3 , 3.3)	71.1 (64.6 , 77.6)	72.1 (66.2 , 78.0)	-1.0 (-2.8 , 0.8)	88.5 (83.9 , 93.1)	89.7 (85.7 , 93.7)	-1.2 (-2.5 , 0.1)
Kentucky	51.0 (44.6 , 57.4)	49.6 (43.5 , 55.7)	1.4 (-0.6 , 3.4)	83.4 (78.6 , 88.2)	83.3 (78.8 , 87.8)	0.1 (-1.4 , 1.6)	86.5 (82.2 , 90.8)	86.4 (82.3 , 90.5)	0.1 (-1.3 , 1.5)
Louisiana	70.8 (64.9 , 76.7)	69.1 (63.5 , 74.7)	1.7 (-0.7 , 4.1)	90.6 (86.6 , 94.6)	89.0 (84.9 , 93.1)	1.6 (-0.4 , 3.6)	91.4 (87.4 , 95.4)	90.1 (86.2 , 94.0)	1.3 (-0.7 , 3.3)
Maine	74.5 (68.7 , 80.3)	75.8 (70.6 , 81.0)	-1.3 (-3.2 , 0.6)	83.0 (77.9 , 88.1)	83.9 (79.3 , 88.5)	-0.9 (-2.3 , 0.5)	86.2 (81.2 , 91.2)	85.1 (80.4 , 89.8)	1.1 (-1.3 , 3.5)
Maryland	70.4 (62.7 , 78.1)	69.2 (62.4 , 76.0)	1.2 (-2.1 , 4.5)	93.6 (89.5 , 97.7)	91.8 (87.6 , 96.0)	1.8 (-0.6 , 4.2)	89.9 (84.8 , 95.0)	88.3 (83.2 , 93.4)	1.6 (-1.1 , 4.3)
Massachusetts	84.1 (78.8 , 89.4)	81.9 (77.4 , 86.4)	2.2 (-0.3 , 4.7)	95.3 (92.8 , 97.8)	94.0 (91.3 , 96.7)	1.3 (-0.7 , 3.3)	96.6 (93.9 , 99.3)	96.2 (94.1 , 98.3)	0.4 (-0.6 , 1.4)
Michigan	67.8 (61.4 , 74.2)	67.3 (61.3 , 73.3)	0.5 (-1.6 , 2.6)	93.3 (89.9 , 96.7)	93.5 (90.3 , 96.7)	-0.2 (-0.3 , -0.1) †	92.9 (89.3 , 96.5)	93.4 (90.1 , 96.7)	-0.5 (-0.6 , -0.4) †
Minnesota	68.3 (61.8 , 74.8)	68.1 (62.2 , 74.0)	0.2 (-2.1 , 2.5)	87.0 (82.1 , 91.9)	87.5 (83.1 , 91.9)	-0.5 (-1.7 , 0.7)	86.5 (81.4 , 91.6)	87.5 (82.9 , 92.1)	-1.0 (-2.0 , 0.0)
Mississippi	47.9 (41.1 , 54.7)	49.6 (43.3 , 55.9)	-1.7 (-3.4 , 0.0)	63.1 (56.7 , 69.5)	63.0 (57.1 , 68.9)	0.1 (-1.6 , 1.8)	93.2 (90.0 , 96.4)	92.4 (89.2 , 95.6)	0.8 (-0.7 , 2.3)
Missouri	58.6 (52.0 , 65.2)	57.8 (51.4 , 64.2)	0.8 (-0.9 , 2.5)	75.6 (69.8 , 81.4)	74.3 (68.7 , 79.9)	1.3 (-0.6 , 3.2)	81.1 (75.6 , 86.6)	80.1 (74.7 , 85.5)	1.0 (-0.9 , 2.9)
Montana	66.9 (60.0 , 73.8)	65.5 (59.2 , 71.8)	1.4 (-1.2 , 4.0)	71.4 (64.8 , 78.0)	71.2 (65.2 , 77.2)	0.2 (-2.0 , 2.4)	90.5 (86.1 , 94.9)	90.4 (86.5 , 94.3)	0.1 (-1.2 , 1.4)
Nebraska	71.0 (64.6 , 77.4)	71.0 (65.1 , 76.9)	0.0 (-2.1 , 2.1)	84.5 (79.2 , 89.8)	84.8 (80.0 , 89.6)	-0.3 (-1.8 , 1.2)	92.0 (87.7 , 96.3)	92.3 (88.5 , 96.1)	-0.3 (-1.0 , 0.4)
Nevada	64.7 (57.8 , 71.6)	64.9 (58.6 , 71.2)	-0.2 (-2.1 , 1.7)	76.8 (70.5 , 83.1)	77.3 (71.6 , 83.0)	-0.5 (-2.1 , 1.1)	83.0 (77.3 , 88.7)	82.5 (77.2 , 87.8)	0.5 (-1.2 , 2.2)
