

## Recent Influenza Vaccination Trends across Influenza Seasons

Estimates from the Behavioral Risk Factor Surveillance System (BRFSS), National Immunization Survey (NIS), and the National 2009 H1N1 Flu Survey (NHFS)

[Age Groups](#)

[Race/Ethnicity, ≥6 months](#)

[Race/Ethnicity, 6 months-17 years](#)

[Race/Ethnicity, ≥18 years](#)

[Race/Ethnicity, 18-64 years](#)

[Race/Ethnicity, 18-64 years high-risk](#)

[Race/Ethnicity, 18-49 years](#)

[Race/Ethnicity, 18-49 years high-risk](#)

[Race/Ethnicity, 50-64 years](#)

[Race/Ethnicity, ≥65 years](#)

### Age Group

Table 1 summarizes national weighted estimates of influenza vaccination coverage by age group across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For the 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 1-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 1-A.

**Table 1-A: Influenza vaccination coverage estimates by age group — United States,\* 2007-08 through 2010-11**

Age Groups	Estimate <sup>†</sup>	2007-08 <sup>‡</sup>	2008-09 <sup>‡</sup>	2009-10 Seasonal (Trivalent) <sup>§</sup>	2010-11
≥6 months	n			511,357	494,368
	% <sup>  </sup>	<b>NA</b>	<b>NA</b>	<b>41.2</b>	<b>43.0</b>
	±95% CI <sup>  </sup>			0.4	0.4
6 months–17 years	n			149,872	116,799
	%	<b>NA</b>	<b>NA</b>	<b>43.7</b>	<b>51.0</b>
	±95% CI			0.9	0.9
≥18 years	n	199,942	342,202	361,485	377,569
	%	<b>37.5</b>	<b>40.5</b>	<b>40.4</b>	<b>40.5</b>
	±95% CI	0.4	0.6	0.4	0.4
18–64 years	n	140,955	235,800	246,461	244,933
	%	<b>30.7</b>	<b>33.6</b>	<b>34.4</b>	<b>34.8</b>
	±95% CI	0.6	0.6	0.4	0.6
18–64 years high-risk**	n	26,940	46,008	58,368	41,826
	%	<b>44.6</b>	<b>48.4</b>	<b>46.2</b>	<b>46.7</b>
	±95% CI	1.4	1.4	1.0	1.4

Age Groups	Estimate <sup>†</sup>	2007-08 <sup>‡</sup>	2008-09 <sup>‡</sup>	2009-10 Seasonal (Trivalent) <sup>§</sup>	2010-11
18–49 years	n	77,155	123,144	126,708	116,113
	%	<b>25.6</b>	<b>28.4</b>	<b>29.9</b>	<b>30.5</b>
	±95% CI	0.6	0.8	0.5	0.6
18–49 years high-risk**	n	10,740	17,327	22,233	14,711
	%	<b>36.0</b>	<b>39.1</b>	<b>38.2</b>	<b>39.0</b>
	±95% CI	2.2	2.0	1.3	2.2
50–64 years	n	63,800	112,656	119,754	128,820
	%	<b>43.4</b>	<b>46.2</b>	<b>45.0</b>	<b>44.5</b>
	±95% CI	0.8	0.8	0.6	0.6
≥65 years	n	58,987	106,402	115,018	132,636
	%	<b>72.3</b>	<b>74.0</b>	<b>69.6</b>	<b>66.6</b>
	±95% CI	0.8	0.6	0.6	0.6

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS and the National Immunization Survey (NIS). Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season—United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Data for children, 6 months–17 years, not available (NA) for these seasons.

§ Seasonal: Seasonal influenza vaccination (trivalent).

|| Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

¶ CI: Confidence Interval.

\*\* For 2009-10, the selected high risk conditions were asthma, other lung conditions, diabetes, heart disease, kidney conditions, anemia, weakened immune system caused by a chronic illness or by medicines taken for a chronic illness. For 2007-08, 2008-09, and 2010-11, selected high-risk conditions were asthma, diabetes, heart disease.

**Table 1-B: Influenza vaccination coverage estimates by age group — United States,\* 2009-10**

Age Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
≥6 months	n	511,357	453,663	518,465
	% <sup>§</sup>	<b>41.2</b>	<b>27.0</b>	<b>47.8</b>
	±95% CI <sup>  </sup>	0.4	0.4	0.4
6 months–17 years	n	149,872	146,766	159,971
	%	<b>43.7</b>	<b>40.2</b>	<b>55.3</b>
	±95% CI	0.9	0.8	0.8

Age Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
≥18 years	n	361,485	306,897	358,494
	%	<b>40.4</b>	<b>22.7</b>	<b>45.4</b>
	±95% CI	0.4	0.4	0.4
18–64 years	n	246,461	209,435	244,165
	%	<b>34.4</b>	<b>21.5</b>	<b>39.8</b>
	±95% CI	0.4	0.5	0.5
18–64 years high-risk <sup>¶</sup>	n	58,368	49,772	58,015
	%	<b>46.2</b>	<b>28.5</b>	<b>52.0</b>
	±95% CI	1.0	1.1	1.1
18–49 years	n	126,708	108,009	125,816
	%	<b>29.9</b>	<b>20.7</b>	<b>36.1</b>
	±95% CI	0.5	0.6	0.6
18–49 years high-risk <sup>¶</sup>	n	22,233	18,995	22,099
	%	<b>38.2</b>	<b>26.0</b>	<b>45.3</b>
	±95% CI	1.3	1.6	1.6
50–64 years	n	119,754	101,426	118,349
	%	<b>45.0</b>	<b>23.5</b>	<b>48.7</b>
	±95% CI	0.6	0.6	0.6
≥65 years	n	115,018	97,462	114,329
	%	<b>69.6</b>	<b>28.8</b>	<b>72.0</b>
	±95% CI	0.6	0.7	0.5

\* Excludes U.S. territories.

† For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ For 2009-10, the selected high risk conditions were asthma, other lung conditions, diabetes, heart disease, kidney conditions, anemia, weakened immune system caused by a chronic illness or by medicines taken for a chronic illness.

