State Health Improvement Plan • 2013-2017

HEALTHY VERMONTERS 2020

VERMONT
DEPARTMENT OF HEALTH

January 2013

Development Committee

- Bi-State Primary Care Association
- Burlington Partnership
- Centerpoint
- Department of Disabilities, Aging & Independent Living
- Department for Children & Families
- Department of Mental Health
- Department of Vermont Health Access
- United Ways of Vermont
- University of Vermont/VCHIP
- VT Association of Hospitals & Health Systems
- VT Public Health Association (VtPHA)

- Department of Health
  - Alcohol & Drug Abuse Programs
  - Commissioner's Office
  - Communication Office
  - Health Promotion & Disease Prevention
  - Health Surveillance
  - Local Health
  - Maternal & Children's Health
  - Public Health Preparedness
  - St. Albans District Office

State Health Improvement Plan (SHIP)

• *Improving Health in the Healthiest State*

Vermont is regularly recognized as the healthiest state in the country. Despite this, Vermont's public health system recognizes the need for continued improvement in order to ensure that all Vermonters have equal opportunity to experience good health and quality of life.

In the spring of 2012, the Vermont Department of Health led a collaborative endeavor to develop our *State Health Improvement Plan*. Using *Healthy Vermonters 2020,* our state health assessment, as a foundation, key department and external stakeholders reviewed health status indicators of Vermonters with the goal of identifying three to five statewide strategic health priorities. The *State Health Improvement Plan* presents the priorities and improvement strategies agreed upon by multiple public health partners. It provides the framework for creating healthier communities over the next five years.

The *State Health Improvement Plan* development committee utilized a set of guiding principles to direct its work while developing the plan. These principles called for a focus on:

- determination of priority areas based on available data
- prevention as the highest priority for improving population health
- addressing conditions that impact social determinants of health
- achieving health equity among population groups
- choosing evidence-based interventions that incorporate policy and environmental approaches
- monitoring progress of interventions through a strong performance management system

More information on the guiding principles can be found in this document and in the Appendices.

COVER PHOTOS – Calvin Coolidge Homestead • Jim Eaton; Arcadia Brook Farm, North Ferrisburg • Karen Pike; Burke Mountain • Dennis Curran; home flower garden • David Grass; Burlington • Karen Pike; Burlington • Karen Pike; home vegetable garden • David Grass; Lake Champlain, Sand Bar State Park • Dennis Curran

• *State Health Improvement Goals*

The *State Health Improvement Plan* is organized around three goals that were chosen based on data reflecting the health status of Vermonters, and an interest in choosing priorities that are strategic. As a result, the focus of Vermont's plan is on conditions that are preventable and can be addressed by the public health system and, when improvements are made, will have a positive impact on multiple health outcomes in the future.

GOAL 1: Reduce the prevalence of chronic disease

Indicators:

- % of adults who eat the daily recommended servings of fruit/vegetables
- % of youth who eat the daily recommended servings of fruit/vegetables
- % of adults who meet physical activity guidelines
- % of youth who meet physical activity guidelines
- % of adults who smoke cigarettes
- % of youth who smoke cigarettes

GOAL 2: Reduce the prevalence of individuals with or at risk of substance abuse or mental illness

Indicators:

- % of people age 12+ who need and do not receive treatment for alcohol use
- % of youth who binge drink
- # of suicide deaths per 100,000 people
- % of suicide attempts among youth in grades 9-12 that require medical attention

GOAL 3: Improve childhood immunization rates

Indicators:

- % of children (19-35 months) who receive recommended vaccines
- % of Kindergarteners with 2+ doses of mumps, measles, rubella (MMR) vaccine
- % of youth age 13-15 who are vaccinated with one dose of Tdap vaccine

State Assets

Vermont benefits from several key assets that will aid implementation and monitoring of *State Health Improvement Plan* efforts:

- Vermont is a small state, with a history of collaboration among state government, community agencies, coalitions, hospitals, health centers and health care providers.

- The Vermont Department of Health is the single public health agency that serves all Vermonters, with its central offices and lab in Burlington, and 12 district offices located around the state.

