

Table 32. Vaccination coverage for selected diseases among adolescents aged 13–17 years, by selected characteristics: United States, selected years 2008–2018

Excel version (with more data years and standard errors when available): <https://www.cdc.gov/nchs/hus/contents2019.htm#Table-032>

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population, supplemented by a survey of vaccination providers to the sampled adolescents]

Vaccination coverage	2008	2010	2011	2012	2013	2014 ¹	2015 ¹	2016 ¹	2017 ¹	2018 ¹
Percent of adolescents aged 13–17										
Measles, mumps, rubella (2 doses or more).....	89.3	90.5	91.1	91.4	91.8	90.7	90.7	90.9	92.1	91.9
Hepatitis B (3 doses or more).....	87.9	91.6	92.3	92.8	93.2	91.4	91.1	91.4	91.9	92.1
Varicella vaccine (2 doses or more) among those with no history of varicella ²	34.1	58.1	68.3	74.9	78.5	81.0	83.1	85.6	88.6	89.6
Tdap (1 dose or more) ³	40.8	68.7	78.2	84.6	86.0	87.6	86.4	88.0	88.7	88.9
Meningococcal conjugate vaccine (MenACWY) (1 dose or more) ⁴	41.8	62.7	70.5	74.0	77.8	79.3	81.3	82.2	85.1	86.6
Human papillomavirus (HPV) (up-to-date among females) ⁵.....	...	...	...	...	...	...	...	49.5	53.1	53.7
Human papillomavirus (HPV) (3 doses or more among females) ⁶	17.9	32.0	34.8	33.4	37.6	39.7	41.9	43.0	44.0	37.9
Human papillomavirus (HPV) (up-to-date among males) ⁵.....	...	...	...	...	...	...	...	37.5	44.3	48.7
Human papillomavirus (HPV) (3 doses or more among males) ⁶.....	...	...	1.3	6.8	13.9	21.6	28.1	31.5	34.8	32.1
Race and Hispanic origin ⁷										
Poverty level ⁸										
Location of residence										
Not Hispanic or Latino										
Inside MSA ⁹										
Vaccination coverage, 2018 ¹	White only	Black or African American only	American Indian or Alaska Native only	Asian only	Hispanic or Latino	Below poverty level	At or above poverty level	MSA, principal city	MSA, nonprincipal city	Non-MSA
Percent of adolescents aged 13–17										
Measles, mumps, rubella (2 doses or more).....	92.8	93.1	91.6	89.0	89.9	91.6	92.2	92.0	92.3	90.1
Hepatitis B (3 doses or more).....	93.2	93.1	92.9	93.3	89.1	91.3	92.6	91.4	93.1	90.7
Varicella vaccine (2 doses or more) among those with no history of varicella ²	90.8	89.4	89.9	86.1	87.6	89.2	89.9	90.2	89.8	86.4
Tdap (1 dose or more) ³	89.7	88.4	86.4	87.9	87.7	87.5	89.2	88.6	89.7	86.8
Meningococcal conjugate vaccine (MenACWY) (1 dose or more) ⁴	86.0	87.1	82.6	85.9	87.6	86.2	86.6	86.5	88.3	79.5
Human papillomavirus (HPV) (up-to-date among females) ⁵	50.7	58.4	58.7	52.3	57.2	59.4	52.2	56.8	52.7	46.2
Human papillomavirus (HPV) (up-to-date among males) ⁵	45.0	48.5	56.5	53.9	56.0	54.9	47.1	55.5	45.6	35.2

See footnotes at end of table.

Table 32. Vaccination coverage for selected diseases among adolescents aged 13–17 years, by selected characteristics: United States, selected years 2008–2018—Con.

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[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population, supplemented by a survey of vaccination providers to the sampled adolescents]

... Category not applicable.

¹Starting in 2014, the National Immunization Survey–Teen (NIS–Teen) implemented a new definition of adequate provider data. Data for 2013 shown in this table are revised based on the 2014 definition. In general, 2013 NIS–Teen vaccination coverage estimates using the revised adequate provider data definition are different, and generally lower, than original 2013 NIS–Teen estimates. Thus, data for 2013 and beyond are not directly comparable with data for earlier years. For more information on the revised criteria and its effect on coverage levels, see Appendix I, National Immunization Surveys (NIS).