## Race/Ethnicity, Persons ≥6 months

Table 2 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for persons ≥6 months, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 2-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 2-A.

**Table 2-A: Influenza vaccination coverage estimates by race/ethnicity among persons ≥6 months — United States,\* 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08 <sup>‡</sup>	2008-09 <sup>‡</sup>	2009-10 Seasonal (Trivalent) <sup>§</sup>	2010-11
≥6 months, non-Hispanic white only	n			391,359	377,124
	% <sup>  </sup>	NA	NA	<b>43.9</b>	<b>44.3</b>
	±95% CI <sup>¶</sup>			0.4	0.4
≥6 months, non-Hispanic black only	n			42,817	41,198
	%	NA	NA	<b>33.7</b>	<b>39.0</b>
	±95% CI			1.2	1.5
≥6 months, Hispanic	n			40,073	40,119
	%	NA	NA	<b>33.6</b>	<b>40.0</b>
	±95% CI			1.2	1.4
≥6 months, non-Hispanic other (overall)**	n			33,466	31,453
	%	NA	NA	<b>42.4</b>	<b>42.9</b>
	±95% CI			1.6	1.6
≥6 months, non-Hispanic other (Asian only)	n			11,061	10,083
	%	NA	NA	<b>44.3</b>	<b>43.1</b>
	±95% CI			2.3	2.8
≥6 months, non-Hispanic other (AIAN only) <sup>††</sup>	n			7,535	6,731
	%	NA	NA	<b>46.3</b>	<b>42.1</b>
	±95% CI			2.6	4.0
≥6 months, non-Hispanic other <sup>†††</sup>	n			14,505	14,639
	%	NA	NA	<b>38.6</b>	<b>42.9</b>
	±95% CI			2.0	2.5

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009*

*Monovalent Vaccination Coverage – United States, August 2009 through May 2010*

([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS and the National Immunization Survey (NIS). Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season—United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Data for children, 6 months–17 years, not available (NA) for these seasons.

§ Seasonal: Seasonal influenza vaccination (trivalent).

|| Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

¶ CI: Confidence Interval.

\*\* Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

†† AIAN: American Indian and Alaska Native.

‡‡ Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 2-B: Influenza vaccination coverage estimates by race/ethnicity among persons ≥6 months — United States,\* 2009-10**

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
≥6 months, non-Hispanic white only	n	391,359	344,634	394,929
	% <sup>§</sup>	<b>43.9</b>	<b>27.2</b>	<b>49.5</b>
	±95% CI <sup>  </sup>	0.4	0.4	0.4
≥6 months, non-Hispanic black only	n	42,817	38,853	43,902
	%	<b>33.7</b>	<b>21.6</b>	<b>40.5</b>
	±95% CI	1.2	1.0	1.2
≥6 months, Hispanic	n	40,073	36,809	41,610
	%	<b>33.6</b>	<b>27.9</b>	<b>43.5</b>
	±95% CI	1.2	1.2	1.3
≥6 months, non-Hispanic other (overall) <sup>¶</sup>	n	33,466	30,194	34,588
	%	<b>42.4</b>	<b>31.1</b>	<b>49.9</b>
	±95% CI	1.6	1.6	1.6
≥6 months, non-Hispanic other (Asian only)	n	11,061	10,095	11,398
	%	<b>44.3</b>	<b>33.7</b>	<b>52.6</b>
	±95% CI	2.3	2.2	2.3
≥6 months, non-Hispanic other (AIAN only) <sup>**</sup>	n	7,535	6,531	7,787
	%	<b>46.3</b>	<b>34.8</b>	<b>53.0</b>
	±95% CI	2.6	2.6	2.6
≥6 months, non-Hispanic other <sup>††</sup>	n	14,505	13,008	14,788
	%	<b>38.6</b>	<b>27.1</b>	<b>45.9</b>
	±95% CI	2.0	2.0	2.1

\* Excludes U.S. territories.

† For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

## Race/Ethnicity, Children 6 months-17 years

Table 3 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for children 6 months-17 years, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 3-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 3-A.

**Table 3-A: Influenza vaccination coverage estimates by race/ethnicity among children 6 months-17 years — United States,\* 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08 <sup>‡</sup>	2008-09 <sup>‡</sup>	2009-10 Seasonal (Trivalent) <sup>§</sup>	2010-11
6 months–17 years, non-Hispanic white only	n			104,178	75,113
	% <sup>  </sup>	NA	NA	43.2	48.5
	±95% CI <sup>¶</sup>			0.9	1.0
6 months–17 years, non-Hispanic black only	n			14,217	12,182
	%	NA	NA	37.0	50.8
	±95% CI			2.6	2.9

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08 <sup>‡</sup>	2008-09 <sup>‡</sup>	2009-10 Seasonal (Trivalent) <sup>§</sup>	2010-11
6 months–17 years, Hispanic	n	NA	NA	17,813	17,598
	%			<b>46.9</b>	<b>55.1</b>
	±95% CI			2.6	2.6
6 months–17 years, non-Hispanic other (overall)**	n	NA	NA	13,412	11,906
	%			<b>53.6</b>	<b>57.1</b>
	±95% CI			3.1	2.9
6 months–17 years, non-Hispanic other (Asian only)	n	NA	NA	4,402	4,113
	%			<b>56.1</b>	<b>59.4</b>
	±95% CI			3.7	4.7
6 months–17 years, non-Hispanic other (AIAN only) <sup>††</sup>	n	NA	NA	2,531	1,786
	%			<b>51.7</b>	<b>55.7</b>
	±95% CI			4.7	8.0
6 months–17 years, non-Hispanic other <sup>‡‡</sup>	n	NA	NA	6,147	6,007
	%			<b>49.7</b>	<b>55.6</b>
	±95% CI			4.0	4.1

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010*

([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from the National Immunization Survey (NIS). Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season—United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Data for children, 6 months–17 years, not available (NA) for these seasons.

§ Seasonal: Seasonal influenza vaccination (trivalent).

|| Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

¶ CI: Confidence Interval.