- State health reform efforts have included a focus on promoting health and preventing chronic illness. Public Health is written into the state's health reform law.

- Dedicated public health professionals have expertise in evidence-based strategies for achieving *State Health Improvement Plan* goals.

- The Health Department's strong performance management framework, combined with 20 years experience with *Healthy Vermonters,* will enable measuring and reporting on progress made with *State Health Improvement Plan* interventions.

The Vermont Prevention Model

Individual Interventions = Motivates change in individual behavior by changing a person's knowledge, attitudes and beliefs.

Relationship Interventions = Facilitates individual behavior change through support aimed at changing social and cultural norms and overcoming individual barriers. Families, friends, and health care providers are all potential sources of interpersonal messages and support.

Organizational Interventions = Supports behavior change by influencing organizational systems and policies. Health care systems, employers, schools, child care settings, and health care plans are potential partners.

Community Interventions = Facilitates behavior change by leveraging and coordinating resources and participation of community-level institutions in health promotion activities.

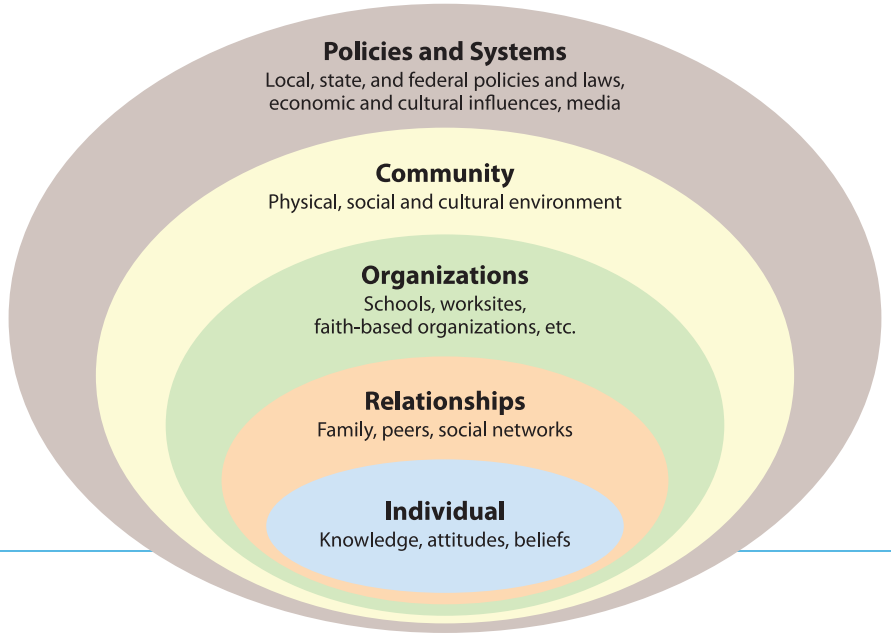
Policy and Systems Interventions = Supports behavior change through regulation, communication and supporting implementation of local, state and federal policies and guidelines.

Simultaneous with the work of the state-level *State Health Improvement Plan* development committee, communities throughout Vermont completed community health assessments. Although each community identified health issues based on regional needs, many of their chosen priorities are aligned with those contained in the state plan. This will allow coordination of efforts as state and local public health partners work to implement improvement plans.

Vermont's Approach to Prevention

Vermont's Prevention Model, based on a five-level Social-Ecological Model, describes multiple levels of interventions aimed at improving health. This model recognizes that, although individuals are ultimately responsible for making healthy choices, behavior change is more likely and more sustainable when the environment supports individual efforts. Comprehensive prevention and health promotion programs, to be most effective for the long term, and to reach the largest number of people, should address multiple levels of the model.

The ultimate goal is to implement interventions that make it easier for people to make the healthy choice, emphasizing the importance of prioritizing community and policy/system levels strategies.



The Social Determinants of Health

The conditions in which we live, work and play have an impact on our health. *Healthy People 2020*, the national framework for improving the health of all Americans, highlights the importance of addressing these conditions by including as one of the four overarching goals for the decade:

Create social and physical environments that promote good health for all.

