

Vermont Immunization Program

2014 Annual Report

Immunizations remain the single most effective way to protect Vermonters against infectious diseases and some cancers. Diseases that vaccines have effectively prevented for years, such as measles or mumps, are re-emerging due to low vaccination rates in the U.S.

The Immunization Program reviews state and national data to assess immunization rates, identify populations at risk, and measure the impact of current initiatives. Efforts to improve immunization rates for all age groups involve collaboration with health care providers, insurers, schools, professional organizations and the Vermont Child Health Improvement Program.

Data highlights for children

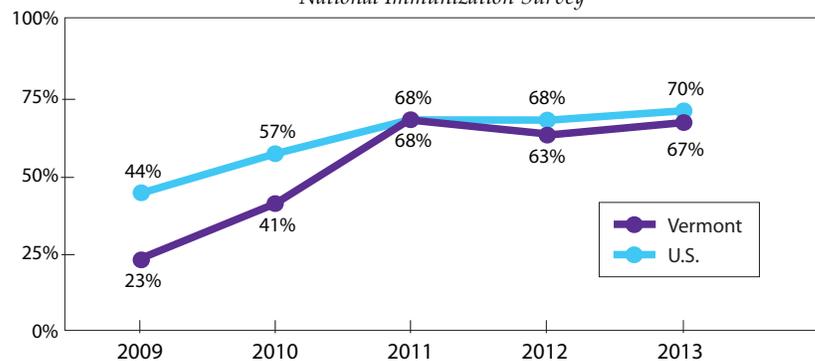
National Immunization Survey

The Centers for Disease Control and Prevention conduct an annual National Immunization Survey (NIS) to estimate immunization coverage rates for children 19–35 months of age. Results from the 2013 NIS show that 67 percent of Vermont children ages 19–35 months received the full series of recommended vaccines. This represents a four percent increase from 2012. In 2013, the Vermont rate was lower than both the national rate (70 percent) and the rate for all New England states (77 percent).



Percent of Vermont children age 19–35 months receiving the full series of recommended vaccines (4:3:1:4:3:1:4)*

National Immunization Survey

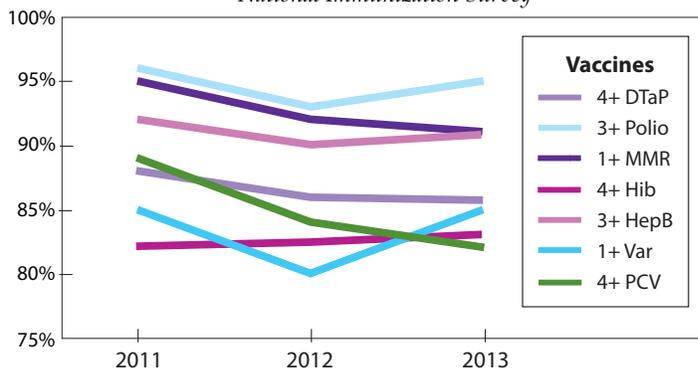


* 4+ DTaP: 4 or more doses of diphtheria, tetanus and pertussis vaccine; 3+ Polio: 3 or more doses of poliovirus vaccine; 1+ MMR: 1 or more dose of a measles, mumps, rubella vaccine; 4+ Hib: 4 or more doses of Haemophilus influenzae type b vaccine; 3+ HepB: 3 or more doses of hepatitis B vaccine; 1+ Var: 1 or more doses of varicella vaccine; 4+ PCV: 4 or more doses of pneumococcal conjugate vaccine

The individual immunization rates for three vaccines: polio, hepatitis B and measles, mumps and rubella (MMR is a combination vaccine) were above the national goal of 90 percent. Although not represented in the series, hepatitis A (49 percent) and rotavirus (73 percent) vaccines increased significantly in 2013. The immunization rate for pneumococcal vaccine dropped from 89 percent in 2011 to 82 percent in 2013. The chart on the following page shows changes by vaccine over the past three years, as reported by NIS.



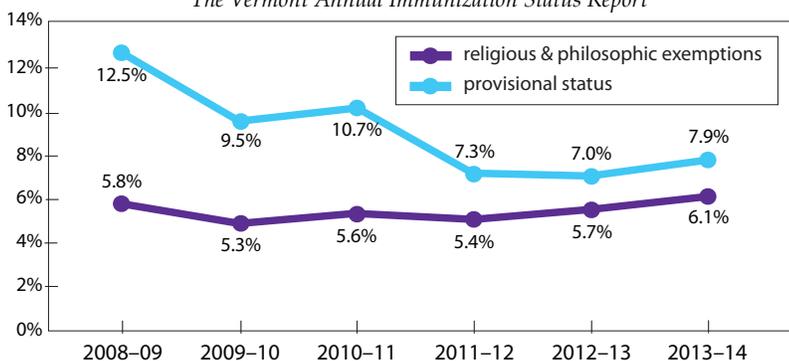
Vaccination coverage, Vermont children age 19–35 months, 2011–13
National Immunization Survey