\*\* Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

†† AIAN: American Indian and Alaska Native.

‡‡ Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 3-B: Influenza vaccination coverage estimates by race/ethnicity among children 6 months-17 years — United States,\* 2009-10**

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
6 months–17 years, non-Hispanic white only	n	104,178	102,020	111,129
	% <sup>§</sup>	<b>43.2</b>	<b>38.5</b>	<b>53.8</b>
	±95% CI <sup>  </sup>	0.9	0.9	0.9
6 months–17 years, non-Hispanic black only	n	14,217	13,994	15,123
	%	<b>37.0</b>	<b>33.7</b>	<b>49.4</b>
	±95% CI	2.6	2.1	2.5
6 months–17 years, Hispanic	n	17,813	17,498	19,151
	%	<b>46.9</b>	<b>46.7</b>	<b>61.2</b>
	±95% CI	2.6	2.3	2.1
6 months–17 years, non-Hispanic other (overall) <sup>¶</sup>	n	13,412	12,938	14,493
	%	<b>53.6</b>	<b>47.1</b>	<b>63.5</b>
	±95% CI	3.1	3.2	2.9
6 months–17 years, non-Hispanic other (Asian only)	n	4,402	4,358	4,713
	%	<b>56.1</b>	<b>51.1</b>	<b>66.2</b>
	±95% CI	3.7	3.8	3.5
6 months–17 years, non-Hispanic other (AIAN only)**	n	2,531	2,412	2,770
	%	<b>51.7</b>	<b>49.1</b>	<b>62.7</b>
	±95% CI	4.7	4.8	4.1
6 months–17 years, non-Hispanic other <sup>††</sup>	n	6,147	5,830	6,428
	%	<b>49.7</b>	<b>42.3</b>	<b>61.0</b>
	±95% CI	4.0	4.0	3.7

\* Excludes U.S. territories.

† For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the *Data Source and Methods* of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.



## Race/Ethnicity, Adults ≥18 years

Table 4 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for adults ≥18 years, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 4-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 4-A.

**Table 4-A: Influenza vaccination coverage estimates by race/ethnicity among adults ≥18 years — United States,\* 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>‡</sup>	2010-11
≥18 years, non-Hispanic white only	n	160,688	274,872	287,180	302,011
	% <sup>§</sup>	<b>40.8</b>	<b>43.5</b>	<b>44.1</b>	<b>43.2</b>
	±95% CI <sup>  </sup>	0.6	0.6	0.4	0.4
≥18 years, non-Hispanic black only	n	14,679	26,042	28,595	29,016
	%	<b>32.1</b>	<b>35.0</b>	<b>32.8</b>	<b>34.2</b>
	±95% CI	1.6	1.8	1.3	1.8
≥18 years, Hispanic	n	12,029	20,077	22,255	22,521
	%	<b>26.6</b>	<b>29.4</b>	<b>29.3</b>	<b>32.3</b>
	±95% CI	1.8	1.6	1.3	1.6
≥18 years, non-Hispanic other (overall) <sup>¶</sup>	n	10,754	18,150	20,054	19,547
	%	<b>34.5</b>	<b>40.6</b>	<b>38.7</b>	<b>38.0</b>
	±95% CI	2.2	4.3	1.8	2.0
≥18 years, non-Hispanic other (Asian only)	n	3,090	5,372	6,659	5,970
	%	<b>34.6</b>	<b>44.1</b>	<b>40.4</b>	<b>38.2</b>
	±95% CI	3.5	8.2	2.8	3.3
≥18 years, non-Hispanic other (AIAN only) <sup>**</sup>	n	2,859	4,721	5,013	4,945
	%	<b>41.1</b>	<b>43.1</b>	<b>44.3</b>	<b>39.0</b>
	±95% CI	4.1	4.9	3.1	4.5
≥18 years, non-Hispanic other <sup>††</sup>	n	4,805	8,057	8,358	8,632
	%	<b>32.2</b>	<b>34.9</b>	<b>34.7</b>	<b>37.4</b>
	±95% CI	3.3	3.1	2.3	3.1

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS. Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season—United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 4-B: Influenza vaccination coverage estimates by race/ethnicity among adults ≥18 years — United States,\* 2009-10**

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
≥18 years, non-Hispanic white only	n	287,181	242,614	283,800
	% <sup>§</sup>	<b>44.1</b>	<b>23.5</b>	<b>48.1</b>
	±95% CI <sup>  </sup>	0.4	0.5	0.4
≥18 years, non-Hispanic black only	n	28,600	24,851	28,779
	%	<b>32.8</b>	<b>17.8</b>	<b>37.8</b>
	±95% CI	1.3	1.2	1.4
≥18 years, Hispanic	n	22,260	19,311	22,459
	%	<b>29.3</b>	<b>21.8</b>	<b>37.8</b>
	±95% CI	1.3	1.4	1.5
≥18 years, non-Hispanic other (overall) <sup>¶</sup>	n	20,054	17,256	20,095
	%	<b>38.7</b>	<b>25.5</b>	<b>45.3</b>
	±95% CI	1.8	1.8	1.9
≥18 years, non-Hispanic other (Asian only)	n	6,659	5,753	6,685
	%	<b>40.4</b>	<b>27.6</b>	<b>48.0</b>
	±95% CI	2.8	2.7	2.9

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
≥18 years, non-Hispanic other (AIAN only)**	n	5,013	4,196	5,032
	%	<b>44.3</b>	<b>30.3</b>	<b>49.7</b>
	±95% CI	3.1	3.0	3.1
≥18 years, non-Hispanic other <sup>††</sup>	n	8,358	7,178	8,360
	%	<b>34.7</b>	<b>21.8</b>	<b>40.7</b>
	±95% CI	2.3	2.2	2.5

\* Excludes U.S. territories.

† For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

## Race/Ethnicity, Adults 18-64 years

Table 5 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for adults 18-64 years, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 5-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 5-A.