New Hampshire	73.6 (67.4 , 79.8)	74.2 (68.8 , 79.6)	-0.6 (-3.1 , 1.9)	87.6 (82.5 , 92.7)	87.9 (83.6 , 92.2)	-0.3 (-1.8 , 1.2)	94.6 (91.5 , 97.7)	95.1 (92.4 , 97.8)	-0.5 (-1.3 , 0.3)
New Jersey	64.4 (57.2 , 71.6)	65.8 (60.0 , 71.6)	-1.4 (-4.2 , 1.4)	91.1 (86.4 , 95.8)	93.3 (90.1 , 96.5)	-2.2 (-2.6 , -1.8) †	92.0 (87.6 , 96.4)	90.0 (86.0 , 94.0)	2.0 (-0.7 , 4.7)
New Mexico	66.0 (59.7 , 72.3)	66.9 (61.1 , 72.7)	-0.9 (-2.7 , 0.9)	76.5 (70.7 , 82.3)	78.0 (72.8 , 83.2)	-1.5 (-2.7 , -0.3) †	85.1 (80.2 , 90.0)	85.5 (80.9 , 90.1)	-0.4 (-1.3 , 0.5)
New York-City of New York	75.6 (68.4 , 82.8)	73.3 (67.3 , 79.3)	2.3 (-1.3 , 5.9)	89.2 (83.7 , 94.7)	88.8 (84.4 , 93.2)	0.4 (-1.8 , 2.6)	90.6 (86.1 , 95.1)	92.9 (89.7 , 96.1)	-2.3 (-2.8 , -1.8) †
New York-Rest of State	65.3 (58.2 , 72.4)	65.5 (59.5 , 71.5)	-0.2 (-3.1 , 2.7)	89.6 (85.1 , 94.1)	89.5 (85.6 , 93.4)	0.1 (-1.4 , 1.6)	89.7 (85.0 , 94.4)	92.8 (89.7 , 95.9)	-3.1 (-3.8 , -2.4) †
North Carolina	64.9 (58.1 , 71.7)	66.8 (60.7 , 72.9)	-1.9 (-4.0 , 0.2)	84.7 (79.7 , 89.7)	84.8 (80.0 , 89.6)	-0.1 (-1.9 , 1.7)	91.4 (87.6 , 95.2)	91.9 (88.5 , 95.3)	-0.5 (-1.2 , 0.2)

Area name	≥ 1 dose HPV vaccine			≥ 1 dose MenACWY			≥ 1 dose Tdap		
	Single	Dual	Difference*	Single	Dual	Difference	Single	Dual	Difference
North Dakota	73.4 (67.9 , 78.9)	72.5 (67.3 , 77.7)	0.9 (-0.9 , 2.7)	91.4 (88.1 , 94.7)	91.9 (88.9 , 94.9)	-0.5 (-1.1 , 0.1)	90.2 (86.6 , 93.8)	90.6 (87.3 , 93.9)	-0.4 (-1.2 , 0.4)
Ohio	64.3 (58.4 , 70.2)	64.1 (58.6 , 69.6)	0.2 (-1.7 , 2.1)	88.0 (84.3 , 91.7)	87.3 (83.9 , 90.7)	0.7 (-0.7 , 2.1)	91.5 (88.3 , 94.7)	90.6 (87.4 , 93.8)	0.9 (-0.4 , 2.2)
Oklahoma	59.5 (53.0 , 66.0)	58.5 (52.2 , 64.8)	1.0 (-0.6 , 2.6)	71.8 (65.8 , 77.8)	71.1 (65.2 , 77.0)	0.7 (-0.9 , 2.3)	86.0 (81.3 , 90.7)	86.7 (82.4 , 91.0)	-0.7 (-1.3 , -0.1) †
Oregon	70.3 (64.3 , 76.3)	71.2 (65.7 , 76.7)	-0.9 (-2.6 , 0.8)	75.5 (69.9 , 81.1)	77.0 (71.9 , 82.1)	-1.5 (-2.9 , -0.1) †	85.9 (81.4 , 90.4)	86.3 (82.1 , 90.5)	-0.4 (-1.7 , 0.9)
Pennsylvania-Philadelphia County	84.3 (79.5 , 89.1)	84.9 (80.6 , 89.2)	-0.6 (-1.8 , 0.6)	89.7 (85.6 , 93.8)	91.1 (87.5 , 94.7)	-1.4 (-1.8 , -1.0) †	91.2 (87.3 , 95.1)	91.6 (88.1 , 95.1)	-0.4 (-1.2 , 0.4)
