

Vermont State Asthma Plan

2013—2018



HEALTHY
VERMONTERS
2020



 VERMONT
DEPARTMENT OF HEALTH

Acknowledgements

The Vermont Asthma Program sincerely appreciates the many individuals and organizations who participated in the planning process of the 2013–2018 Vermont Asthma State Plan. This document was made possible through the invaluable time, input, and consideration from the following individuals and organizations, in collaboration with the Vermont Department of Health staff:

- American Academy of Pediatrics
 - American Lung Association of the Northeast
 - Asthma Resource Council
 - Blueprint for Health
 - Centers for Disease Control and Prevention
 - Connecting Youth Tobacco Coalition
 - Environmental Protection Agency
 - Fletcher Allen Health Care
 - Hagan, Rinehart & Connolly Pediatrics
 - Mt. Anthony Primary Care
 - Rutland Regional Medical Center
 - Timber Lane Allergy & Asthma Associates
 - University of Vermont, Department of Nursing
 - University of Vermont, Vermont Lung Center
 - Vermont Child Health Improvement Project
 - Vermont Department of Disabilities, Aging & Independent Living
 - Vermont Department of Health Access
 - Vermont Department of Labor
 - Vermont Pharmacist Association
- Stephanie Winters
Rebecca Ryan
Stacey Chacker
Jenney Samuelson
Kathie Sunnarborg
Christine Lloyd-Newberry
Alison Simcox, PhD
Barbara Frankowski, MD
Julie Houchell, FNP
David Kaminski, MD
Thomas Lahiri, MD
Jill Rinehart, MD
Greg King, MD
Sarah Cosgrove, RT, AE-C
Sarah Narkewicz, RN, MS
Betsy Jaffe, MD
Jean Coffey, PhD, APRN
Charles Irvin, PhD
Richard Wasserman, MD
Patricia Berry, MPH
Mary Woodruff, MPH, RD
- Jenney Samuelson
Scott Meyers
Jim Marmar, Pharm D

This plan is supported by Grant/Cooperative Agreement Number EH0990104 from the Centers for Disease Control and Prevention (CDC). The contents outlined in this document are solely the responsibility of the authors and do not necessarily represent the official views of the CDC.

