Supplementary Table 2. Estimated vaccination coverage with selected vaccines and doses* among adolescents aged 13-17 years ${ }^{\dagger}$ by HHS Region, state, selected local area, or territory - National Immunization Survey-Teen (NIS-Teen), United States, 2021

| Region, state, local area | \% (95\% CI) ${ }^{\text {§ }}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | All adolescents ( $\mathrm{n}=18,002$ ) |  |  |  |
|  | $\geq 1$ Tdap ${ }^{\text {I }}$ | $\geq 1$ MenACWY** | $\geq 1 \mathrm{HPV}^{\dagger \dagger}$ | HPV UTD ${ }^{\text {§ }}$ |
| United States overall | 89.6 (88.6-90.5) | 89.0 (87.9-90.0) | 76.9 (75.6-78.2) \\|\| | 61.7 (60.2-63.2) \\|\| |
| Region I | 93.8 (91.2-95.7) | 91.9 (89.2-94.0) *** | 84.7 (81.7-87.4) | 71.6 (67.7-75.2) |
| Connecticut | 93.9 (89.3-96.6) | 94.9 (91.4-97.1) | 77.9 (71.7-83.0) | 66.4 (59.8-72.5) |
| Maine | 89.7 (84.4-93.4) | 88.2 (83.0-92.0) *** | 77.5 (71.1-82.8) | 61.5 (54.5-68.0) |
| Massachusetts | 94.3 (88.2-97.4) | 91.8 (85.7-95.5) | 89.3 (83.0-93.4) | 75.0 (67.3-81.4) |
| New Hampshire | 94.9 (90.5-97.3) | 88.1 (82.8-91.9) | 84.6 (78.9-89.0) | 72.3 (65.7-78.1) |
| Rhode Island | 93.8 (87.2-97.1) | 92.8 (86.3-96.3) | 90.1 (83.2-94.3) | 83.2 (76.1-88.6) |
| Vermont | 94.2 (91.4-96.2) | 88.8 (85.1-91.6) | 83.4 (79.0-87.1) | 66.7 (61.5-71.6) |
| Region II | 87.9 (84.7-90.5) *** | 93.2 (90.6-95.1) | 72.4 (68.2-76.2) | 61.2 (56.8-65.4) |
| New Jersey | 88.9 (82.7-93.1) | 91.8 (86.4-95.2) | 65.4 (57.7-72.4) | 54.8 (47.1-62.4) |
| New York | 87.3 (83.4-90.4) *** | 93.8 (90.8-95.9) | 75.9 (70.8-80.4) | 64.4 (59.1-69.4) |
| NY-City of New York | 82.6 (76.3-87.4) *** | 91.2 (86.2-94.5) | 80.0 (73.3-85.3) | 70.3 (63.3-76.5) |
| NY-Rest of State | 90.5 (85.1-94.0) | 95.6 (91.0-97.9) | 73.2 (65.8-79.5) | 60.5 (53.0-67.5) |
| Region III | 89.7 (87.7-91.4) *** | 91.4 (89.4-93.0) | 79.1 (76.5-81.5) | 67.8 (64.8-70.6) \\|\| |
| Delaware | 89.6 (85.0-93.0) | 90.8 (86.3-93.9) | 83.5 (77.7-88.0) | 68.9 (62.3-74.8) |
| Dist. of Columbia | 87.3 (82.2-91.1) | 90.2 (85.5-93.6) | 89.6 (85.1-92.9) | 79.4 (73.5-84.4) |
| Maryland | 89.5 (86.4-91.9) | 93.7 (91.1-95.5) | 85.5 (82.1-88.4) | 71.9 (67.5-76.0) |
| Pennsylvania | 91.1 (88.2-93.4) *** | 92.8 (90.0-94.9) | 77.7 (73.4-81.5) | 68.7 (64.2-73.0) |
| PA-Philadelphia | 88.9 (83.8-92.6) | 92.6 (88.0-95.6) | 87.1 (81.8-91.1) | 74.2 (67.8-79.8) |
| PA-Rest of State | 91.4 (88.1-93.9) *** | 92.8 (89.6-95.1) | 76.4 (71.6-80.7) | 68.0 (62.9-72.7) |
| Virginia | 88.3 (82.5-92.4) | 88.0 (82.3-92.1) | 77.3 (70.6-82.9) | 64.9 (57.6-71.5) |
| West Virginia | 88.4 (83.6-92.0) | 90.7 (85.6-94.1) | 70.5 (63.7-76.5) T\\| | 56.4 (49.2-63.3) ๆT |
| Region IV | 91.0 (88.8-92.8) | 84.9 (82.3-87.2) | 74.7 (71.7-77.5) | 56.6 (53.3-59.9) |
| Alabama | 91.2 (85.8-94.6) | 88.3 (82.9-92.1) | 78.5 (72.4-83.6) T\\| | 62.5 (55.6-68.8) |
| Florida | 89.7 (83.1-93.9) | 76.9 (69.3-83.1) | 67.7 (59.5-74.9) | 49.0 (40.7-57.2) |
| Georgia | 92.7 (87.1-95.9) | 92.5 (86.8-95.9) | 78.6 (71.6-84.3) | 60.9 (52.8-68.4) |
| Kentucky | 83.5 (76.5-88.7) *** | 87.7 (81.5-92.1) *** | 70.3 (62.4-77.1) | 57.0 (49.0-64.8) |
| Mississippi | 89.1 (83.5-92.9) | 60.2 (53.1-66.9) | 56.2 (49.2-63.1) | 32.7 (26.5-39.6) |
| North Carolina | 94.5 (88.9-97.4) | 93.3 (87.6-96.5) | 85.0 (78.2-90.0) | 67.8 (59.6-75.0) |
| South Carolina | 91.1 (86.1-94.4) | 86.3 (80.6-90.5) | 81.8 (75.9-86.5) \\|\| | 62.1 (54.7-69.0) ๆ\\| |