²Denominator comprises adolescents aged 13–17 with no history of varicella disease. History of varicella disease is obtained by parent or guardian report or provider records. Historically, report of varicella disease has been considered valid evidence of immunity under the Advisory Committee on Immunization Practices (ACIP) guidelines. For more information, see: Marin M, Bialek SR, Seward JF. Updated recommendations for use of VarIZIG—United States, 2013. *MMWR Recomm Rep* 62(28):574–6. 2013. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6228a4.htm>.

³Tdap is tetanus toxoid-diphtheria vaccine (Td) or tetanus toxoid, reduced diphtheria toxoid, and acellular pertussis vaccine (Tdap) or tetanus-unknown type vaccine received at or after age 10 years. For initial recommendations on Tdap vaccination, see: Broder KR, Cortese MM, Iskander JK, Kretsinger K, Slade BA, Brown KH, et al. Preventing tetanus, diphtheria, and pertussis among adolescents: Use of tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccines. Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep* 55(RR03):1–34. 2006. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5503a1.htm>.

⁴Includes persons receiving MenACWY or meningococcal vaccine of unknown type. For initial recommendations on meningococcal vaccination, see: Bilukha OO, Rosenstein N. Prevention and control of meningococcal disease: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep* 54(RR07):1–21. 2005. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5407a1.htm>.

⁵In December 2016, the Advisory Committee on Immunization Practices released new recommendations on HPV vaccination stating that up-to-date HPV vaccination includes those with 3 doses or more, and those with 2 doses when the first HPV vaccine dose was received under age 15 years and having at least 5 months minus 4 days between the first and second dose. For more information, see: Meites E, Kempe A, Markowitz LE. Use of a 2-dose schedule for human papillomavirus vaccination—Updated recommendations of the Advisory Committee on Immunization Practices. *MMWR Morb Mortal Wkly Rep* 65(49):1405–8. 2016. Available from: <https://www.cdc.gov/mmwr/volumes/65/wr/mm6549a5.htm>.

⁶For 2008, refers to HPV vaccine quadrivalent; for 2009–2014, refers to HPV vaccine quadrivalent or bivalent; and for 2015 and beyond, refers to HPV vaccine 9-valent, quadrivalent, or bivalent when specific vaccines are licensed and recommended for use among adolescents. Quadrivalent HPV vaccine was licensed by the FDA in June 2006. For initial recommendations on HPV vaccination, see: Markowitz LE, Dunne EF, Saraiya M, Lawson HW, Chesson H, Unger ER, et al. Quadrivalent human papillomavirus vaccine: Recommendations of the Advisory Committee on Immunization Practices (ACIP). *MMWR Recomm Rep* 56(RR02):1–24. 2007. Available from: https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5602a1.htm?s_cid=rr5602a1_e. HPV vaccine was recommended for males in October 2011. For more information, see: Dunne EF, Markowitz LE, Chesson H, Curtis CR, Saraiya M, Gee J, Unger ER. Recommendations on the use of quadrivalent human papillomavirus vaccine in males—Advisory Committee on Immunization Practices (ACIP), 2011. *MMWR Morb Mortal Wkly Rep* 60(50):1705–8. 2011. Available from: <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6050a3.htm>.

⁷Persons of Hispanic origin may be of any race. Estimates are tabulated using the 1997 “Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity.” Data for Native Hawaiian or Other Pacific Islander persons and persons of multiple races are not included because of small sample sizes. See Appendix II, Hispanic origin; Race.

⁸Based on family income and family size using U.S. Census Bureau poverty thresholds. See Appendix II, Family income; Poverty.

⁹MSA is metropolitan statistical area. MSAs are defined based on U.S. Office of Management and Budget delineation files. See Appendix II, Metropolitan statistical area (MSA).

NOTES: Vaccination coverage estimates are based on provider-verified responses from parents who live in households with telephones. Starting in 2011, the National Immunization Surveys (NIS) sampling frame was expanded from a single (landline) sampling frame to dual (landline and cell phone) sampling frames. Starting in 2018, NIS shifted to a single (cell phone) sampling frame design. Interpretation of vaccination data must take into account when specific vaccines are licensed and recommended for use among adolescents. Additional information on the recommended schedule for adolescent vaccination is available from: <https://www.cdc.gov/vaccines/schedules/index.html>. See Appendix I, National Immunization Surveys (NIS); Appendix II, Vaccination.

SOURCE: National Center for Immunization and Respiratory Diseases, National Immunization Survey–Teen. Available from: <https://www.cdc.gov/vaccines/imz-managers/coverage/teenavxview/index.html>. See Appendix I, National Immunization Surveys (NIS).