**Table 5-A: Influenza vaccination coverage estimates by race/ethnicity among adults 18-64 years — United States,\* 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>‡</sup>	2010-11
18–64 years, non-Hispanic white only	n	109,864	183,365	188,825	188,853
	% <sup>§</sup>	<b>32.9</b>	<b>35.5</b>	<b>36.9</b>	<b>36.6</b>
	±95% CI <sup>  </sup>	0.6	0.6	0.5	0.6
18–64 years, non-Hispanic black only	n	11,337	19,878	21,583	21,059
	%	<b>28.0</b>	<b>30.7</b>	<b>29.4</b>	<b>30.9</b>
	±95% CI	1.8	2.0	1.4	1.8
18–64 years, Hispanic	n	10,196	16,709	18,650	18,016
	%	<b>23.3</b>	<b>25.7</b>	<b>27.3</b>	<b>29.7</b>
	±95% CI	1.8	1.6	1.3	1.6
18–64 years, non-Hispanic other (overall) <sup>¶</sup>	n	8,548	14,170	15,550	14,630
	%	<b>30.2</b>	<b>37.0</b>	<b>35.6</b>	<b>35.2</b>
	±95% CI	2.4	4.9	1.9	2.2
18–64 years, non-Hispanic other (Asian only)	n	2,481	4,298	5,265	4,624
	%	<b>30.1</b>	<b>40.9</b>	<b>37.9</b>	<b>36.1</b>
	±95% CI	3.5	9.2	3.0	3.5
18–64 years, non-Hispanic other (AIAN only)**	n	2,329	3,774	4,019	3,822
	%	<b>37.3</b>	<b>39.4</b>	<b>42.0</b>	<b>34.9</b>
	±95% CI	4.5	5.5	3.3	4.9
18–64 years, non-Hispanic other <sup>††</sup>	n	3,738	6,098	6,220	6,184
	%	<b>27.9</b>	<b>30.6</b>	<b>30.8</b>	<b>34.3</b>
	±95% CI	3.7	3.5	2.4	3.3

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS. Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season—United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 5-B: Influenza vaccination coverage estimates by race/ethnicity among adults 18-64 years — United States, \* 2009-10**

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
18–64 years, non-Hispanic white only	n	188,825	159,508	186,251
	% <sup>§</sup>	<b>36.9</b>	<b>22.2</b>	<b>41.4</b>
	±95% CI <sup>  </sup>	0.5	0.5	0.5
18–64 years, non-Hispanic black only	n	21,583	18,731	21,686
	%	<b>29.4</b>	<b>17.3</b>	<b>34.7</b>
	±95% CI	1.4	1.3	1.5
18–64 years, Hispanic	n	18,650	16,220	18,811
	%	<b>27.3</b>	<b>21.1</b>	<b>36.1</b>
	±95% CI	1.3	1.4	1.6
18–64 years, non-Hispanic other (overall) <sup>¶</sup>	n	15,550	13,383	15,586
	%	<b>35.6</b>	<b>25.0</b>	<b>42.5</b>
	±95% CI	1.9	1.9	2.0
18–64 years, non-Hispanic other (Asian only)	n	5,265	4,555	5,302
	%	<b>37.9</b>	<b>27.1</b>	<b>45.6</b>
	±95% CI	3.0	2.9	3.1
18–64 years, non-Hispanic other (AIAN only) <sup>**</sup>	n	4,019	3,346	4,029
	%	<b>42.0</b>	<b>30.1</b>	<b>47.0</b>
	±95% CI	3.3	3.2	3.3
18–64 years, non-Hispanic other <sup>††</sup>	n	6,220	5,356	6,229
	%	<b>30.8</b>	<b>21.4</b>	<b>37.3</b>
	±95% CI	2.4	2.4	2.6

\* Excludes U.S. territories.

† For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for*

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

## Race/Ethnicity, Adults 18-64 years at high-risk

Table 6 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for adults 18-64 years at high-risk, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 6-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 6-A.

**Table 6-A: Influenza vaccination coverage estimates by race/ethnicity among adults 18-64 years at high-risk\* — United States,† 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate‡	2007-08	2008-09	2009-10 Seasonal (Trivalent)§	2010-11
High-risk 18–64 years, non-Hispanic white only	n	19,940	34,039	43,108	30,818
	%	<b>47.0</b>	<b>48.8</b>	<b>48.6</b>	<b>48.1</b>
	±95% CI¶	1.6	1.4	1.0	1.6
High-risk 18–64 years, non-Hispanic black only	n	2,915	5,175	6,673	4,566
	%	<b>41.3</b>	<b>50.0</b>	<b>40.6</b>	<b>42.6</b>
	±95% CI	4.1	4.9	2.5	4.9
High-risk 18–64 years, Hispanic	n	1,841	3,201	3,968	2,984
	%	<b>35.6</b>	<b>45.1</b>	<b>41.0</b>	<b>44.6</b>
	±95% CI	5.1	4.3	3.2	5.3

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>§</sup>	2010-11
High-risk 18–64 years, non-Hispanic other (overall)**	n	1,993	3,226	4,051	2,972
	%	<b>46.6</b>	<b>47.2</b>	<b>46.5</b>	<b>44.8</b>
	±95% CI	4.9	5.1	5.3	5.1
High-risk 18–64 years, non-Hispanic other (Asian only)	n	315	548	650	484
	%	<b>47.7</b>	<b>51.5</b>	<b>50.6</b>	<b>42.8</b>
	±95% CI	11.0 <sup>††</sup>	10.8 <sup>††</sup>	13.8 <sup>††</sup>	10.4 <sup>††</sup>
High-risk 18–64 years, non-Hispanic other (AIAN only) <sup>‡‡</sup>	n	702	1,102	1,317	950
	%	<b>51.2</b>	<b>52.4</b>	<b>49.5</b>	<b>41.3</b>
	±95% CI	8.6	8.2	5.4	10.2 <sup>††</sup>
High-risk 18–64 years, non-Hispanic other <sup>§§</sup>	n	976	1,576	1,938	1,538
	%	<b>44.0</b>	<b>41.9</b>	<b>43.5</b>	<b>47.3</b>
	±95% CI	6.9	7.4	4.2	7.1

\* For 2009-10, the selected high risk conditions were asthma, other lung conditions, diabetes, heart disease, kidney conditions, anemia, weakened immune system caused by a chronic illness or by medicines taken for a chronic illness. For 2007-08, 2008-09, and 2010-11, selected high-risk conditions were asthma, diabetes, heart disease.