| Tennessee | 92.0 (87.3-95.0) | 88.1 (82.9-91.9) | 75.3 (68.9-80.8) | 56.5 (49.4-63.3) |
| :---: | :---: | :---: | :---: | :---: |
| Region V | 89.4 (87.3-91.1) *** | 91.6 (89.7-93.3) | 76.5 (73.7-79.1) | 62.2 (59.3-65.1) |
| Illinois | 89.5 (85.7-92.4) | 94.7 (92.0-96.5) | 76.6 (71.8-80.7) | 62.2 (56.9-67.1) |
| IL-City of Chicago | 88.9 (79.7-94.3) | 90.0 (80.3-95.2) | 82.9 (71.6-90.4) | 70.4 (59.0-79.7) |
| IL-Rest of State | 89.6 (85.3-92.8) | 95.7 (92.9-97.4) | 75.2 (69.7-79.9) | 60.4 (54.5-66.0) |
| Indiana | 87.9 (82.1-91.9) *** | 91.3 (85.9-94.8) | 72.1 (65.2-78.0) | 55.2 (48.0-62.2) |
| Michigan | 85.4 (79.0-90.1) | 89.7 (83.6-93.7) *** | 79.0 (72.6-84.2) | 64.7 (57.6-71.2) |
| Minnesota | 90.5 (85.0-94.1) | 91.3 (86.1-94.6) | 79.9 (73.2-85.2) | 65.7 (58.4-72.3) |
| Ohio | 90.8 (84.4-94.8) | 90.3 (83.5-94.5) | 72.4 (63.6-79.8) | 62.2 (53.5-70.1) |
| Wisconsin | 93.5 (89.5-96.1) | 91.7 (87.3-94.6) | 82.4 (76.8-86.8) | 63.3 (56.7-69.4) |
| Region VI | 88.1 (85.3-90.4) | 89.9 (87.3-92.0) | 72.9 (69.1-76.4) | 53.8 (49.8-57.8) |
| Arkansas | 94.9 (90.8-97.2) | 96.1 (93.0-97.9) | 73.2 (67.2-78.5) | 56.8 (50.2-63.1) |
| Louisiana | 93.1 (88.4-96.0) | 93.7 (89.6-96.3) | 81.1 (75.1-86.0) | 63.9 (56.9-70.4) |
| New Mexico | 87.8 (82.5-91.7) | 84.6 (79.4-88.7) | 80.9 (75.4-85.5) | 57.9 (51.5-64.1) |
| Oklahoma | 85.4 (79.4-89.9) | 82.7 (76.9-87.3) | 72.4 (65.4-78.5) | 56.7 (49.3-63.8) ¢TI |
| Texas | 87.1 (83.1-90.3) | 90.0 (86.3-92.7) | 71.3 (66.0-76.1) | 51.5 (46.0-56.9) |
| TX-Bexar County | 84.3 (78.6-88.7) | 90.5 (85.8-93.8) | 77.3 (70.9-82.7) | 59.7 (52.4-66.6) |
| TX-City of Houston | 86.0 (76.9-91.9) | 93.1 (86.4-96.6) | 79.9 (70.8-86.7) | 62.2 (52.0-71.4) |
| TX-Rest of State | 87.4 (82.8-90.9) | 89.7 (85.4-92.8) | 70.1 (64.0-75.6) | 50.0 (43.8-56.2) |
| Region VII | 90.2 (87.6-92.4) | 90.4 (87.8-92.5) ¢\|II | 77.9 (74.4-81.0) \||| | 62.2 (58.3-66.0) \||| |