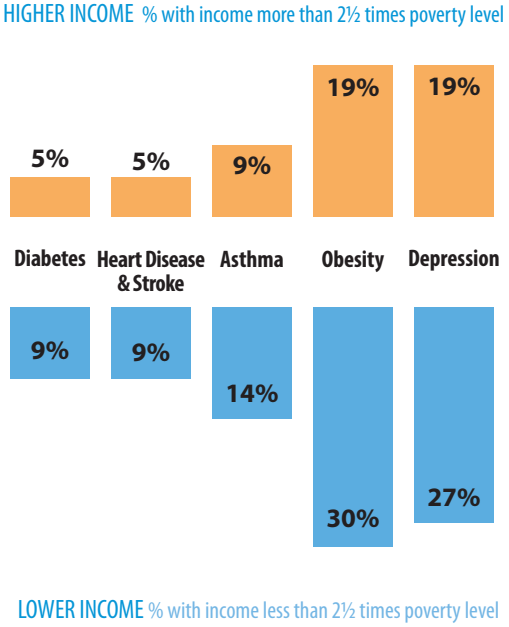
The conditions in which we live explain why some Vermonters are healthier than others, and why so many are not as healthy as they could be. Too many people in our state, especially younger, less educated, minority and lower income citizens, experience real differences in years of healthy life when compared to the general population. To ensure that all Vermonters have equal opportunities to make choices that lead to good health, advances are needed not only in health care, but also in areas such as education, child care, housing, law, community planning, transportation and agriculture.

Education, occupation and income combine to provide a measure of socioeconomic status, which is one of the strongest predictors of a person's health. Lower income Vermonters are less likely to have a healthy diet, have regular physical activity and are more likely to smoke. These behaviors are determinants of higher rates of depression and other chronic conditions such as obesity, asthma, heart disease, stroke and diabetes.

While Vermont's racial and ethnic minority populations are proportionally small (6%) compared to the rest of the United States, this population is growing at a faster rate than the population overall. Statistically significant differences in health outcomes or behaviors that exist between white non-Hispanics and people of racial and ethnic minority groups, are noted in this plan, *The Health Disparities of Vermonters 2010,* and *Healthy Vermonters 2020.*

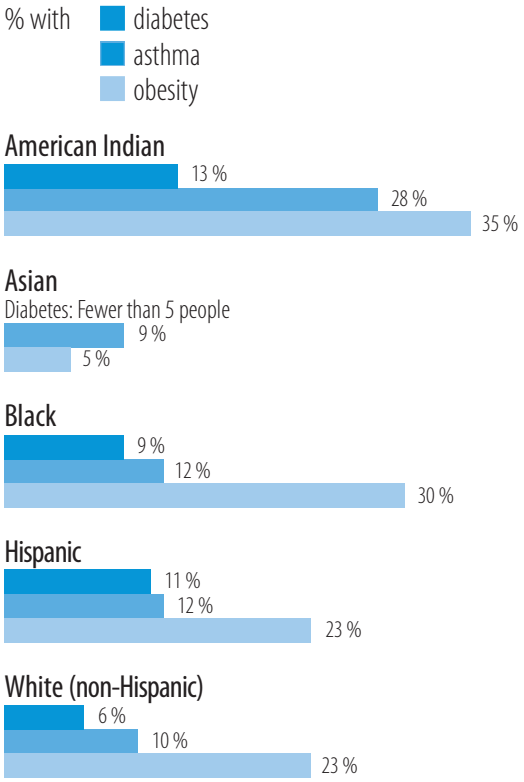
Chronic Conditions & Income

Vermont adults who report having a chronic condition, by Federal Poverty Level • 2010



