

ADOLESCENT VACCINES

The percent of adolescents who have received routinely recommended vaccines increased from 2007 to 2008.

- ▶ For the first time, the Healthy People 2010 goal of 90 percent immunization rates for adolescents ages 13 to 15 was met for measles, mumps and rubella, commonly called MMR vaccines, and Hepatitis B.
- ▶ Immunization rates for the new human papillomavirus vaccine (commonly known as HPV) also increased by 12 percent from 2007 to 2008.
- ▶ There were significant differences among states and by race, ethnicity and poverty status.
 - ▶ At least 50 percent of adolescents in Arizona, New Hampshire and New York received all three routinely recommended vaccines.
 - ▶ The lowest immunization rates for the three routinely recommended vaccines were in Mississippi, South Dakota and West Virginia.
 - ▶ The lowest immunization rates for the HPV vaccine were in Mississippi, Georgia and South Carolina.
 - ▶ Compared with whites, immunization rates were lower among African-Americans for varicella (commonly known as chickenpox), at 87.9 percent versus 93.7 percent.
 - ▶ Compared with whites, immunization rates were higher among American Indian/Alaskan Natives for measles, mumps and rubella, at 93.9 percent versus 89.9 percent.
 - ▶ Immunization rates were higher among Hispanics than whites for HPV.
 - ▶ Immunization rates for the HPV vaccine were higher for adolescents living below the poverty level than for those living at or above the poverty level.



Changes in vaccine policy, recent experiences with outbreaks or efforts to remove cost as a barrier can improve adolescent vaccination rates in states.

- ▶ Colorado, which ranked fifth in the country for whooping cough, implemented a tetanus, diphtheria and pertussis vaccine (Tdap in the chart) requirement for sixth and 10th grade students during the 2007–2008 school year.
- ▶ In 2007, 22 states had a requirement for a vaccine containing tetanus for entry into middle school; no states had a requirement for the meningitis or HPV vaccine.
- ▶ Insurance companies in New Hampshire contributed funds for state purchase of vaccines, which allowed universal coverage of HPV for females ages 11 to 18.
- ▶ Because HPV is the most expensive vaccine recommended for adolescents, it is widely available through the Vaccines for Children program for the uninsured, Medicaid-eligible and American Indian/Alaskan Natives. Barriers to access have been reported among private insurers.

Several strategies improve vaccine coverage among adolescents, including:

- ▶ Client and provider reminders that vaccinations are due;
- ▶ Vaccination requirements for school entry;
- ▶ Reduction of out-of-pocket costs for families for vaccinations;
- ▶ Increased access in health care settings by increasing hours of availability and providing vaccines in clinical settings in which they were not previously provided; and
- ▶ Assessment and feedback to vaccine providers by public health departments.

Source: "National, State, and Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years—United States, 2008," September 18, 2009, 58(36); 997–1001, <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5836a2.htm>

ESTIMATED VACCINATION COVERAGE AMONG ADOLESCENTS, AGED 13–17, 2008

	Vaccines routinely recommended during childhood (adolescent catch-up vaccines)			Vaccines routinely recommended for adolescents			
	MMR	Hep B	Varicella	Td or Tdap	Tdap	Meningitis	HPV
United States	89.3	87.9	81.9	72.2	40.8	41.8	37.2
Alabama	89.8	68.2	71.2	70.1	44	29.9	32.8
Alaska	84.4	86.9	66.7	68.3	42.1	30.5	38.8
Arizona	82.4	83.9	85.4	74	53.8	51.5	50.5
Arkansas	90.2	90.9	84.9	46.1	23.8	14.5	22.4
California	91.9	89.9	92.9	71.3	43.7	48	46.6
Colorado	91	94.6	85.3	77.4	63	32.4	33.5
Connecticut	95.7	98.4	97.6	79.8	45.4	45.2	45
Delaware	94.8	95.2	86.1	78.6	43.1	58.6	46.8
District of Columbia	94.6	94.8	96.4	84.7	32.7	58.1	38.7
Florida	92.3	92.8	80	79.4	29	33.6	36.7
Georgia	92.8	91.6	91.4	70.9	37.8	41.6	18.5
Hawaii	91.4	93.1	89.7	71.6	32	44.1	40.2
Idaho	73.2	73.1	61.1	51.3	31.7	29.9	28.4
Illinois	89.5	93.2	74.2	72.9	45.4	41.9	27
Indiana	91.7	86.2	70.4	53.6	31.2	31.8	26.1
Iowa	86.4	79.2	68.4	65.9	43.5	31.9	41.9
Kansas	84.1	71.4	62.5	69.9	46.8	25.6	30.1
Kentucky	96.2	93.3	74.7	82	28.1	30.9	26.3
Louisiana	89	85.1	68.9	74.9	35.3	53.6	36.6
Maine	92.6	81.4	89.7	75	43	35.6	40.3
Maryland	92.3	91.2	86.7	79	37.9	54.6	41.1
Massachusetts	99.5	97.4	95	94.4	43.3	55.9	53.3
Michigan	94.6	92.8	86.8	69.9	33.6	39.9	32.3
Minnesota	90.1	89.7	84.8	88.7	40.7	38.9	33.6
Mississippi	94.5	60.8	40	28.7	19.6	14.8	15.8
Missouri	84.2	87	62.7	67.9	44.1	35.3	31.6
Montana	84.1	75.2	70.1	69.1	44.2	17.8	N/A
Nebraska	88.5	90.6	86.1	71.5	42.2	37.2	29.5
Nevada	88.8	82.7	64.8	69	45.9	29.6	30
New Hampshire	94.9	92.7	93.2	84.2	53.1	54.6	54.4
New Jersey	91.8	94.5	86.2	78.1	43	60.6	43
New Mexico	84.2	83.1	69	75.1	50.4	39.6	48.3
New York	92.6	93	88.7	85.5	53.8	56	50.2
North Carolina	82.2	81.4	57.7	63.6	28	30.7	34.4
North Dakota	93.7	87.9	76.1	75	47.8	47.4	28.7
Ohio	84.8	76.9	77.4	57.8	30.6	37.7	29.1
Oklahoma	90.2	88.9	83.1	59.5	28.6	25.1	35.5
Oregon	87.7	88	89	64.1	38.9	29.6	34.8
Pennsylvania	94.6	95.3	94.2	82	51.2	59.7	46.1
Rhode Island	96.3	98.4	97.8	91.5	41.6	62.6	54.7
South Carolina	90.9	92	61	53.7	27.3	25.1	18.7
South Dakota	86.7	65.2	52.7	45.3	19.3	14	45.9
Tennessee	85.9	82.4	72	50.3	34.3	36.5	29.6
Texas	81.6	86.5	79.4	79.3	40.8	37.4	31.6
Utah	82.6	70.2	67.5	62.7	46.8	31.3	—
Vermont	95.2	94.8	93	79.8	49.2	20	50.4
Virginia	83	83.7	69.4	70.3	49.1	43.8	40.6
Washington	78	81.3	78.9	64.2	34.7	40	46.5
West Virginia	80.8	72.4	66.5	44.7	24.1	30.2	33.6
Wisconsin	93	87.8	84.4	75.4	53.8	52.2	47
Wyoming	87.3	80.9	69.5	79.1	28.3	32.8	36.2