Table 67. Vaccination coverage for selected diseases among adolescents aged 13–17, by selected characteristics: United States, selected years 2008–2015

Excel and PDF versions (with more data years and standard errors when available): http://www.cdc.gov/nchs/hus/contents2016.htm#067.

[Data are based on telephone interviews of a sample of the civilian noninstitutionalized population, supplemented by a survey of interview participants' immunization providers]

Vaccination coverage	2008	2010	2011	2012	2013[1]	2014[1]	2015[1]
	Percent of adolescents aged 13–17						
Measles, mumps, rubella (2 doses or more)	89.3	90.5	91.1	91.4	89.6	90.7	90.7
Hepatitis B (3 doses or more)	87.9	91.6	92.3	92.8	91.3	91.4	91.1
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
Tdap (1 dose or more)[3]	40.8	68.7	78.2	84.6	84.7	87.6	86.4
Meningococcal conjugate vaccine (MenACWY) (1 dose or more)[4]	41.8	62.7	70.5	74.0	76.6	79.3	81.3
Human papillomavirus (HPV) (3 doses or more among females)[5]	17.9	32.0	34.8	33.4	36.8	39.7	41.9
Human papillomavirus (HPV) (3 doses or more among males)[5]	. . .	. . .	1.3	6.8	13.4	21.6	28.1

	Race and Hispanic origin[6]					Poverty level[7]		Location of residence		
	Not Hispanic or Latino							Inside MSA[8]		
Vaccination coverage, 2015	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	Central city	Remaining area	Outside MSA[8]
	Percent of adolescents aged 13–17									
Measles, mumps, rubella (2 doses or more)	91.7	91.9	91.1	87.5	88.1	89.5	90.9	91.2	90.1	91.4
Hepatitis B (3 doses or more)	92.5	92.5	93.1	89.2	87.4	90.3	91.1	91.5	90.7	91.3
Varicella vaccine (2 doses or more) among those with no history of varicella[2]	82.8	84.9	86.9	84.5	82.3	85.4	82.2	84.6	83.1	78.3
Tdap (1 dose or more)[3]	86.6	86.0	87.6	86.0	85.3	85.0	87.0	88.1	86.0	82.7
Meningococcal conjugate vaccine (MenACWY) (1 dose or more)[4]	79.5	81.7	83.9	83.3	85.0	82.6	80.5	82.9	82.5	71.6
Human papillomavirus (HPV) (3 doses or more among females)[5]	39.6	40.8	38.7	53.5	46.2	44.4	41.3	44.6	41.3	35.8
Human papillomavirus (HPV) (3 doses or more among males)[5]	25.2	26.0	34.6	30.7	35.0	31.0	27.4	32.5	26.0	22.5

. . . Category not applicable.

[1] Starting in 2014, NIS-Teen implemented a new definition of adequate provider data. Data for 2013 shown in this table were revised based on the 2014 definition. In general, 2013 NIS-Teen vaccination coverage estimates using the revised adequate provider data definition were different, and generally lower, than original 2013 NIS-Teen estimates. Thus, data for 2013 and beyond are not directly comparable with data for 2008–2012. For more information on the new criteria and their effect on coverage levels, see Appendix I, National Immunization Survey (NIS).

[2] Denominator is comprised of adolescents aged 13–17 with no history of varicella disease. History of varicella disease was obtained by parent/guardian report or by provider records. Historically, report of varicella disease has been considered valid evidence of immunity under the Advisory Committee on Immunization Practices guidelines.

[3] Tdap refers to 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 the age of 10 years.

[4] Includes persons receiving MenACWY or meningococcal-unknown type vaccine.

[5] For 2008, refers to HPV vaccine quadrivalent; for 2009–2014, refers to HPV vaccine quadrivalent or bivalent; for 2015 and beyond, refers to HPV vaccine 9-valent, quadrivalent, or bivalent.

[6] Persons of Hispanic origin may be of any race. Estimates were 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 were not included because of small sample sizes. See Appendix II, Hispanic origin; Race.

[7] Poverty level is based on family income and family size using U.S. Census Bureau poverty thresholds. In 2015, 3.5% (unweighted) of adolescents with provider-reported vaccination data were missing information about poverty level and were not included in the estimates of vaccination coverage by poverty level. See Appendix II, Family income; Poverty.

[8] MSA is metropolitan statistical area. 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. Complex statistical methods are used to adjust vaccination estimates to account for adolescents whose parents refuse to participate in the survey, for adolescents who live in households without telephones, or for adolescents whose vaccination histories cannot be verified through their providers. Starting in 2011, the NIS sampling frame was expanded from a single-landline frame to dual-landline and cellular telephone sampling frames. See Appendix I, National Immunization Survey (NIS). Detailed vaccination data among adolescents, by race and Hispanic origin, percent of poverty level, and MSA were not available prior to 2008. Interpretation of vaccination data needs to take into account when specific vaccines were licensed and recommended for use among adolescents. Quadrivalent HPV vaccine was licensed by the U.S. Food and Drug Administration (FDA) in June 2006. For the initial recommendations on HPV vaccination, see: CDC. Quadrivalent human papillomavirus vaccine: Recommendations of the Advisory Committee on Immunization Practices. MMWR 2007;56(RR-02):1–24. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5602a1.htm?s_cid=rr5602a1_e; HPV vaccine was recommended for males in October 2011. CDC. Recommendations on the use of quadrivalent human papillomavirus vaccine in males - Advisory Committee on Immunization Practices (ACIP), 2011. MMWR 2011;60(50):1705–8. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6050a3.htm. Meningococcal vaccine was licensed for use by the FDA in January 2005. For the initial recommendations on meningococcal vaccination, see: CDC. Prevention and control of meningococcal disease: Recommendations of the Advisory Committee on Immunization Practices. MMWR 2005;54(RR-07):1–21. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5407a1.htm. Tdap vaccines were licensed by the FDA in May and June of 2005. For the initial recommendations on Tdap vaccination, see: CDC. 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. MMWR 2006;55(RR-03):1–34. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5503a1.htm. See Appendix I, National Immunization Survey (NIS). Additional information on the recommended schedule for adolescent vaccination is available from: http://www.cdc.gov/vaccines/schedules/index.html.

SOURCE: NCHS and National Center for Immunization and Respiratory Diseases (NCIRD) (data for 2008–2014); NCIRD (data for 2015 onwards), National Immunization Survey–Teen. Available from: https://www.cdc.gov/vaccines/vaxview/index.html. See Appendix I, National Immunization Survey (NIS).