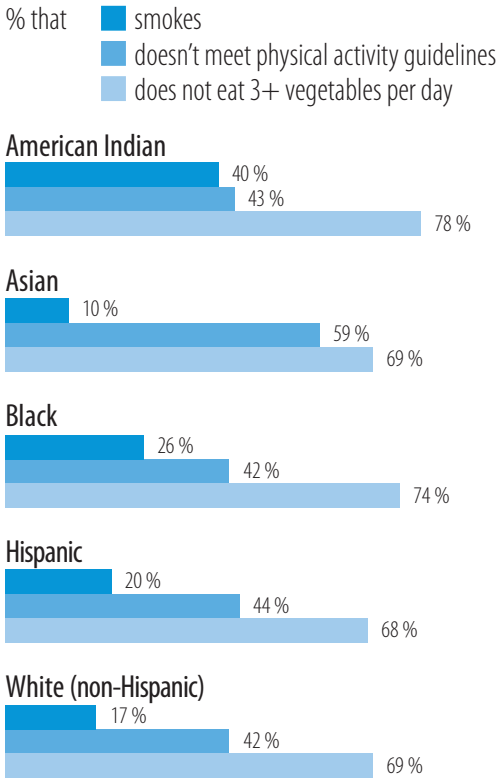
Race & Chronic Conditions

Vermonters age 18+ • 2006-2010



Race & Health Risk Factors

Vermonters age 18+ • 2005-2010



Evidence-Based Strategies

A guiding principle of the *State Health Improvement Plan* committee was to encourage use of strategies that have been proven to be effective at improving outcomes.

National agencies, such as the Centers for Disease Control & Prevention (CDC) and the Substance Abuse and Mental Health Services Administration (SAMHSA), offer resources to programs and policymakers that guide the selection of successful evidence-based interventions. To better target Vermont's efforts, Health Department content experts assessed all available nationally recognized strategies. As a result, three to five were identified for each *State Health Improvement Plan* goal.

A description of each goal and the associated evidence-based strategies are highlighted on the following pages.

For more information, see –

- Appendix A: *Vermont Recommended Evidence-Based Strategies*
- Appendix B: *Summary of State Health Improvement Plan Interventions*

GOAL 1: Reduce the prevalence of chronic disease

Tobacco Use

Tobacco use is the single most preventable cause of disease, disability and death in the U. S. It is associated with increased risk for some cancers, heart disease and other chronic diseases. Of the estimated 75,500 adult Vermonters who were smokers in 2010, half of those who continue will likely die of a smoking related cause.

About one-third of very low income (31%) and uninsured (35%) adults smoke. Those who did not graduate from high school are more likely to smoke (39%), and an estimated 38 percent of adults with mental illness smoke. Also in Vermont, 27 percent of adults and 19 percent of youth of racial and ethnic minorities are current smokers, compared to 17 percent of adults and 13 percent of youth who are white.

- Reduce % of adults who smoke cigarettes
  - 2020 Goal: 12%
  - 2010 Baseline: 16%

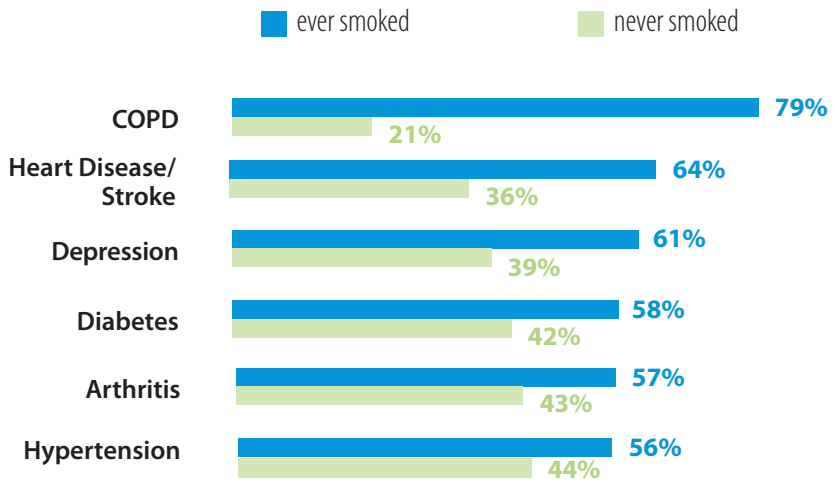
- Reduce % of youth in grades 9-12 who smoke cigarettes
  - 2020 Goal: 10%
  - 2011 Baseline: 13%

Evidence-based strategies

- Promote creation of smoke-free environments.
- Reduce point-of-sale marketing and product placement.
- Participate in statewide adult cessation media campaigns.