| lowa | 92.3 (86.1-95.9) | 95.0 (88.7-97.9) | 79.2 (70.8-85.7) | 66.1 (56.9-74.1) |
| Kansas | 87.8 (81.7-92.1) | 86.0 (79.8-90.5) | 76.5 (69.6-82.3) \9 | 64.3 (56.8-71.1) 919 |
| Missouri | 89.6 (84.6-93.1) | 90.4 (85.7-93.7) | 76.2 (70.0-81.5) | 59.3 (52.5-65.7) |
| Nebraska | 92.3 (88.0-95.1) | 89.7 (84.9-93.1) | 82.7 (76.8-87.3) | 61.9 (54.8-68.6) |
| Region VIII | 91.6 (89.0-93.6) | 88.2 (85.2-90.6) | 80.0 (76.7-82.9) | 65.0 (61.1-68.7) \||| |
| Colorado | 90.2 (84.7-93.8) | 84.8 (78.5-89.5) | 80.0 (73.6-85.2) | 69.2 (62.1-75.5) |
| Montana | 88.8 (83.6-92.5) | 77.1 (70.7-82.5) | 75.3 (68.9-80.7) | 52.6 (45.8-59.3) |
| North Dakota | 94.9 (90.0-97.5) | 95.5 (90.9-97.8) | 83.8 (76.4-89.2) | 72.2 (63.7-79.3) |
| South Dakota | 95.6 (92.3-97.5) | 96.6 (94.3-98.0) | 87.4 (82.8-90.9) | 74.7 (69.2-79.6) |
| Utah | 92.9 (88.3-95.8) | 94.0 (90.0-96.5) | 80.9 (75.2-85.6) ¢ $\mid$ \| | 61.4 (54.1-68.2) 9 9 |
| Wyoming | 89.8 (83.9-93.7) | 75.9 (68.7-81.8) | 64.8 (56.9-71.9) | 48.0 (40.5-55.7) |
| Region IX | 89.2 (84.4-92.7) | 87.5 (81.8-91.5) | 81.3 (75.3-86.2) | 67.2 (60.6-73.1) |
| Arizona | 89.4 (84.9-92.7) | 88.8 (83.6-92.5) | 81.3 (75.6-85.9) ¢ 1 \| | 61.7 (54.6-68.3) ¢ $\mid$ \| |
| California | 89.1 (82.6-93.3) | 87.0 (79.5-92.1) | 81.7 (73.7-87.7) | 69.0 (60.5-76.4) |
| Hawaii | 88.6 (83.2-92.5) | 88.0 (82.1-92.1) | 83.8 (77.8-88.4) | 69.3 (62.3-75.5) |
| Nevada | 91.2 (85.8-94.6) | 89.5 (84.1-93.2) | 76.1 (69.3-81.7) | 56.5 (49.1-63.5) |
| Region X | 86.9 (83.6-89.6) | 84.6 (81.3-87.3) | 79.4 (75.8-82.6) | 66.0 (61.9-69.9) TTI |
| Alaska | 81.7 (75.3-86.8) | 75.2 (68.5-81.0) | 70.3 (62.9-76.7) | 56.2 (48.8-63.3) |
| Idaho | 89.4 (84.1-93.1) | 89.1 (83.7-92.9) | 78.8 (72.9-83.7) | 61.6 (54.8-67.9) |
| Oregon | 85.6 (79.6-90.1) | 82.4 (76.4-87.1) | 82.3 (76.3-87.0) | 67.0 (60.0-73.4) |


