



# We address vaccination across the lifespan.

## Why is this important?

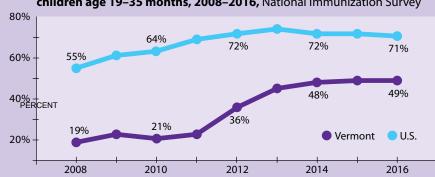
### • Centers for Disease Control and Prevention (CDC) Immunization Schedule recommends immunizations to prevent 14 diseases in young children. Combination vaccines reduce the number of shots a child receives.

- A birth dose of hepatitis B vaccine should be given within 24 hours of birth.
- Vaccines are required for enrollment in child care and preschool.

# Key findings

- Overall immunization rates for children under age 3 continues to steadily improve and outpace national rates.
- In 2016, 77% of Vermont children age 19–35 months received the full series of vaccinations recommended by the CDC, a steady increase from 63% in 2012.
- Low hepatitis B birth dose rates (49%) persist.

#### Hepatitis B birth-dose (0-3 days) vaccination coverage among Vermont children age 19-35 months, 2008-2016, National Immunization Survey



### Program initiatives

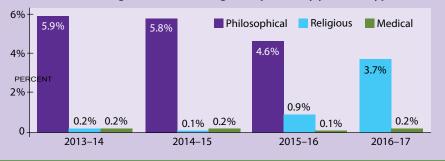
- Offer provider education, including quality improvement site visits, practice-specific immunization reports, the Vaccinate Vermont newsletter and a conference in May 2018
- · Meet with staff at Vermont birthing hospitals to review policies and ensure practices to prevent transmission of hepatitis B
- Facilitate reporting for child care and preschool



- All Vermont schools are required to report immunization rates to the Health Department by January 1.
- Schools must make immunization rates publicly available.
- Increased rates of non-medical exemptions are associated with higher rates of vaccine preventable disease.
- Recent policy change: philosophical exemption eliminated in 2016

- Of all Vermont students in K-12, 94% had all required vaccines.
- Kindergarten students who were provisionally admitted increased to 6.4%, from 4.6% last school year.
- Kindergarteners with a non-medical exemption decreased from 5.5% (religious or philosophic) in 2015–16 to 3.7% (religious only) in 2016–17.

#### Vermont kindergarteners receiving exemptions, by year and type



- Work with schools to maintain 100% reporting; provide ongoing education regarding regulations
- Make annual aggregate immunization rates for all schools available by June 1
- Ensure that Vermont school immunization law requirements are communicated clearly to parents, child care providers and school personnel



## CDC recommends three vaccines for adolescents: Tetanus, diphtheria, and pertussis (Tdap); Meningococcal; and HPV.

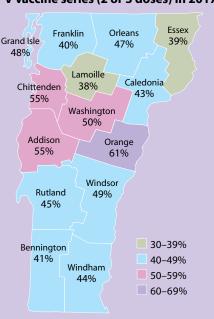
 HPV vaccine is more effective and fewer shots are required when started before age 15.

#### Age of first HPV vaccination in Vermont, 2017



- Vermont's rates were above U.S. rates for all three vaccines.
- In 2016, the National Immunization Survey reported that 94%, 86% and 56% of Vermont teens age 13–17 were up-to-date on Tdap, meningococcal and HPV vaccines, respectively.

#### Teens age 13-15 who completed the HPV vaccine series (2 or 3 doses) in 2017



- Education, outreach and quality improvement efforts to ensure that teens are fully vaccinated
- Collaboration with academic and community groups to increase awareness of and need for HPV vaccination
- Use of social media to increase parents' awareness of the benefits of flu vaccine for teens
- Flu vaccine is available to children and teens through their primary care provider





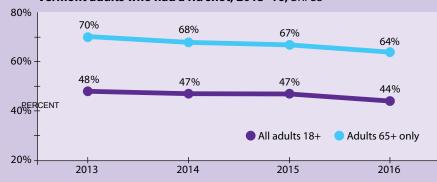


# Vaccine recommendations for adults vary depending on age and previous medical history.

 Pregnant women should receive a Tdap vaccine with each pregnancy.

- Vermont's flu vaccination rates decreased among adults age 65 and older who are at greatest risk for hospitalization and death due to flu.
- Forty-six percent of adults age 65 and older had received the pneumococcal conjugate vaccine (PCV13) as recommended.
- Zoster vaccination rates are among the highest in the U.S.

### Vermont adults who had a flu shot, 2013–16, BRFSS



- Through the Vaccines for Adults program, make recommended vaccines available to primary care providers at no cost for adults age 19-64
- Incorporate provider-targeted, adult-specific improvement efforts into the program



# Priority areas

# **Provider support**

- Offer every practice quality improvement guidance with up-to-date immunization rates
- Require optimal vaccine management to ensure viability of all vaccines
- Ninety-five percent of enrolled practices have received educational and compliance site visits
- All 203 enrolled practices received individual training in the use of the Vaccine Inventory Management System for ordering
- Provide continuing educational opportunities
- The Immunization and Infectious Disease conference will be held in May

#### Research and evaluation

- Evaluate the relationship between varicella vaccination rates, school requirements and disease incidence
- Participate in a Robert Wood Johnson Foundation-funded study on the impact of legislative changes on school immunization rates
- Assess options to increase flu vaccination rates
- Serve as community mentor for students at Larner College of Medicine at the University of Vermont who are conducting research to assess dental practitioner knowledge/recommendations for HPV vaccine
- Participate with the CDC and Harvard T.H. Chan School of Public Health to evaluate provider satisfaction with the Immunization Program

# OUR PARTNERS:



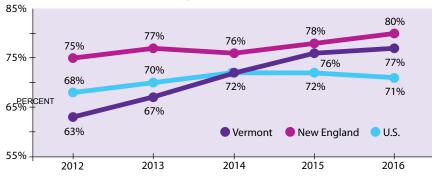




#### Access to vaccines

- Continue universal vaccine program, using federal and insurer funding to provide recommended vaccines at no-cost to providers for use in all populations from birth through age 64
- Work to enroll all primary care practices in the Vaccines for Children and/or Vaccines for Adults programs
- Ensure that vaccine ordering and management processes required of provider practices are efficient
- Collaborate with the Immunization Funding Advisory Committee to support the Vermont Vaccine Purchasing Program; insurers will provide over \$9 million for vaccine purchases
- Ensure that the Immunization Program is valued by primary care providers while meeting CDC requirements and state statutes

# Combined 7-vaccine series\* coverage, Vermont children 19–35 months National Immunization Survey



<sup>\*4+</sup> 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