Smoking & Chronic Disease

Smoking status of adults who have chronic illnesses • 2010

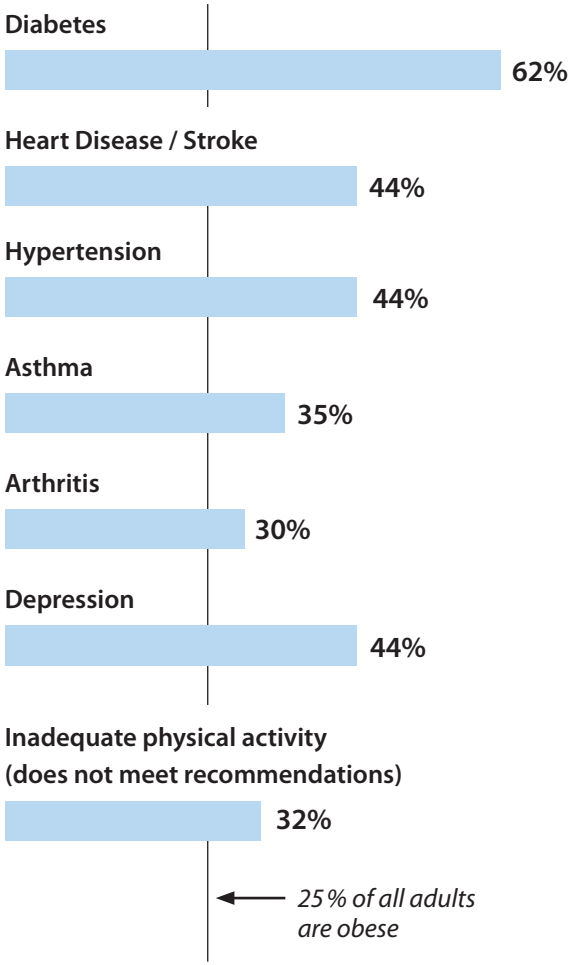


54% of all adults have never smoked

– Healthy Vermonters 2020

Obesity & Chronic Disease

In 2010, % of adults who report being obese, among those who have —



– *Healthy Vermonters 2020*

Nutrition and Physical Activity

Poor nutrition and physical inactivity are associated with a number of chronic conditions. This includes obesity, the second leading cause of preventable death in the U.S., after tobacco use. Being overweight or obese greatly increases a person's risk for many serious health conditions, including high blood pressure, high cholesterol, Type 2 diabetes, heart disease and some cancers. For the first time in history, children may not live as long as their parents.

- Increase % of people who eat 2+ servings of fruit/day

Youth in grades 9-12		Adults age 18+	
2020 Goal:	40%	2020 Goal:	45%
2011 Baseline:	26%	2009 Baseline:	38%

- Increase % of people who eat 3+ servings of vegetables/day

Youth in grades 9-12		Adults age 18+	
2020 Goal:	20%	2020 Goal:	35%
2011 Baseline:	17%	2009 Baseline:	30%

- Increase % of people who meet physical activity guidelines

Youth in grades 9-12		Adults age 18+	
2020 Goal:	30%	2020 Goal:	65%
2011 Baseline:	24%	2009 Baseline:	59%

Evidence-based strategies:

- Create or enhance access to locations for physical activity and healthy eating.
- Provide incentives to food retailers to locate in underserved areas and to offer healthier food and beverage choices.
- Promote increased physical activity and healthy eating options at worksites.
- Encourage increased availability of healthier food and beverage choices at public service venues, including schools.
- Restrict availability of less healthy foods and beverages at public service venues, including child care settings.

Goal 2: Reduce the prevalence of individuals with or at risk of substance abuse or mental illness

Substance Abuse

Alcohol contributes to motor vehicle crash fatalities, suicides, domestic violence and unintentional injuries. The age when a young person starts drinking strongly predicts alcohol dependence. Although the binge drinking rate among 12- to 20-year-old Vermonters has declined since 2007-2008, Vermont still has the highest rate of underage binge drinking in the country among this age group.