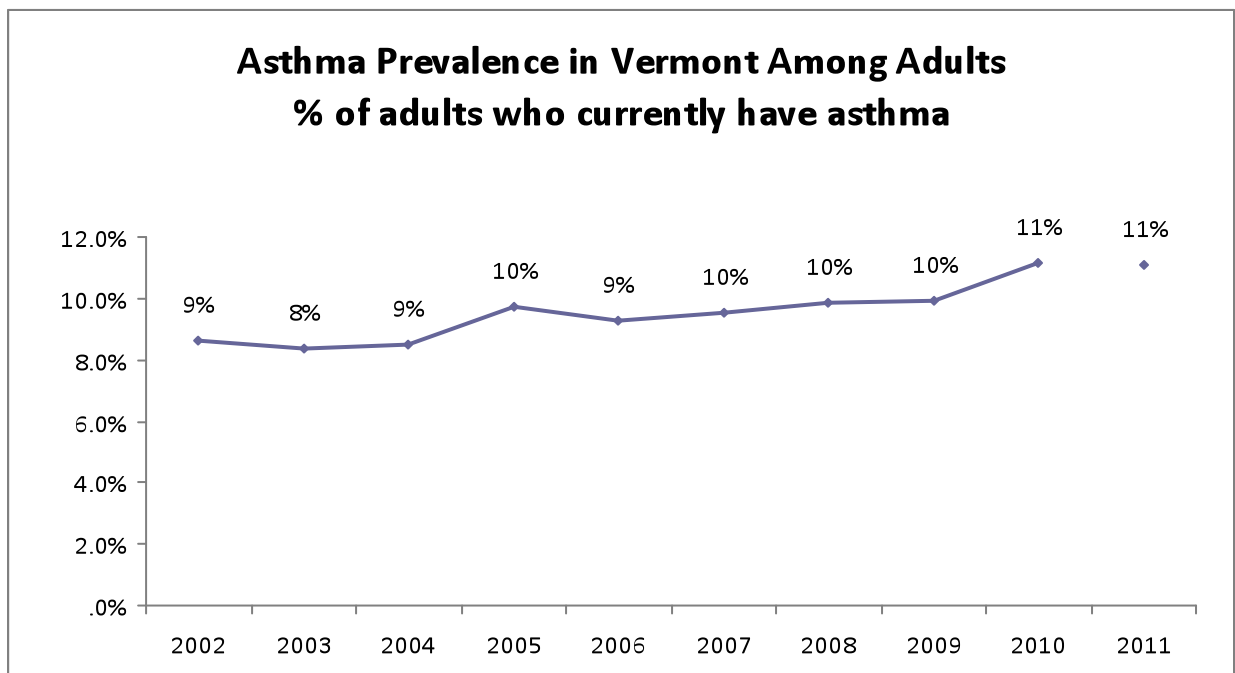
Issued: 5.1.2013

Executive Summary

Asthma in Vermont represents a serious public health concern. According to the latest data available, Vermont's asthma rates in adults are the highest in the country. Asthma affects 11.1 percent of all adults in Vermont and 10 percent of all children. For adults, this percentage is significantly higher than that of the U.S. average of 8.6 percent.

Asthma is a disease that affects the lungs and respiratory system. Common symptoms include wheezing, coughing and shortness of breath caused by airflow obstruction. Asthma is a chronic condition that demands ongoing patient self-management and compliance. Due to its reoccurring symptoms and exacerbations, asthma dramatically influences daily functioning and overall quality of life standards.

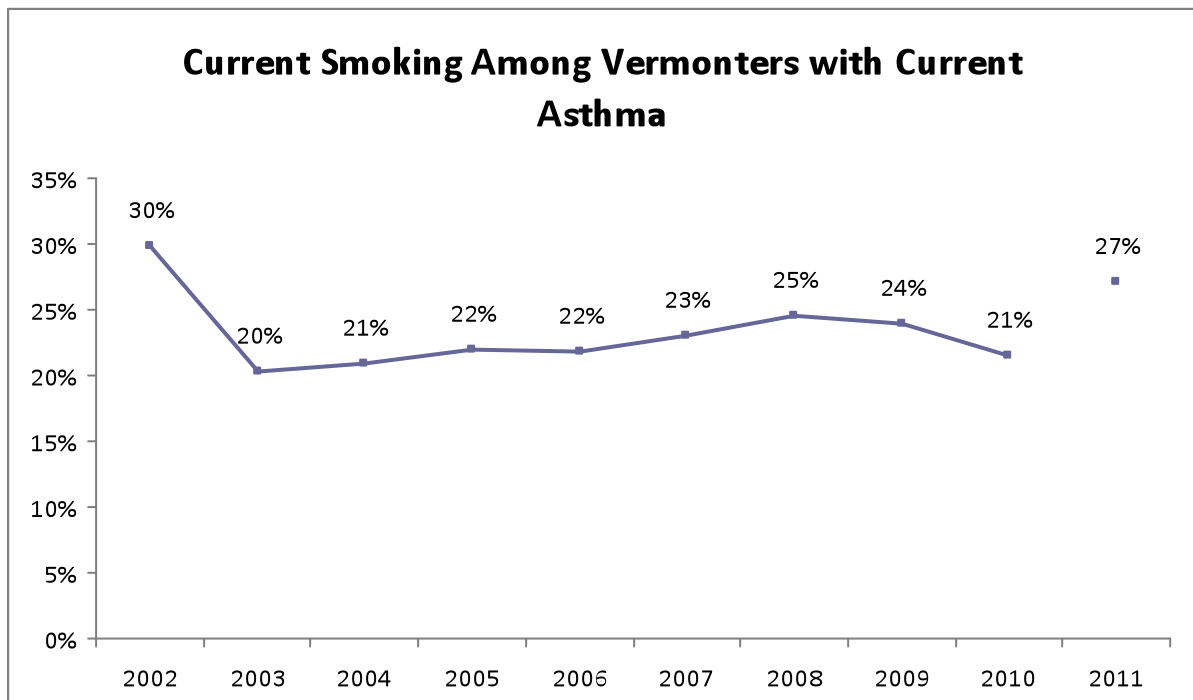
Because of asthma's severity, chronic nature, and burden in Vermont, the Vermont Asthma Program was created to help eliminate health disparities caused by asthma and improve the quality of life of all Vermonters affected by asthma. The Vermont Asthma Program is supported by the National Asthma Control Program of the National Center for Environmental Health, Air Pollution and Respiratory Health Branch of the Centers for Disease Control and Prevention (CDC). This program uses a public health approach to build capacity in the core areas of public health. These areas include tracking, community and medical interventions, education and learning collaborations, and partnership creation.