Vermont Annual School Immunization Report

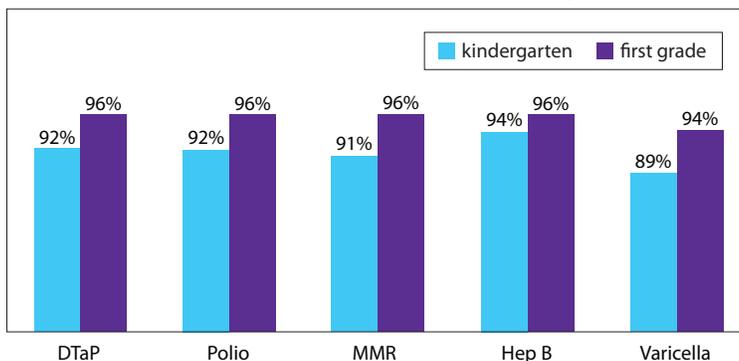
In the 2013–14 school year the percentage of students entering kindergarten who received all of the required vaccines was 86 percent, one percent less than the previous two years. The percentage of kindergarten students who were admitted provisionally (not up to date on vaccines and did not have an exemption) increased to 7.9 percent in the 2013-14 school year, from seven percent the prior year.

Immunization exemptions and provisional admittance by Vermont kindergarten students, 2008–2013 school years
The Vermont Annual Immunization Status Report



Differences in immunization rates were noted between public and private schools. In public schools, 87 percent of students entering kindergarten were fully immunized, and vaccine specific immunization rates were above 94 percent. However, in private schools only 72 percent of students entering kindergarten were fully immunized, and vaccine specific immunization rates were below 80 percent. Over 90 percent of all Vermont students entering first grade received each of the required vaccines.

Percent of Vermont children immunized by vaccine in kindergarten and first grade, 2013–14 school year
The Vermont Annual Immunization Status Report



Vermont Child Care Annual Immunization Report

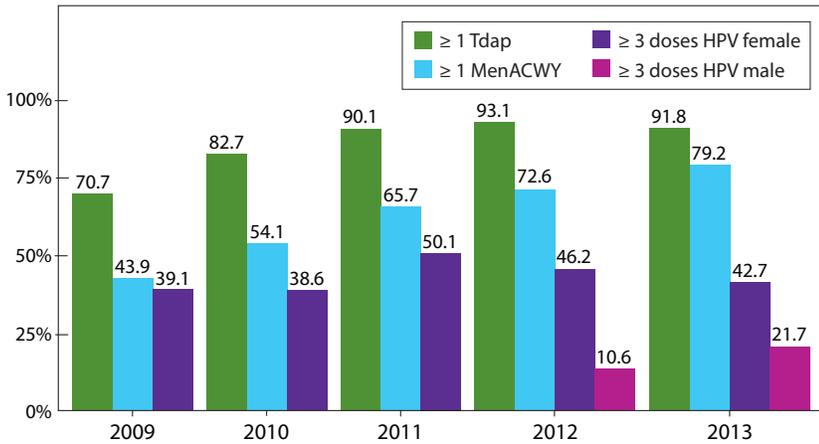
Annual immunization reports from child care facilities have been required in Vermont since 2011. In 2013, 60 percent (684) of all licensed and registered child care facilities completed reports. An analysis of all data indicates that 90 percent of children attending child care were up to date with all required vaccines. The non-medical exemption rate (philosophic and religious) was four percent.

Data highlights for teens

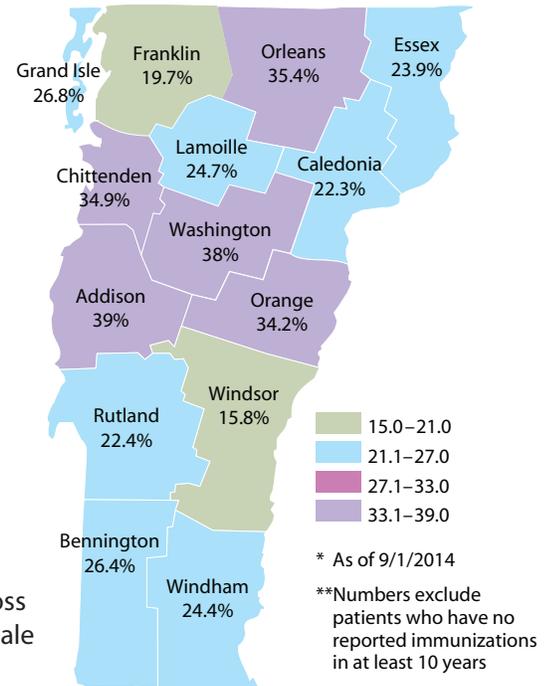
National Immunization Survey: Teens (age 13–17)

The percentage of Vermont teens who have received recommended vaccinations varies widely by vaccine. The Vermont immunization rates for tetanus, diphtheria, pertussis (92 percent) and meningococcal (79 percent) vaccines are above national rates. Despite increased evidence of the effectiveness of human papillomavirus (HPV) vaccine in the prevention of multiple cancers, HPV immunization rates for Vermont girls with ≥ 3 doses decreased from 50% in 2011 to 43% in 2013. The HPV vaccine was just recommended for boys four years ago, and already 22 percent of boys have had ≥ 3 doses of HPV vaccine.