| Washington | 87.4 (81.6-91.5) | 85.4 (79.8-89.6) | 79.0 (72.8-84.1) | 67.8 (61.0-74.0) |
| :---: | :---: | :---: | :---: | :---: |
| Range ${ }^{\text {ttt }}$ | 81.7 to 95.6 | 60.2 to 96.6 | 56.2 to 90.1 | 32.7 to 83.2 |
| Territory |  |  |  |  |
| Guam | 72.7 (64.7-79.4) | 71.0 (62.9-77.9) | 70.0 (62.2-76.8) | 54.0 (45.9-61.8) |
| Puerto Rico | 85.4 (80.5-89.3) ¢9 | 88.0 (83.2-91.5) ¢91 | 86.1 (81.4-89.8) ¢19 | 67.2 (60.7-73.1) \|T\| |
| U.S. Virgin Islands | 81.5 (73.7-87.4) | 82.9 (75.4-88.5) | 71.8 (63.2-79.1) | 45.5 (36.6-54.6) |

Abbreviations: $\mathrm{CI}=$ confidence interval; HHS = U.S. Department of Health and Human Services; HPV = human papillomavirus;
MenACWY = quadrivalent meningococcal conjugate vaccine; MMR = measles, mumps, rubella vaccine; Tdap = tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine; UTD = up-to-date.

* Estimates for additional measures, including MMR, hepatitis B, and varicella vaccines are available at:


## http://www.cdc.gov/vaccines/vaxview/teenvaxview

${ }^{\dagger}$ Adolescents $(N=18,002)$ in the 2021 NIS-Teen were born January 2003 through January 2009.
${ }^{\S}$ Estimates with $95 \%$ confidence intervals > 20 may not be reliable.
${ }^{\text {I }} \geq 1$ dose Tdap vaccine at age $\geq 10$ years.
** $\geq 1$ dose of MenACWY or meningococcal-unknown type vaccine.
${ }^{\dagger \dagger} \mathrm{HPV}$ vaccine, nine-valent (9vHPV), quadrivalent (4vHPV), or bivalent (2vHPV) in females and males combined.
${ }^{\text {§ }}$ HPV UTD includes those with $\geq 3$ 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.
${ }^{1 \pi}$ Statistically significant ( $p<0.05$ ) percentage point increase from 2020.
*** Statistically significant ( $p<0.05$ ) percentage point decrease from 2020.
${ }^{\dagger \dagger \dagger}$ Range excludes selected local areas and territories.

