

## Data Source Documentation

<b>Indicator</b>	Immunizations, under age 2
<b>Demographic Group</b>	Wisconsin children aged 19 to 35 months
<b>Numerator</b>	The number of Wisconsin children aged 19 to 35 months for whom both National Immunization Survey (NIS) household interview data and adequate provider verification data were obtained, and who received the 4:3:1:3:3 series of vaccinations. (See Details about Data Item, below.)
<b>Denominator</b>	The number of Wisconsin children aged 19 to 35 months for whom both National Immunization Survey (NIS) household interview data and adequate provider verification data were obtained. (See Details about Data Item, below.)
<b>Details about Data Item</b>	<p>The Wisconsin Immunization Program in the Division of Public Health recommends the 4:3:1:3:3 series of immunizations for children by age 24 months, signifying the following: four or more doses of diphtheria-tetanus-pertussis (DTP) vaccine, three or more doses of poliovirus vaccine, one or more doses of any measles-containing vaccine (MCV), three or more doses of haemophilus influenzae (Hib) vaccine and three or more doses of hepatitis B (HepB) vaccine.</p> <p>The U.S. Centers for Disease Control and Prevention (CDC) and the Wisconsin Immunization Program consider NIS estimates for immunizations of children aged 19 to 35 months the preferred measure of immunizations by age two. These estimates include both children who received immunizations on time (by 24 months) and those who received them late (between 25 and 35 months).</p> <p>NIS uses random-digit-dialing to find households with children aged 19 to 35 months. Parents or guardians are asked about the vaccines – with dates – that appear on the child's "shot card" kept in the home. At the end of the interview, parents are asked for permission to contact the child's vaccination providers. Providers are then contacted by mail to verify each child's vaccinations.</p> <p>The N, or number of cases, for each year in this measure is the number of Wisconsin children for whom both a household interview and a provider interview were obtained. On an annual basis, 68% to 72% of NIS household interviews have complete provider data available. The number of cases with both types of data is shown in the table.</p> <p>In the tables, the 95% confidence interval (the +/- column) indicates the range in which 95 of 100 identical surveys would estimate the percent of children who are fully immunized between the ages of 19 and 35 months. Add the confidence interval to the estimated percent to find the high boundary and subtract it to find the low boundary. Smaller numbers of cases in the denominator produce larger confidence intervals. Results shown in the table are weighted to represent the overall population of Wisconsin children aged 19 to 35 months.</p>

<b>Reference Time Period</b>	The child's entire lifetime to date (prior to the survey).
<b>Data Source</b>	National Immunization Survey, U.S. Centers for Disease Control and Prevention ( <a href="http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis">http://www.cdc.gov/vaccines/stats-surv/imz-coverage.htm#nis</a> )
<b>Additional Information</b>	<p>Additional information about the Wisconsin Immunization Program is available at <a href="http://dhs.wisconsin.gov/immunization/">http://dhs.wisconsin.gov/immunization/</a>.</p> <p>Additional information about the National Immunization Survey is available at <a href="http://www.cdc.gov/nis/">http://www.cdc.gov/nis/</a>.</p> <p>There was a decrease from 2008 to 2009 in the percent of Wisconsin children who were fully immunized, reflecting a national shortage of Haemophilus influenzae B (Hib) vaccine in 2008 and 2009. The vaccine is now readily available. Additional information is available at <a href="http://www.cdc.gov/media/pressrel/2010/r100916.htm">http://www.cdc.gov/media/pressrel/2010/r100916.htm</a>.</p>