Vermont teen immunization rates, 2009–2013
National Immunization Survey



Percent of teens age 13–17* with at least 3 doses of HPV vaccine**



Vermont Immunization Registry Data: Teens HPV Data

The Vermont Immunization Registry (IMR) is a statewide confidential computerized system for maintaining immunization records. The data in the IMR can be analyzed by geographic region to illustrate variations across the state. The map on right shows the percentage of teens (female and male combined) in each county that have completed the full HPV series.

Data highlights for adults

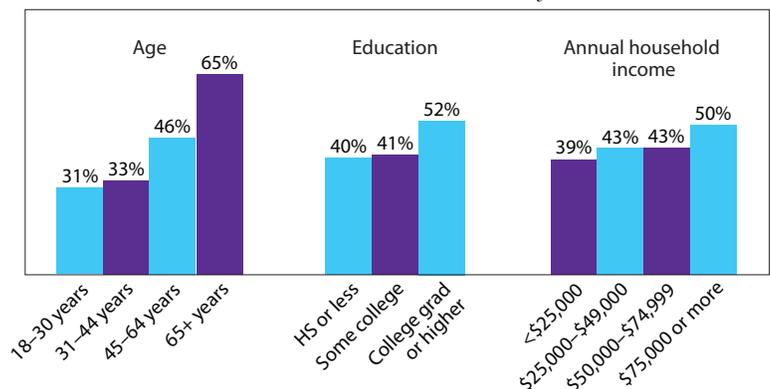
Behavioral Risk Factor Surveillance System: Influenza vaccination

The CDC recommends flu vaccination for all adults of all ages. According to a representative sample of Vermont adults, only 44 percent reported they received the flu vaccine in 2013. As the graph below demonstrates, younger adults with lower levels of education and income are less likely to obtain their annual influenza vaccination.



Percent of adult Vermonters that received an influenza vaccine in 2013

Behavioral Risk Factor Surveillance Survey (BRFSS)



Immunization Program accomplishments in 2014

Through an effective working relationship with primary care providers, schools and insurers, the Immunization Program continues its work to achieve high immunization rates and reduce the risk of vaccine preventable disease. Some highlights this year include:

- Access to vaccines in Vermont remains excellent — over 225 provider practices are enrolled in the Vaccines for Children and/or Vaccines for Adults program. These programs use federal and insurer funding to purchase vaccines for use in primary care practices.
- The legislatively mandated Vermont Immunization Funding Committee has been established to lead the Vermont Vaccine Purchasing Pool, which ensures sustainable funding from health insurers for vaccine purchases at the lowest possible cost.
- The Vermont Immunization Registry is now receiving over 40 percent of immunization records via HL7 reporting from electronic health records in provider offices across the state. This electronic transfer, via Vermont's health information exchange, eliminates the need for duplicate data entry and provides data in real time for use by health care providers, school nurses or child care providers.
- CDC awarded new grant funding to plan and integrate all facets of vaccine ordering within the Immunization Registry. This will reduce the time required by provider practices to account for and order vaccines.
- The Vermont Department of Health is one of only 17 states that make annual school immunization rates for each school publicly available.
- The "It's OK to Ask" social media campaign continues to educate and engage parents in the immunization discussion. Social media continues to build a loyal audience as evidenced by increased engagement and new followers.
- The CDC and the Health Department conducted a statewide evaluation to assess pertussis vaccine effectiveness. Results are expected in early 2015.



Looking ahead: Immunization Program priorities

- Vermont's childhood immunization rates remain lower than other New England states, which have comparable access to vaccines. The Immunization Program will continue efforts to educate parents, provide updated information, and support quality improvement efforts in provider practices.
- HPV vaccination rates for females have decreased over the past two years, resulting in missed opportunities to prevent certain cancers. A statewide collaborative effort is underway to increase HPV immunization rates and reduce the risk of HPV-related cancers.
- Vaccine management is challenging and time consuming for many practices. Strategies are being implemented to enhance education and simplify management of temperature excursions.
- Adult flu vaccine is not always easily accessible in Vermont, particularly for those with financial barriers. The Immunization Program is working to ensure flu vaccine is available for adults who lack access to health care services.
- Only 60 percent of child care facilities completed the required annual immunization report. The Immunization Program is working with the Department of Children and Families to increase the response rate.

Through ongoing evaluation and integration of public health efforts with health care reform, we will work to build on program successes, effectively meet new challenges and protect the most vulnerable in our community.