

Table 81 (page 1 of 3). Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2009

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

Vaccination and year	Race and Hispanic origin ¹							Poverty level		Location of residence			
	Not Hispanic or Latino							Below poverty level	At or above poverty level	Inside MSA ²			
	All	White	Black or African American	American Indian or Alaska Native	Asian ³	Native Hawaiian or Other Pacific Islander ³	2 or more races or Latino			Central city	Remaining area	Outside MSA ²	
Percent of children 19–35 months of age													
Combined series (4:3:1:4:3:1:4): ⁴													
2009.....	44	45	40	---	39	---	41	46	41	46	45	45	42
Combined series (4:3:1:3:3:1:4): ⁵													
2007.....	67	67	62	75	69	*	66	67	65	67	67	68	63
2008.....	68	68	66	63	74	*	76	69	63	71	70	69	65
2009.....	64	64	58	---	55	---	57	67	61	65	---	---	---
Combined series (4:3:1:3:3:1): ⁶													
2002.....	66	66	62	---	74	---	61	66	62	66	64	68	61
2006.....	77	78	74	75	76	---	75	77	73	78	77	78	75
2007.....	77	78	75	83	79	*	76	78	75	78	77	78	76
2008.....	76	75	73	77	82	*	79	78	72	78	77	76	74
2009.....	70	69	67	73	70	---	67	73	68	70	---	---	---
DTP/DT/DTaP (4 doses or more): ⁷													
1995.....	78	80	74	71	84	---	---	75	71	81	77	79	78
2000.....	82	84	76	75	85	---	---	79	76	84	80	83	83
2005.....	86	87	84	*	89	*	86	84	82	87	85	87	85
2006.....	85	87	81	83	86	*	84	85	81	87	84	86	85
2007.....	85	85	82	86	88	*	84	84	81	86	85	85	83
2008.....	85	85	80	82	92	*	88	85	80	87	85	85	82
2009.....	84	86	79	82	87	93	82	83	80	86	84	84	84
Polio (3 doses or more):													
1995.....	88	89	84	86	90	---	---	87	85	89	87	88	89
2000.....	90	91	87	90	93	---	---	88	87	90	88	90	91
2005.....	92	91	91	*	93	*	94	92	90	92	91	93	92
2006.....	93	93	90	91	92	96	92	93	92	93	93	93	93
2007.....	93	93	91	95	95	87	92	93	92	93	92	93	94
2008.....	94	94	92	91	97	*	94	94	92	94	94	94	93
2009.....	93	93	91	92	94	97	93	93	92	93	94	92	92
Measles, Mumps, Rubella:													
1995.....	90	91	87	88	95	---	---	88	86	91	90	90	89
2000.....	91	92	88	87	90	---	---	90	89	91	90	91	91
2005.....	92	91	92	90	92	90	94	91	89	92	92	92	90
2006.....	92	93	91	89	95	94	91	92	91	93	93	93	92
2007.....	92	92	92	96	94	88	95	93	91	93	92	93	92
2008.....	92	91	92	96	95	97	94	93	92	92	93	92	90
2009.....	90	91	88	95	91	97	89	89	89	91	91	89	89
Hib (3 doses or more): ⁸													
1995.....	91	93	88	93	90	---	---	89	88	93	91	92	92
2000.....	93	95	93	90	92	---	---	91	90	95	92	94	95
2005.....	94	94	93	88	89	91	95	94	92	95	93	94	94
2006.....	93	94	91	94	90	96	91	94	91	94	93	94	92
2007.....	93	93	91	95	91	*	90	94	91	93	92	94	92
2008.....	91	91	89	89	93	96	90	92	88	92	91	92	89
Hib (primary series plus booster dose): ⁸													
2009.....	55	55	51	---	55	---	54	55	51	57	56	55	53
Hepatitis B (3 doses or more):													
1995.....	68	68	66	52	80	---	---	70	65	69	69	71	59
2000.....	90	91	89	91	91	---	---	88	87	91	89	90	92
2005.....	93	93	93	90	93	*	94	93	91	94	92	94	93
2006.....	93	94	92	95	92	97	92	94	93	94	93	94	93
2007.....	93	93	91	97	94	*	92	94	92	93	92	93	94
2008.....	94	93	92	92	98	*	95	94	91	94	93	94	93
2009.....	92	92	92	93	93	96	93	93	92	93	93	92	92

See footnotes at end of table.