Pennsylvania-Rest of State	65.4 (59.1 , 71.7)	65.0 (59.4 , 70.6)	0.4 (-2.2 , 3.0)	95.0 (92.5 , 97.5)	93.7 (90.8 , 96.6)	1.3 (-0.7 , 3.3)	91.2 (87.3 , 95.1)	90.5 (86.7 , 94.3)	0.7 (-1.4 , 2.8)
Rhode Island	88.9 (83.7 , 94.1)	88.6 (84.1 , 93.1)	0.3 (-1.1 , 1.7)	94.7 (91.8 , 97.6)	94.1 (91.0 , 97.2)	0.6 (-1.2 , 2.4)	94.7 (91.8 , 97.6)	94.6 (91.8 , 97.4)	0.1 (-0.9 , 1.1)
South Carolina	58.7 (51.3 , 66.1)	59.6 (52.9 , 66.3)	-0.9 (-3.5 , 1.7)	78.9 (72.8 , 85.0)	78.6 (72.9 , 84.3)	0.3 (-1.6 , 2.2)	90.1 (85.9 , 94.3)	89.4 (85.3 , 93.5)	0.7 (-1.1 , 2.5)
South Dakota	63.0 (56.2 , 69.8)	63.2 (56.9 , 69.5)	-0.2 (-2.3 , 1.9)	75.1 (68.9 , 81.3)	74.5 (68.7 , 80.3)	0.6 (-1.3 , 2.5)	79.2 (73.4 , 85.0)	79.5 (74.1 , 84.9)	-0.3 (-2.0 , 1.4)
Tennessee	56.4 (49.4 , 63.4)	56.1 (49.4 , 62.8)	0.3 (-1.9 , 2.5)	75.7 (69.5 , 81.9)	75.0 (69.0 , 81.0)	0.7 (-1.4 , 2.8)	89.8 (85.8 , 93.8)	89.4 (85.4 , 93.4)	0.4 (-0.8 , 1.6)
Texas-Bexar County	62.4 (56.0 , 68.8)	62.9 (56.8 , 69.0)	-0.5 (-1.8 , 0.8)	85.5 (80.3 , 90.7)	86.0 (81.1 , 90.9)	-0.5 (-1.2 , 0.2)	83.0 (77.5 , 88.5)	83.7 (78.5 , 88.9)	-0.7 (-1.5 , 0.1)
Texas-City of Houston	72.4 (63.2 , 81.6)	73.0 (64.7 , 81.3)	-0.6 (-2.9 , 1.7)	91.8 (86.6 , 97.0)	91.4 (86.5 , 96.3)	0.4 (-1.5 , 2.3)	87.7 (81.2 , 94.2)	87.9 (81.7 , 94.1)	-0.2 (-1.4 , 1.0)
Texas-El Paso County	82.2 (76.7 , 87.7)	82.8 (77.8 , 87.8)	-0.6 (-1.2 , 0.0)	89.0 (84.4 , 93.6)	89.5 (85.3 , 93.7)	-0.5 (-1.0 , 0.0)	89.3 (85.0 , 93.6)	89.6 (85.5 , 93.7)	-0.3 (-0.8 , 0.2)
Texas-Dallas County	53.8 (45.8 , 61.8)	54.5 (46.9 , 62.1)	-0.7 (-2.6 , 1.2)	87.1 (81.9 , 92.3)	85.1 (79.7 , 90.5)	2.0 (0.2 , 3.8) †	79.1 (72.4 , 85.8)	77.0 (70.4 , 83.6)	2.1 (0.3 , 3.9) †
Texas-Travis County	70.5 (63.8 , 77.2)	69.7 (63.6 , 75.8)	0.8 (-1.2 , 2.8)	88.7 (84.2 , 93.2)	89.1 (85.1 , 93.1)	-0.4 (-1.5 , 0.7)	86.1 (81.2 , 91.0)	85.9 (81.5 , 90.3)	0.2 (-1.3 , 1.7)
Texas-Rest of State	55.3 (50.6 , 60.0)	54.5 (49.9 , 59.1)	0.8 (-0.4 , 2.0)	84.2 (80.7 , 87.7)	84.1 (80.7 , 87.5)	0.1 (-0.8 , 1.0)	83.2 (79.6 , 86.8)	83.1 (79.6 , 86.6)	0.1 (-0.8 , 1.0)
Utah	60.1 (53.4 , 66.8)	58.8 (52.7 , 64.9)	1.3 (-1.0 , 3.6)	84.5 (79.6 , 89.4)	85.1 (80.8 , 89.4)	-0.6 (-2.1 , 0.9)	91.0 (87.3 , 94.7)	91.6 (88.3 , 94.9)	-0.6 (-1.9 , 0.7)