- Decrease % of youth age 12-17 years who binge drink

2020 Goal:	10%
2008-09 Baseline:	11%

- Reduce % of people age 12+ years who need and do not receive treatment for alcohol use

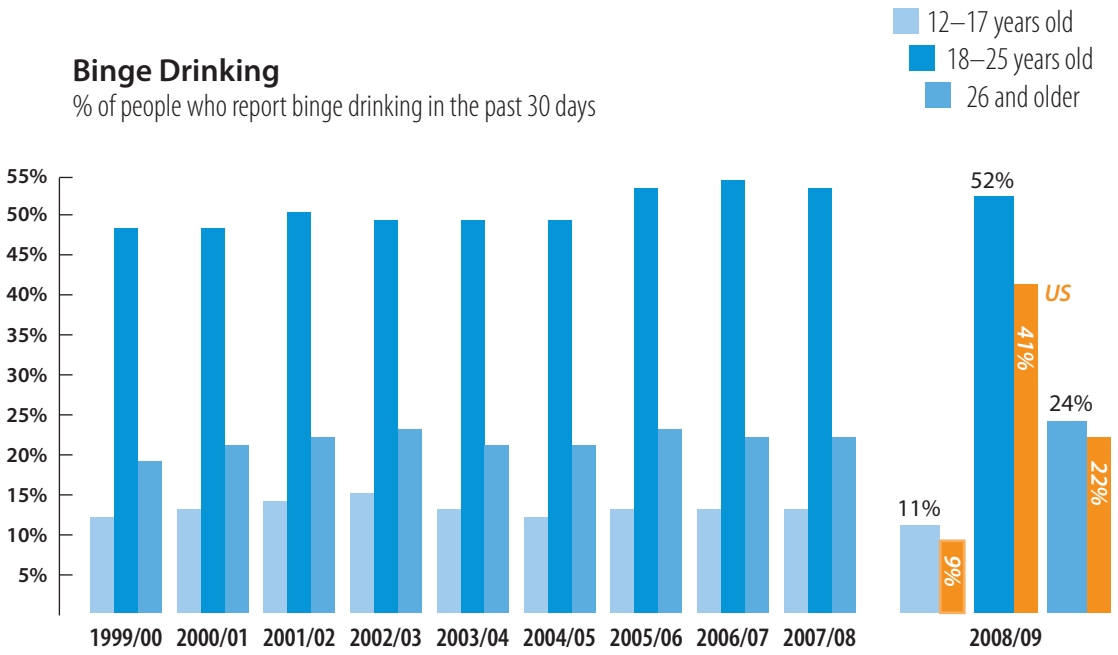
2020 Goal:	5%
2008-09 Baseline:	7%

Evidence-based strategies:

- Encourage use of the Addictions Severity Index and the Comprehensive Health Assessment for Teens (ASI/CHAT) tool among treatment providers.
- Develop policies that restrict hours of operation of alcohol outlets and limit locations of alcohol service.
- Implement Parent Family Education Programs that have been tested and shown to increase coping, communication and family management skills with parents and youth.

Binge Drinking

% of people who report binge drinking in the past 30 days



– Healthy Vermonters 2020

Mental Health

Mental health is a state of successful mental function and performance that results in productive activities, fulfulling relationships with other people, and the ability to adapt to change and to cope with challenges. Mental illness is the term that refers collectively to all diagnosable mental disorders.

Suicide is the second leading cause of death for young Vermonters between the ages of 10 and 24, averaging nine deaths per year. Young people who are of racial and ethnic minority groups are more likely to make a suicide attempt that requires medical attention (5%) compared to white youth (1%).