Note: Due to methodological changes in the Vermont Behavioral Risk Factor Surveillance Survey (BRFSS), 2011 data is not included in this 2002–2010 trend.

This five-year plan sets the strategic direction to guide the Vermont Department of Health towards meeting its goals and achieving its mission of reducing the burden of asthma in Vermont. Activities and objectives outlined here represent feedback from key stakeholders within the state including medical providers, public health leaders, allied health professionals and community members. The goals described in this document, although based on national standards from the CDC and Healthy People 2020 objectives, are tailored for the specific needs of Vermonters. This plan is based on the efforts and accomplishments of two previous plans in 2003 and 2008.

Since that time, the Vermont Department of Health has made strides in reducing the burden and complications associated with asthma. One of the measures used to monitor the burden of asthma in a population is hospitalizations, which can speak to several different factors including access and utilization of care, patient self-management, and environmental triggers. Using the most recent preliminary data available, it appears that Vermont is making progress in reducing hospitalizations and emergency room visits attributed to asthma exacerbations and is below that of the national average for all age groups. Over the past years, the hospitalization measure has been an area of concern for the Department of Health in terms of asthma control and severity and self-management practices. Another important measure has been the utilization of Asthma Action Plans in all ages, especially in school-aged children. We are seeing modest increases in the use of Asthma Action Plans. In an effort to address asthma from an environmental perspective, the Department of Health has made strides in reducing smoking prevalence in people with asthma, as well as reducing the exposure of secondhand smoke in people with asthma and the general public.



Note: Due to methodological changes in the Vermont Behavioral Risk Factor Surveillance Survey (BRFSS), 2011 data is not included in this 2002–2010 trend.

Healthy People 2020

Healthy People 2020 represents a multiyear process of promoting health and well-being on the national level. While it is a national campaign, each state models its own indicators and activities around the four overarching goals. The strategic objectives outlined in the state's 2013–2018 Asthma State Plan are organized under the four major goals of *Healthy People 2020*. These overarching goals include:

1. Attain high quality, longer lives free of preventable disease, disability, injury, and premature death.
2. Achieve health equity, eliminate disparities, and improve the health of all groups.
3. Create social and physical environments that promote good health for all.
4. Promote quality of life, healthy development and health behaviors across all life stages.



Using this framework, *Healthy Vermonters 2020* contains specific health goals to address chronic disease and risk behaviors impacting the state's population. To decrease the burden of asthma, the following specific goals were created. These include:

- Reduce hospitalization rates in both adults and children.
- Increase the percentage of adults and children with written Asthma Action Plans.
- Reduce exposure to second hand smoke.
- Reduce exposure to environmental triggers in the home, work, and school environment.
- Increase provider and patient education on asthma self-management practices.

To align with these national standards and promote optimal asthma care, this plan contains five goals which include focus on the indoor and outdoor environment and its affect on asthma, improved patient care through implementing the National Asthma Education Prevention Program (NAEPP) guidelines, and efforts to bring asthma to the forefront of health care reform in Vermont. A strong focus has been placed on positioning asthma more fully in the context of addressing the physical environment in addition to improving clinic-based care.