Table 81 (page 2 of 3). Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2009

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

Vaccination and year	Race and Hispanic origin ¹								Poverty level		Location of residence		
	Not Hispanic or Latino										Inside MSA ²		
	All	White	Black or African American	American Indian or Alaska Native	Asian ³	Native Hawaiian or Other Pacific Islander ³	2 or more races	Hispanic or Latino	Below poverty level	At or above poverty level	Central city	Remaining area	Outside MSA ²
Percent of children 19–35 months of age													
Varicella: ⁹													
1998.....	43	42	42	28	53	---	---	47	41	44	45	45	34
2000.....	68	66	67	62	77	---	---	70	64	69	69	70	60
2005.....	88	86	91	82	92	*	90	89	87	88	88	88	86
2006.....	89	89	89	85	93	90	91	90	88	90	90	90	86
2007.....	90	89	90	95	94	89	92	91	89	90	90	90	89
2008.....	91	90	90	94	94	92	91	92	90	91	92	90	88
2009.....	90	89	88	89	90	98	91	91	89	90	91	89	89
PCV (4 doses or more): ¹⁰													
2005.....	54	57	46	*	56	*	54	51	45	57	52	58	48
2006.....	68	71	61	63	65	*	71	67	62	71	69	71	62
2007.....	75	77	70	80	75	*	74	75	73	76	75	77	71
2008.....	80	81	76	71	82	*	85	79	74	83	81	81	75
2009.....	80	83	73	76	73	---	73	81	75	83	80	82	82
Not Hispanic or Latino													
Vaccination and year	White				Black or African American				Hispanic or Latino				
	Below poverty level		At or above poverty level		Below poverty level		At or above poverty level		Below poverty level		At or above poverty level		
Percent of children 19–35 months of age													
Combined series (4:3:1:4:3:1:4): ⁴													
2009.....				43	46			38	44		44		49
Combined series (4:3:1:3:3:1:4): ⁵													
2007.....				60	68			60	64		69		66
2008.....				59	70			63	69		64		73
2009.....				62	65			55	63		66		68
Combined series (4:3:1:3:3:1): ⁶													
2005.....				70	77			74	80		76		75
2006.....				69	79			72	77		76		78
2007.....				70	79			74	77		78		79
2008.....				68	77			70	75		75		81
2009.....				68	69			64	71		71		74

See footnotes at end of table.

Table 81 (page 3 of 3). Vaccination coverage among children 19–35 months of age for selected diseases, by race, Hispanic origin, poverty level, and location of residence in metropolitan statistical area (MSA): United States, selected years 1995–2009

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

- - - Data not available.

* Estimates are considered unreliable. For data prior to 2007, percents not shown if the unweighted sample size for the numerator was less than 30, or the confidence interval half-width divided by the estimate was greater than 50%, or the confidence interval half-width was greater than 10. Starting with 2007 data, percents not shown if the unweighted sample size for the denominator was less than 30, or the confidence interval half-width divided by the estimate was greater than 60%, or the confidence interval half-width was greater than 10.

¹Persons of Hispanic origin may be of any race. Starting with 2002 data, estimates were tabulated using the 1997 Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Estimates for earlier years were tabulated using the 1977 Standards on Race and Ethnicity. See Appendix II, Hispanic origin; Race.

²MSA is metropolitan statistical area. See Appendix II, Metropolitan statistical area.

³Prior to data year 2002, the category Asian included Native Hawaiian and Other Pacific Islander.

⁴The 4:3:1:4:3:1:4 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses or 4 or more doses of *Haemophilus influenzae* type b vaccine (Hib) depending on Hib vaccine product type (primary series plus booster dose); 3 or more doses of hepatitis B vaccine; 1 or more doses of varicella vaccine; and 4 or more doses of pneumococcal conjugate vaccine (PCV). The vaccine shortage that ended in September 2004 might have reduced coverage with the fourth dose of PCV among children in the 2007 National Immunization Survey (NIS) cohort. Also see footnote 8 for additional information on (Hib) vaccination.

⁵The 4:3:1:3:3:1:4 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses of *Haemophilus influenzae* type b vaccine (Hib); 3 or more doses of hepatitis B vaccine; 1 or more doses of varicella vaccine; and 4 or more doses of pneumococcal conjugate vaccine (PCV). The vaccine shortage that ended in September 2004 might have reduced coverage with the fourth dose of PCV among children in the 2007 NIS cohort.

⁶The 4:3:1:3:3:1 combined series consists of 4 or more doses of diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), or diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP); 3 or more doses of any poliovirus vaccine; 1 or more doses of a measles-containing vaccine (MCV); 3 or more doses of *Haemophilus influenzae* type b vaccine (Hib); 3 or more doses of hepatitis B vaccine; and 1 or more doses of varicella vaccine.

⁷Diphtheria and tetanus toxoids and pertussis vaccine (DTP), diphtheria and tetanus toxoids (DT), and diphtheria and tetanus toxoids and acellular pertussis vaccine (DTaP).

⁸*Haemophilus influenzae* type b vaccine (Hib). Before January 2009, NIS did not distinguish between Hib vaccine product types; therefore, children who received 3 doses of a vaccine product that requires 4 doses were misclassified as fully vaccinated. In addition, there was a Hib vaccine shortage during December 2007–September 2009. For more information, see Changes in measurement of *Haemophilus influenzae* serotype b (Hib) vaccination coverage—National Immunization Survey, United States, 2009. MMWR 59(33): 1069–72. Available from: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5933a3.htm?s_cid=mm5933a3_e%0d%0a.

⁹Recommended in 1996. Data collection for varicella began in July 1996.

¹⁰PCV is pneumococcal conjugate vaccine. Recommended in 2000. Data collection for PCV began in July 2001. Data for 4 doses of PCV are not available prior to 2005.

NOTES: Final estimates from the National Immunization Survey include an adjustment for children with missing immunization provider data. Poverty level is based on family income and family size using U.S. Census Bureau poverty thresholds. In 2009, 5% of 17,313 children with provider-reported vaccination history data, 7% of Hispanic, 4% of non-Hispanic white, and 6% of non-Hispanic black children were missing information about poverty level and were omitted from the estimates of vaccination coverage by poverty level. See Appendix II, Poverty. See Appendix I, National Immunization Survey. Additional information on childhood immunizations is available from: <http://www.cdc.gov/vaccines/recs/schedules/child-schedule.htm#printable>. Data for additional years are available. See Appendix III.

SOURCE: CDC/NCHS and National Center for Immunization and Respiratory Diseases, National Immunization Survey. Available from: <http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis> and <http://www.cdc.gov/nis/>.