- Reduce # of suicide deaths (per 100,000 Vermonters)
  - 2020 Goal: 11.7
  - 2009 Baseline: 13.0

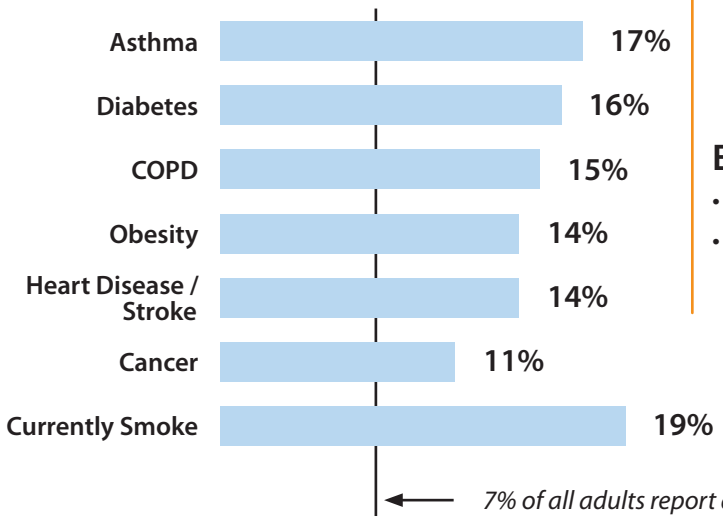
- Decrease % of suicide attempts by youth in grades 9-12 that require medical attention
  - 2020 Goal: 1.0%
  - 2009 Baseline: 1.6%

Evidence-based strategies:

- Train school professionals in the *UMatter* prevention protocol and *Lifelines* curriculum.
- Train professionals (mental health, law enforcement, first responders, social service workers, primary care, and leaders of faith communities) in the National Alliance on Mental Illness (NAMI-NH) Connect model.

Depression & Chronic Illness

In 2010, % of adults who report having depression, among those who have —



– Healthy Vermonters 2020

Goal 3: Improve childhood immunization rates

A person who is fully immunized is protected against vaccine preventable disease or severe illness, and helps protect the community from disease outbreaks. Some parents question whether all vaccines are still needed, and are concerned by the increased number of vaccines that are recommended and misinformation about vaccine safety. Overall immunization rates in Vermont have trended downward until recently. For the 2010/11 school year, 6 percent of children entering Kindergarten had a religious or philosophical exemption. Another 11 percent entered provisionally, without being up to date on their vaccinations. Because immunity to some diseases wanes over time, adolescents need one dose of Tdap booster vaccine by age 15.

- Increase % of children age 19-35 months who receive recommended vaccines
  - 2020 Goal: 80%
  - 2010 Baseline: 41%

- Increase % of Kindergarteners with two or more doses of MMR (measles, mumps, rubella) vaccine
  - 2020 Goal: 95%
  - 2010-11 Baseline: 91%

- Increase % of youth age 13-15 who are vaccinated with one dose of Tdap (tetanus, diphtheria, pertussis) vaccine
  - 2020 Goal: 90%
  - 2010 Baseline: 83%

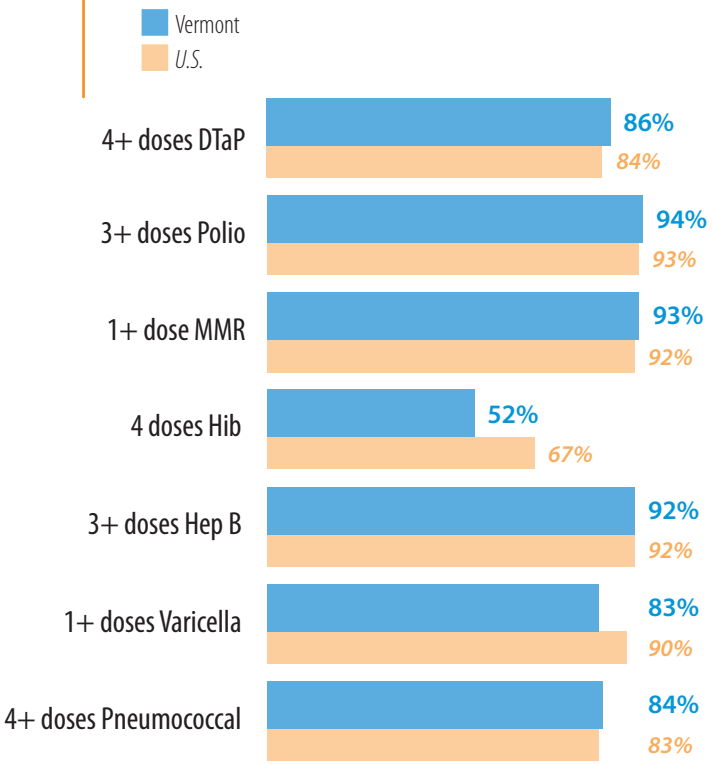
Evidence-based strategies:

- Encourage client reminder-recall systems in provider practices.
- Support vaccination requirements for child care, school and college attendance.
- Conduct site visits with all provider practices enrolled in Vaccines for Children (VFC) and Vaccines for Adults (VFA) annually.

Vaccine Series for Babies

% of babies age 19-35 months who are fully immunized with five universally recommended vaccines • 2010 *

DTaP to prevent Diphtheria, Tetanus and Pertussis (Whooping Cough)
Polio to prevent Polio
MMR to prevent Measles, Mumps and Rubella
Hib to prevent Haemophilus Influenzae b
Hep B to prevent Hepatitis B
Varicella to prevent Varicella (Chickenpox)
Pneumococcal Vaccine to prevent Pneumococcal Disease



* *A national shortage of Hib vaccine contributed to lower rates of fully immunized babies in Vermont and the U.S. for 2009 and 2010.*

Performance Management

The Vermont Department of Health has a comprehensive performance management framework in place to improve the health status of Vermonters by ensuring the efficacy and evidence base of services delivered. Performance management establishes and manages systems at the Health Department to identify and regularly report on population objectives and performance measures, perform quality improvement activities, and assess and emphasize the need to fund and implement evidence-based practices to change population outcomes.

This comprehensive performance management system is supported by Public Health Stat, a management tool that facilitates data-driven decision making, and Public Health Accreditation readiness activities. The Health Department, as the lead *State Health Improvement Plan* agency, will utilize its performance management framework to monitor progress of interventions associated with the plan, and realign efforts of the department and partners as indicated by the data.

Performance Management Framework Components

Population Health Status = Identification of, and managing to, population health priorities to improve the health of all Vermonters. *Healthy Vermonters 2020* and the *State Health Improvement Plan* document the state's current population health status priorities. These population-level indicators are displayed on the Performance Dashboard at the Health Department website: **http://www.healthvermont.gov/hv2020**

Performance Measures = Identification and monitoring of programmatic measures that enable managers to hold staff accountable for implementing evidence-based interventions that target population priorities. These measures should be evidence-based and describe how the department holds itself accountable to making population-level change. Performance measures are displayed on the Performance Dashboard at the Health Department website: **http://www.healthvermont.gov/hv2020**

Public Health Stat = Process that facilitates data-driven decision making through cross-divisional meetings focused on department priorities. Program planning and resource allocation decisions are made based on data, with key stakeholder input, and aligned to strategic goals and performance measures. *State Health Improvement Plan* priorites are regular topics at Health Department monthly Public Health Stat meetings.

Quality Improvement = The Agency Improvement Model (AIM) is the Health Department's quality improvement tool. It is a straightforward approach to identifying changes that will benefit the customer, and engaging staff to plan and measure incremental change. This is similar to Plan-Do-Study-Act cycles and the NIATx model. The AIM process will be used to identify and manage improvements related to *State Health Improvement Plan* priorities.

Performance Based Granting/Contracting = Allows entering into agreements with partners based on what is to be achieved, rather than how it is done. In the context of performance management, this allows the work of partners to be aligned with population priorities and Health Department performance measures.

Performance Evaluations = Performance evaluation defines functions of an employee's job, monitors and evaluates performance, offers career development and succession planning, and ensures that population goals and missions are emphasized. In the context of the performance management framework, the evaluation process allows staff to understand how their efforts align to population objectives and performance measures to address priority health issues.

Performance Management Framework