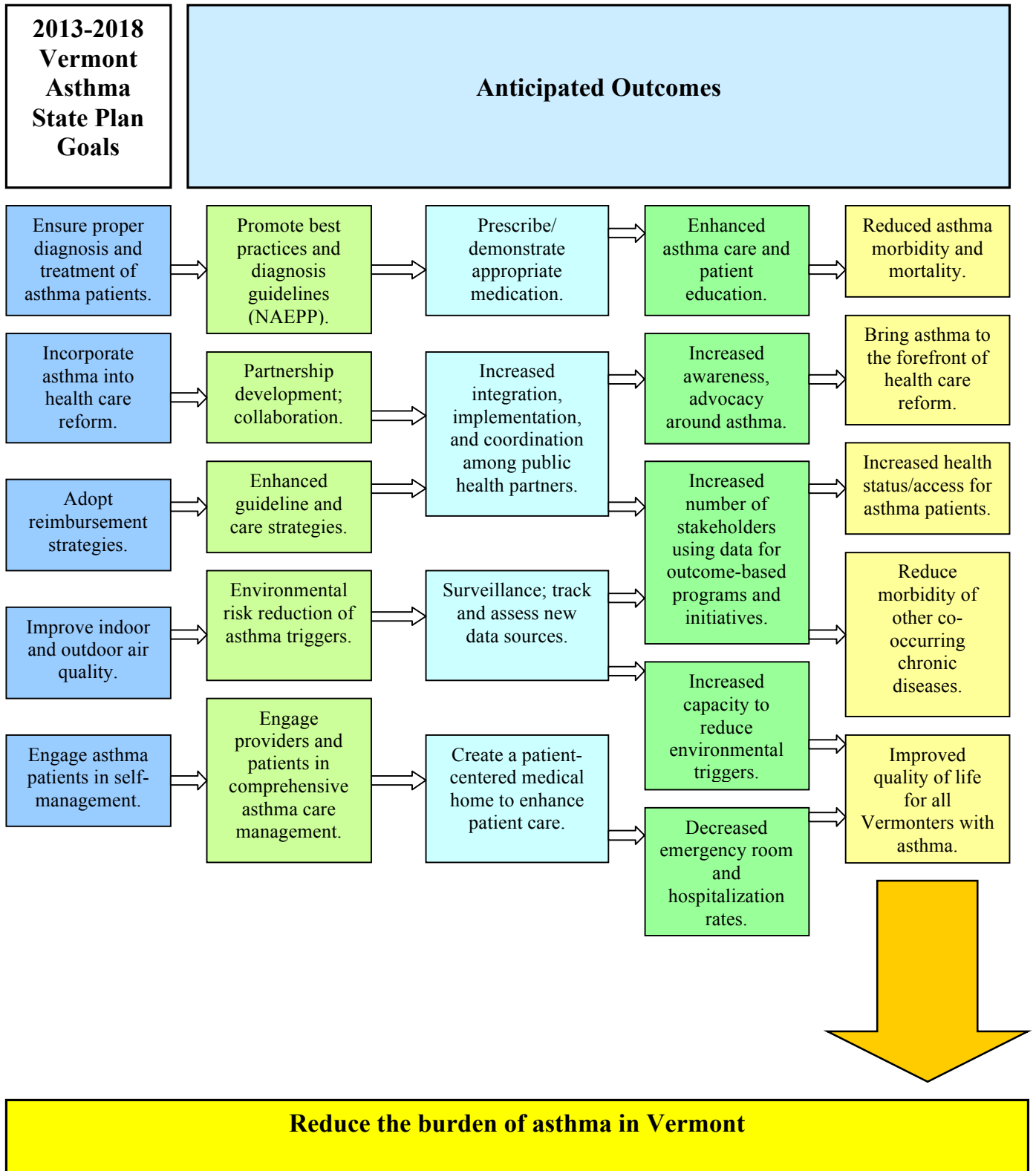
The 2013-2018 Asthma State Plan goals are:

- Ensure proper diagnosis and treatment of asthma patients using National Asthma Education Prevention Program (NAEPP) guidelines.
- Pursue sustained efforts to incorporate asthma care into the forefront of state and national health care reform.
- Adopt reimbursement strategies for health care systems that lead to optimal asthma care.
- Improve both indoor and outdoor air quality for all Vermonters.
- Engage Vermonters with asthma, their families, and other caregivers in appropriate self-management.

Through the successful completion of these strategic objectives, the Asthma Program will be well positioned to dramatically reduce the prevalence of asthma in Vermont and enhance the quality of life of all people living with asthma. An ongoing focus of the Asthma Program is to address asthma (and other co-occurring chronic diseases) in a culturally-competent manner with a focus on health equity and health care access. To meet the needs of populations disproportionately affected by asthma in Vermont, the following activities are targeted on those living at or below 125 percent of the Federal Poverty Level and those with a high school education or less.

Note: Unless noted, all data sources used to describe asthma in Vermont is from the Vermont Behavioral Risk Factor Surveillance Survey (BRFSS), a national telephone survey that all states use to measure the health status of their residents, and the Vermont Asthma Call Back Survey.