† Excludes U.S. territories.

‡ For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS. Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season–United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

§ Seasonal: Seasonal influenza vaccination (trivalent).

|| Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

¶ CI: Confidence Interval.

\*\* Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

†† Estimates might be unreliable because confidence interval half-width is >10.

‡‡ AIAN: American Indian and Alaska Native.

§§ Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 6-B: Influenza vaccination coverage estimates by race/ethnicity among adults 18-64 years at high-risk\* — United States,† 2009-10**

Racial/Ethnic Groups	Estimate‡	Seasonal (Trivalent)§	H1N1 (Monovalent)§	Seasonal and/or H1N1§
High-risk 18–64 years, non-Hispanic white only	n	43,108	31,320	42,692
	% <sup>  </sup>	<b>48.6</b>	<b>30.2</b>	<b>53.6</b>
	±95% CI <sup>  </sup>	1.0	1.2	1.1
High-risk 18–64 years, non-Hispanic black only	n	6,673	5,093	6,711
	%	<b>40.6</b>	<b>23.1</b>	<b>46.6</b>
	±95% CI	2.5	2.6	2.6
High-risk 18–64 years, Hispanic	n	3,968	2,957	4,001
	%	<b>41.0</b>	<b>27.5</b>	<b>50.3</b>
	±95% CI	3.2	3.0	3.4
High-risk 18–64 years, non-Hispanic other (overall)**	n	4,051	3,066	4,064
	%	<b>46.5</b>	<b>28.4</b>	<b>48.8</b>
	±95% CI	5.3	4.1	4.7
High-risk 18–64 years, non-Hispanic other (Asian only)	n	650	491	657
	%	<b>50.6</b>	<b>30.1</b>	<b>47.3</b>
	±95% CI	13.8 <sup>††</sup>	10.3 <sup>††</sup>	9.4
High-risk 18–64 years, non-Hispanic other (AIAN only) <sup>‡‡</sup>	n	1,317	931	1,310
	%	<b>49.5</b>	<b>30.6</b>	<b>52.8</b>
	±95% CI	5.4	5.8	5.3
High-risk 18–64 years, non-Hispanic other <sup>§§</sup>	n	1,938	1,425	1,943
	%	<b>43.5</b>	<b>27.3</b>	<b>47.5</b>
	±95% CI	4.2	4.4	4.2

\* For 2009-10, the selected high risk conditions were asthma, other lung conditions, diabetes, heart disease, kidney conditions, anemia, weakened immune system caused by a chronic illness or by medicines taken for a chronic illness.

† Excludes U.S. territories.

‡ For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

§ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).



|| Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

¶ CI: Confidence Interval.

\*\* Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

†† Estimates might be unreliable because confidence interval half-width is >10.

‡‡ AIAN: American Indian and Alaska Native.

§§ Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

## Race/Ethnicity, Adults 18-49 years

Table 7 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for adults 18-49 years, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 7-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 7-A.

**Table 7-A: Influenza vaccination coverage estimates by race/ethnicity among adults 18-49 years — United States,\* 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>‡</sup>	2010-11
18–49 years, non-Hispanic white only	n	57,126	90,642	91,424	84,099
	% <sup>§</sup>	<b>27.1</b>	<b>29.6</b>	<b>31.9</b>	<b>31.6</b>
	±95% CI <sup>  </sup>	0.8	0.8	0.6	0.8
18–49 years, non-Hispanic black only	n	6,613	11,167	11,976	10,743
	%	<b>24.2</b>	<b>26.6</b>	<b>25.3</b>	<b>28.1</b>
	±95% CI	2.2	2.4	1.7	2.4
18–49 years, Hispanic	n	7,433	11,903	13,056	11,929
	%	<b>20.7</b>	<b>22.8</b>	<b>24.7</b>	<b>27.1</b>
	±95% CI	2.2	2.0	1.4	2.0
18–49 years, non-Hispanic other (overall) <sup>¶</sup>	n	5,521	8,643	9,457	8,339
	%	<b>26.7</b>	<b>33.9</b>	<b>33.3</b>	<b>32.6</b>
	±95% CI	2.5	6.5	2.2	2.7

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>‡</sup>	2010-11
18–49 years, non-Hispanic other (Asian only)	n	1,745	2,909	3,547	2,982
	%	<b>27.1</b>	<b>38.2</b>	<b>35.5</b>	<b>33.4</b>
	±95% CI	3.9	11.6**	3.3	3.9
18–49 years, non-Hispanic other (AIAN only) <sup>††</sup>	n	1,449	2,261	2,327	2,108
	%	<b>34.1</b>	<b>36.1</b>	<b>39.3</b>	<b>31.3</b>
	±95% CI	5.7	7.1	4.0	6.1
18–49 years, non-Hispanic other <sup>†††</sup>	n	2,327	3,473	3,489	3,249
	%	<b>24.3</b>	<b>26.6</b>	<b>27.9</b>	<b>32.1</b>
	±95% CI	4.3	4.5	2.9	4.3

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS. Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season–United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* Estimates might be unreliable because confidence interval half-width is >10.

†† AIAN: American Indian and Alaska Native.

††† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 7-B: Influenza vaccination coverage estimates by race/ethnicity among adults 18-49 years — United States, \* 2009-10**

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
18–49 years, non-Hispanic white only	n	91,424	77,350	90,315
	% <sup>§</sup>	<b>31.9</b>	<b>21.1</b>	<b>37.1</b>
	±95% CI <sup>  </sup>	0.6	0.7	0.7

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
18–49 years, non-Hispanic black only	n	11,976	10,396	12,030
	%	<b>25.3</b>	<b>16.8</b>	<b>31.2</b>
	±95% CI	1.7	1.6	1.8
18–49 years, Hispanic	n	13,056	11,363	13,185
	%	<b>24.7</b>	<b>20.3</b>	<b>34.0</b>
	±95% CI	1.4	1.6	1.8
18–49 years, non-Hispanic other (overall) <sup>¶</sup>	n	9,457	8,160	9,495
	%	<b>33.3</b>	<b>25.7</b>	<b>41.1</b>
	±95% CI	2.2	2.3	2.4
18–49 years, non-Hispanic other (Asian only)	n	3,547	3,055	3,571
	%	<b>35.5</b>	<b>27.4</b>	<b>43.6</b>
	±95% CI	3.3	3.4	3.5
18–49 years, non-Hispanic other (AIAN only)**	n	2,327	1,931	2,340
	%	<b>39.3</b>	<b>29.6</b>	<b>45.0</b>
	±95% CI	4.0	3.7	4.0
18–49 years, non-Hispanic other††	n	3,489	3,003	3,519
	%	<b>27.9</b>	<b>21.5</b>	<b>35.5</b>
	±95% CI	2.9	3.0	3.2

\* Excludes U.S. territories.

† For 2009–10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

## Race/Ethnicity, Adults 18-49 years at high-risk

Table 8 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for adults 18-49 years at high-risk, across several recent influenza seasons. Coverage estimates have been previously published for the

2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 8-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 8-A.

**Table 8-A: Influenza vaccination coverage estimates by race/ethnicity among adults 18-49 years at high-risk\* — United States,† 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate‡	2007-08	2008-09	2009-10 Seasonal (Trivalent)§	2010-11
High-risk 18–49 years, non-Hispanic white only	n	7,584	12,118	15,366	10,209
	%	<b>37.7</b>	<b>37.5</b>	<b>39.9</b>	<b>39.2</b>
	±95% CI¶	2.5	2.0	1.6	2.4
High-risk 18–49 years, non-Hispanic black only	n	1,181	2,026	2,768	1,712
	%	<b>34.7</b>	<b>44.2</b>	<b>34.8</b>	<b>37.1</b>
	±95% CI	5.9	7.8	3.3	6.9
High-risk 18–49 years, Hispanic	n	944	1,655	2,039	1,415
	%	<b>28.1</b>	<b>41.1</b>	<b>35.9</b>	<b>37.3</b>
	±95% CI	7.1	5.9	3.9	6.5
High-risk 18–49 years, non-Hispanic other (overall)**	n	955	1,406	1,767	1,238
	%	<b>39.1</b>	<b>37.0</b>	<b>41.5</b>	<b>41.6</b>
	±95% CI	6.5	7.3	5.9	7.1
High-risk 18–49 years, non-Hispanic other (Asian only)	n	168	265	252	217
	%	<b>39.8</b>	<b>42.1</b>	<b>42.9</b>	<b>34.0</b>
	±95% CI	13.5 <sup>††</sup>	14.7 <sup>††</sup>	10.6 <sup>††</sup>	12.5 <sup>††</sup>
High-risk 18–49 years, non-Hispanic other (AIAN only) <sup>‡‡</sup>	n	318	476	529	382
	%	<b>46.6</b>	<b>46.5</b>	<b>45.8</b>	<b>40.3</b>
	±95% CI	13.9 <sup>††</sup>	12.0 <sup>††</sup>	7.7	14.5 <sup>††</sup>
High-risk 18–49 years, non-Hispanic other <sup>§§</sup>	n	469	665	791	639
	%	<b>36.1</b>	<b>28.0</b>	<b>36.8</b>	<b>45.5</b>
	±95% CI	8.6	9.6	6.1	9.8

\* For 2009-10, the selected high risk conditions were asthma, other lung conditions, diabetes, heart disease, kidney conditions, anemia, weakened immune system caused by a chronic illness or by medicines taken for a chronic illness. For 2007-08, 2008-09, and 2010-11, selected high-risk conditions were asthma, diabetes, heart disease.

† Excludes U.S. territories.

‡ For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS. Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season–United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

§ Seasonal: Seasonal influenza vaccination (trivalent).

|| Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

¶ CI: Confidence Interval.

\*\* Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

†† Estimates might be unreliable because confidence interval half-width is >10.

‡‡ AIAN: American Indian and Alaska Native.

§§ Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 8-B: Influenza vaccination coverage estimates by race/ethnicity among adults 18-49 years at high-risk\* — United States,† 2009-10**

Racial/Ethnic Groups	Estimate‡	Seasonal (Trivalent)§	H1N1 (Monovalent)§	Seasonal and/or H1N1§
High-risk 18–49 years, non-Hispanic white only	n	15,366	10,936	15,202
	%	<b>39.9</b>	<b>26.8</b>	<b>46.0</b>
	±95% CI¶	1.6	1.8	1.7
High-risk 18–49 years, non-Hispanic black only	n	2,768	1,966	2,784
	%	<b>34.8</b>	<b>22.2</b>	<b>42.0</b>
	±95% CI	3.3	3.6	3.6
High-risk 18–49 years, Hispanic	n	2,039	1,463	2,062
	%	<b>35.9</b>	<b>23.5</b>	<b>43.4</b>
	±95% CI	3.9	3.7	4.1
High-risk 18–49 years, non-Hispanic other (overall)**	n	1,767	1,260	1,772
	%	<b>41.5</b>	<b>25.6</b>	<b>45.6</b>
	±95% CI	5.9	4.9	6.1

Racial/Ethnic Groups	Estimate <sup>‡</sup>	Seasonal (Trivalent) <sup>§</sup>	H1N1 (Monovalent) <sup>§</sup>	Seasonal and/or H1N1 <sup>§</sup>
High-risk 18–49 years, non-Hispanic other (Asian only)	n	252	180	255
	%	<b>42.9</b>	<b>21.5</b>	<b>44.1</b>
	±95% CI	10.6 <sup>††</sup>	11.1 <sup>††</sup>	10.5 <sup>††</sup>
High-risk 18–49 years, non-Hispanic other (AIAN only) <sup>‡‡</sup>	n	529	329	526
	%	<b>45.8</b>	<b>33.5</b>	<b>49.5</b>
	±95% CI	7.7	8.3	7.4
High-risk 18–49 years, non-Hispanic other <sup>§§</sup>	n	791	546	795
	%	<b>36.8</b>	<b>22.4</b>	<b>41.8</b>
	±95% CI	6.1	4.9	6.1

\* For 2009-10, the selected high risk conditions were asthma, other lung conditions, diabetes, heart disease, kidney conditions, anemia, weakened immune system caused by a chronic illness or by medicines taken for a chronic illness.