Vermont	79.0 (73.3 , 84.7)	78.7 (73.7 , 83.7)	0.3 (-2.2 , 2.8)	83.9 (78.7 , 89.1)	84.2 (79.5 , 88.9)	-0.3 (-2.5 , 1.9)	92.4 (89.0 , 95.8)	92.8 (89.8 , 95.8)	-0.4 (-1.9 , 1.1)

Area name	≥ 1 dose HPV vaccine			≥ 1 dose MenACWY			≥ 1 dose Tdap		
	Single	Dual	Difference*	Single	Dual	Difference	Single	Dual	Difference
Virginia	78.3 (70.5 , 86.1)	75.6 (69.0 , 82.2)	2.7 (-1.5 , 6.9)	82.6 (74.8 , 90.4)	80.0 (73.5 , 86.5)	2.6 (-1.5 , 6.7)	91.2 (86.0 , 96.4)	89.3 (84.3 , 94.3)	1.9 (-1.0 , 4.8)
Washington	73.9 (67.7 , 80.1)	71.9 (66.2 , 77.6)	2.0 (-0.2 , 4.2)	83.1 (77.8 , 88.4)	82.6 (77.7 , 87.5)	0.5 (-1.4 , 2.4)	89.1 (84.7 , 93.5)	88.6 (84.5 , 92.7)	0.5 (-0.9 , 1.9)
West Virginia	60.8 (54.2 , 67.4)	60.9 (54.7 , 67.1)	-0.1 (-2.1 , 1.9)	88.6 (84.2 , 93.0)	87.9 (83.7 , 92.1)	0.7 (-0.6 , 2.0)	88.0 (83.7 , 92.3)	87.5 (83.4 , 91.6)	0.5 (-0.9 , 1.9)
Wisconsin	71.1 (64.9 , 77.3)	69.2 (63.3 , 75.1)	1.9 (0.0 , 3.8)	84.7 (79.5 , 89.9)	83.8 (78.9 , 88.7)	0.9 (-0.7 , 2.5)	90.4 (86.4 , 94.4)	90.3 (86.5 , 94.1)	0.1 (-1.0 , 1.2)
Wyoming	48.0 (41.4 , 54.6)	46.9 (40.7 , 53.1)	1.1 (-0.9 , 3.1)	60.2 (53.7 , 66.7)	60.7 (54.7 , 66.7)	-0.5 (-2.5 , 1.5)	86.2 (81.5 , 90.9)	86.4 (81.9 , 90.9)	-0.2 (-1.8 , 1.4)
U.S. Virgin Islands	42.8 (27.8 , 57.8)	44.0 (31.1 , 56.9)	-1.2 (-5.7 , 3.3)	65.9 (52.8 , 79.0)	60.1 (47.6 , 72.6)	5.8 (1.2 , 10.4) †	74.7 (62.0 , 87.4)	78.1 (68.4 , 87.8)	-3.4 (-8.2 , 1.4)
Guam	66.5 (58.5 , 74.5)	67.5 (61.7 , 73.3)	-1.0 (-3.9 , 1.9)	68.6 (60.6 , 76.6)	68.3 (62.5 , 74.1)	0.3 (-2.7 , 3.3)	77.7 (70.5 , 84.9)	77.3 (72.1 , 82.5)	0.4 (-2.5 , 3.3)
Puerto Rico	75.3 (67.8 , 82.8)	75.9 (68.8 , 83.0)	-0.6 (-2.8 , 1.6)	89.4 (84.0 , 94.8)	90.4 (85.4 , 95.4)	-1.0 (-1.4 , -0.6) †	90.1 (85.1 , 95.1)	90.7 (86.0 , 95.4)	-0.6 (-1.1 , -0.1) †

Abbreviations: HPV = human papillomavirus vaccine; MenACWY = quadrivalent meningococcal conjugate vaccine; Tdap = tetanus, diphtheria, and pertussis vaccine.

Note: “Dual”=landline & cell-phone, “Single”=cell-phone, CI=confidence interval

*Difference=Single%-dual%

†Denotes statistically significant difference between single- and dual-frame estimates