† Excludes U.S. territories.

‡ For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

§ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

|| Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

¶ CI: Confidence Interval.

\*\* Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

†† Estimates might be unreliable because confidence interval half-width is >10.

‡‡ AIAN: American Indian and Alaska Native.

§§ Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

## Race/Ethnicity, Adults 50-64 years

Table 9 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for adults 50-64 years, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability

of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 9-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 9-A.

**Table 9-A: Influenza vaccination coverage estimates by race/ethnicity among adults 50-64 years — United States,\* 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>‡</sup>	2010-11
50–64 years, non-Hispanic white only	n	52,738	92,723	97,401	104,754
	% <sup>§</sup>	<b>45.2</b>	<b>47.6</b>	<b>46.5</b>	<b>45.7</b>
	±95% CI <sup>  </sup>	0.8	0.8	0.6	0.8
50–64 years, non-Hispanic black only	n	4,724	8,711	9,574	10,316
	%	<b>38.4</b>	<b>41.8</b>	<b>40.3</b>	<b>38.4</b>
	±95% CI	3.3	2.7	2.0	2.4
50–64 years, Hispanic	n	2,763	4,806	5,565	6,087
	%	<b>35.8</b>	<b>39.4</b>	<b>40.3</b>	<b>41.9</b>
	±95% CI	3.7	3.3	2.8	3.3
50–64 years, non-Hispanic other (overall) <sup>¶</sup>	n	3,027	5,527	6,084	6,291
	%	<b>40.7</b>	<b>47.7</b>	<b>44.1</b>	<b>44.2</b>
	±95% CI	4.5	4.3	3.5	3.1
50–64 years, non-Hispanic other (Asian only)	n	736	1,389	1,657	1,642
	%	<b>40.7</b>	<b>52.2</b>	<b>48.8</b>	<b>49.3</b>
	±95% CI	8.2	7.6	6.2	5.7
50–64 years, non-Hispanic other (AIAN only)**	n	880	1,513	1,622	1,714
	%	<b>43.5</b>	<b>48.2</b>	<b>48.6</b>	<b>44.6</b>
	±95% CI	7.6	6.7	4.4	6.7
50–64 years, non-Hispanic other <sup>††</sup>	n	1,411	2,625	2,683	2,935
	%	<b>40.0</b>	<b>42.1</b>	<b>39.2</b>	<b>40.5</b>
	±95% CI	6.3	4.5	3.5	4.3

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS. Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more

on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season—United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 9-B: Influenza vaccination coverage estimates by race/ethnicity among adults 50-64 years — United States,\* 2009-10**

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
50–64 years, non-Hispanic white only	n	97,401	82,158	95,936
	% <sup>§</sup>	<b>46.5</b>	<b>24.2</b>	<b>49.8</b>
	±95% CI <sup>  </sup>	0.6	0.6	0.6
50–64 years, non-Hispanic black only	n	9,574	8,264	9,623
	%	<b>40.3</b>	<b>18.9</b>	<b>44.6</b>
	±95% CI	2.0	1.8	2.1
50–64 years, Hispanic	n	5,565	4,796	5,608
	%	<b>40.3</b>	<b>24.5</b>	<b>46.3</b>
	±95% CI	2.8	2.6	2.8
50–64 years, non-Hispanic other (overall) <sup>¶</sup>	n	6,084	5,207	6,082
	%	<b>44.1</b>	<b>23.8</b>	<b>47.8</b>
	±95% CI	3.5	2.7	3.1
50–64 years, non-Hispanic other (Asian only)	n	1,657	1,405	1,672
	%	<b>48.8</b>	<b>25.9</b>	<b>53.9</b>
	±95% CI	6.2	4.5	5.1
50–64 years, non-Hispanic other (AIAN only)**	n	1,622	1,294	1,613
	%	<b>48.6</b>	<b>31.0</b>	<b>51.4</b>
	±95% CI	4.4	4.1	4.3
50–64 years, non-Hispanic other <sup>††</sup>	n	2,683	2,247	2,675
	%	<b>39.2</b>	<b>23.5</b>	<b>42.8</b>
	±95% CI	3.5	3.9	3.7

\* Excludes U.S. territories.



† For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

## Race/Ethnicity, Adults ≥65 years

Table 10 summarizes national weighted estimates of influenza vaccination coverage by race/ethnicity for adults ≥65 years, across several recent influenza seasons. Coverage estimates have been previously published for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)), but estimates for 2007-08 and 2008-09 have not been previously published.

Please note: There have been changes in data sources, time periods, and vaccination recommendations across seasons. The 2009-10 influenza season was unique for several reasons: two vaccines and vaccination periods, and the availability of information for more high risk conditions. Detailed methods are available for the 2009-10 influenza season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)) and the 2010-11 season ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)). For 2007-08 and 2008-09 BRFSS adult estimates, the same analytic methods were used as for the 2010-11 season estimates just cited.

Additional estimates for 2009-10 vaccination coverage are available in [Table 10-B](#) or by selecting the column heading “2009-10 Seasonal (Trivalent)” in Table 10-A.

**Table 10-A: Influenza vaccination coverage estimates by race/ethnicity among adults ≥65 years — United States,\* 2007-08 through 2010-11**

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>‡</sup>	2010-11
≥65 years, non-Hispanic white only	n	50,824	91,507	98,355	113,158
	% <sup>§</sup>	<b>74.6</b>	<b>75.8</b>	<b>71.7</b>	<b>67.7</b>
	±95% CI <sup>  </sup>	0.8	0.6	0.5	0.6
≥65 years, non-Hispanic black only	n	3,342	6,164	6,988	7,957
	%	<b>60.0</b>	<b>63.8</b>	<b>55.1</b>	<b>56.1</b>
	±95% CI	3.5	3.1	2.3	3.3
≥65 years, Hispanic	n	1,833	3,368	3,574	4,505
	%	<b>66.8</b>	<b>68.8</b>	<b>56.1</b>	<b>66.8</b>
	±95% CI	5.5	4.1	3.3	3.7

Racial/Ethnic Groups	Estimate <sup>†</sup>	2007-08	2008-09	2009-10 Seasonal (Trivalent) <sup>‡</sup>	2010-11
≥65 years, non-Hispanic other (overall) <sup>¶</sup>	n	2,206	3,980	4,492	4,917
	%	<b>66.2</b>	<b>68.2</b>	<b>68.1</b>	<b>64.5</b>
	±95% CI	4.7	4.3	3.2	3.3
≥65 years, non-Hispanic other (Asian only)	n	609	1,074	1,291	1,346
	%	<b>68.6</b>	<b>73.5</b>	<b>70.7</b>	<b>67.9</b>
	±95% CI	8.4	7.6	5.6	6.3
≥65 years, non-Hispanic other (AIAN only)**	n	530	947	938	1,123
	%	<b>60.7</b>	<b>67.7</b>	<b>61.6</b>	<b>68.7</b>
	±95% CI	9.6	7.4	5.5	8.0
≥65 years, non-Hispanic other <sup>††</sup>	n	1,067	1,959	2,117	2,448
	%	<b>65.8</b>	<b>63.5</b>	<b>64.2</b>	<b>60.7</b>
	±95% CI	6.7	6.3	4.1	4.3

\* Excludes U.S. territories.

† For 2007-08 and 2008-09, data are from the Behavioral Risk Factor Surveillance System (BRFSS). For 2007-08, coverage estimates represent those interviewed January 2008–June 2008 who reported being vaccinated August 2007–May 2008. For 2008-09, coverage estimates represent those interviewed September 2008–June 2009 who reported being vaccinated August 2008–May 2009. For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)). For 2010-11, data are from BRFSS. Coverage estimates represent those interviewed September 2010–June 2011 who reported being vaccinated August 2010–May 2011. For more on methods see the [Data Source and Methods](#) of the report *Final state-level influenza vaccination coverage estimates for the 2010–11 season–United States, National Immunization Survey and Behavioral Risk Factor Surveillance System, August 2010 through May 2011* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_1011estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_1011estimates.htm)).

‡ Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.

**Table 10-B: Influenza vaccination coverage estimates by race/ethnicity among adults ≥65 years — United States,\* 2009-10**

Racial/Ethnic Groups	Estimate <sup>†</sup>	Seasonal (Trivalent) <sup>‡</sup>	H1N1 (Monovalent) <sup>‡</sup>	Seasonal and/or H1N1 <sup>‡</sup>
≥65 years, non-Hispanic white only	n	98,355	83,106	97,549
	% <sup>§</sup>	<b>71.7</b>	<b>29.1</b>	<b>73.9</b>
	±95% CI <sup>  </sup>	0.5	0.7	0.5
≥65 years, non-Hispanic black only	n	6,988	6,063	7,073
	%	<b>55.1</b>	<b>21.0</b>	<b>58.3</b>
	±95% CI	2.3	2.2	2.3
≥65 years, Hispanic	n	3,574	3,019	3,615
	%	<b>56.1</b>	<b>30.6</b>	<b>61.4</b>
	±95% CI	3.3	3.4	3.3
≥65 years, non-Hispanic other (overall) <sup>¶</sup>	n	4,492	3,819	4,502
	%	<b>68.1</b>	<b>31.6</b>	<b>71.8</b>
	±95% CI	3.2	3.9	3.1
≥65 years, non-Hispanic other (Asian only)	n	1,291	1,075	1,292
	%	<b>70.7</b>	<b>33.9</b>	<b>73.2</b>
	±95% CI	5.6	7.2	5.5
≥65 years, non-Hispanic other (AIAN only)**	n	938	776	941
	%	<b>61.6</b>	<b>37.1</b>	<b>68.2</b>
	±95% CI	5.5	5.9	4.9
≥65 years, non-Hispanic other <sup>††</sup>	n	2,117	1,742	2,112
	%	<b>64.2</b>	<b>28.8</b>	<b>67.0</b>
	±95% CI	4.1	4.9	4.1

\* Excludes U.S. territories.

† For 2009-10, data are from BRFSS and the National 2009 H1N1 Flu Survey (NHFS). For seasonal influenza vaccination, coverage estimates represent those interviewed October 2009–June 2010 who reported being vaccinated August 2009–May 2010. For influenza A (H1N1) 2009 monovalent vaccination, coverage estimates represent those interviewed November 2009–June 2010 who reported being vaccinated October 2009–May 2010. For more on methods see the [Data Source and Methods](#) of the report *Final estimates for 2009–10 Seasonal Influenza and Influenza A (H1N1) 2009 Monovalent Vaccination Coverage – United States, August 2009 through May 2010* ([http://www.cdc.gov/flu/professionals/vaccination/coverage\\_0910estimates.htm](http://www.cdc.gov/flu/professionals/vaccination/coverage_0910estimates.htm)).

‡ H1N1: Influenza A (H1N1) 2009 vaccination (monovalent); Seasonal: Seasonal influenza vaccination (trivalent).

§ Month of vaccination was imputed for respondents with missing month of vaccination data. Percentages are weighted to the non-institutionalized, U.S. civilian population.

|| CI: Confidence Interval.

¶ Includes Asian, American Indian and Alaska Native (AIAN), Native Hawaiian or other Pacific Islander, multiracial, and other races.

\*\* AIAN: American Indian and Alaska Native.

†† Includes Native Hawaiian or other Pacific Islander, multiracial, and other races.