Conceptual Framework of the 2013–2018 Vermont Asthma State Plan



**Healthy Vermonters 2020 Overarching Goal:
Attain high quality, longer lives free of preventable disease,
disability, injury and premature death.**

Goal 1: Ensure proper diagnosis and treatment of asthma patients using National Asthma Education Prevention Program (NAEPP) guidelines.

Objective 1.1: Diagnose asthma and asthma severity/control properly.

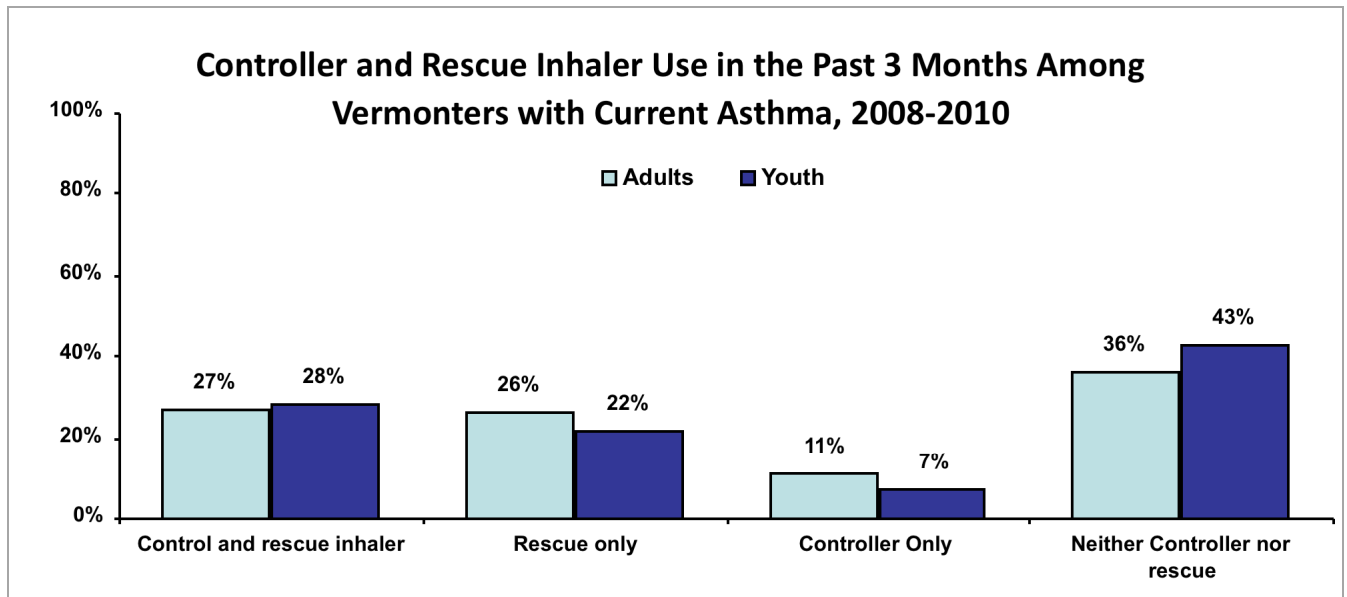
Activities/Strategies:

- Perform spirometry training and interpretation of results.
- Prescribe inhaled corticosteroids.

Objective 1.2: Initiate appropriate medication treatment and demonstrate proper use for patients.

Activities/strategies:

- Incorporate exposure and asthma trigger questions into DocSite to assist and improve patient care.
- Teach patients how to correctly use medications.



Objective 1.3: Revise and increase use of Asthma Action Plans.

Activities/Strategies:

- Promote and support evidence-based programs and interventions to improve patient self-management.
- By July 2014, revise the Vermont Asthma Action Plan (<http://healthvermont.gov/prevent/asthma/tools.aspx>) to be symptom-based versus peak flow based.
- Embed Asthma Action Plan template into electronic health record (EHR) systems.

Objective 1.4: By July 2018, reduce rates of emergency department visits due to asthma in groups with historically high rates of visits.

Activities/strategies:

- Reduce rates of overall emergency department visits for groups with high rates of hospitalization:
 - Reduce rates of emergency department visits in boys under age 15 from 63.3 per 10,000 to 57.0 per 10,000.
 - Reduce rates of emergency department visits in women age 15-44 from 76.9 per 10,000 to 69.2 per 10,000.
 - Reduce rates of emergency department visits in men aged 15–44 from 41.4 per 10,000 to 37.2 per 10,000.
- Explore an Emergency Department Asthma Learning Collaborative that engages four to six emergency departments on best practices for asthma management.
- Create and disseminate an Asthma Discharge Policy that recommends asthma education, inhaler technique training, and setting up of an appointment within 10 days of discharge for both children and adults.

Objective 1.5: By July 2018, reduce rates of hospitalizations due to asthma in groups with historically high rates of hospitalizations.

Activities/strategies:

- Reduce rates of overall hospitalizations attributed to asthma exacerbations:
 - Reduce hospitalization rates in boys under age 15 from 11.3 per 10,000 to 10.2 per 10,000.
 - Reduce hospitalization rates in adults aged 65+ from 11.6 per 10,000 to 10.1 per 10,000.
 - Reduce hospitalization rates in women age 15–44 from 6.8 per 10,000 to 6.1 per 10,000.

Objective 1.6: Support policies aimed at physical activity promotion, nutrition education and tobacco cessation for those with asthma and/or other co-occurring chronic diseases.

Activities/strategies:

- By July 2018, decrease the % of adults with asthma who are obese from 35% to 30%.
- By July 2018, increase from 29% to 33% consumption of at least five servings of fruit and vegetables per day among adults and youth with asthma.
- By July 2018, reduce prevalence of smoking among adults with asthma from 21% to 17%.
- Increase registration of smokers with asthma into the Vermont Quit Network by 5% each year.

**Healthy Vermonters 2020 Overarching Goal:
Achieve health equity, eliminate disparities
and improve the health of all groups.**

Goal 2.1: Pursue sustained efforts to incorporate optimal asthma care into the forefront of state and national health care reform.

Objective 2.1: By July 2016, expand partnerships and collaborations in order to leverage additional resources and efforts to address asthma in Vermont.

Activities/strategies:

- Incorporate asthma case detection, referral and education into existing community programs such as Cathedral Square’s Support and Services at Home (SASH) program, Visiting Nurses Association, Maternal Child Health’s Nurse-Health Partnership, Healthy Homes and Lead Visiting Program, and the Department for Children and Family.
- Coordinate with other state agencies addressing policies to improve asthma conditions and provision of care.
- Leverage opportunities for inclusion of guideline care and best practice policy as part of health care reform.
- Create an annual media and communications plan for the Department of Health’s Asthma Program that is shared with the Asthma Advisory Council and partners.
- Create a policy committee under the Asthma Advisory Panel to oversee policy analysis, development and implementation.

Goal 2.2: Adopt reimbursement strategies for health care systems that lead to optimal asthma care.

Objective 2.2.1: By July 2018, expand coverage from insurance providers for asthma to include private and public insurance plans.

Activities/strategies:

- Obtain coverage from two insurance carriers (from a baseline of zero) for spacers or a mask for children under age 6 and elders.
- Pursue with insurance carriers policies for appropriate access to medications (relievers) to ensure continuity of care.
- Explore payment methods for in-home asthma education for high-risk asthma patients.
 - Monitor the Vermont Medicaid Chronic Care Initiative model of addressing high-risk asthma outcomes through delivery of in-home asthma education and use this data with other insurers.
- Train Office of Local Health District personnel in asthma management; invite district staff to all asthma webinars, trainings and relevant meetings.

**Healthy Vermonters 2020 Overarching Goal:
Create social and physical environments that promote good health for all.**

Goal 3: Improve both indoor and outdoor air quality for all Vermonters.

Objective 3.1: Enhance community-level partnerships around supporting activities and policies to improve air quality in Vermont.

Activities/strategies:

- Explore creating an Environmental Policy Committee of the Asthma Advisory Panel to discuss and promote best practices for improving indoor and outdoor air quality for all Vermonters.
- Promote components of Vermont’s Energy Plan that address improving indoor and outdoor air quality through types of fuel use (e.g. incentives to help consumers purchase or use renewable energy sources including cleaner, more efficient stoves that comply with air quality standards).
- Support policy proposals of collaborators that address asthma (e.g. American Lung Association’s policy agenda on truck idling; tax credits for smoke free housing; banning of smoking in cars when children are present).

Objective 3.2: By July 2018, improve indoor and outdoor air quality in Vermont worksites (from one to 12 formal policies).

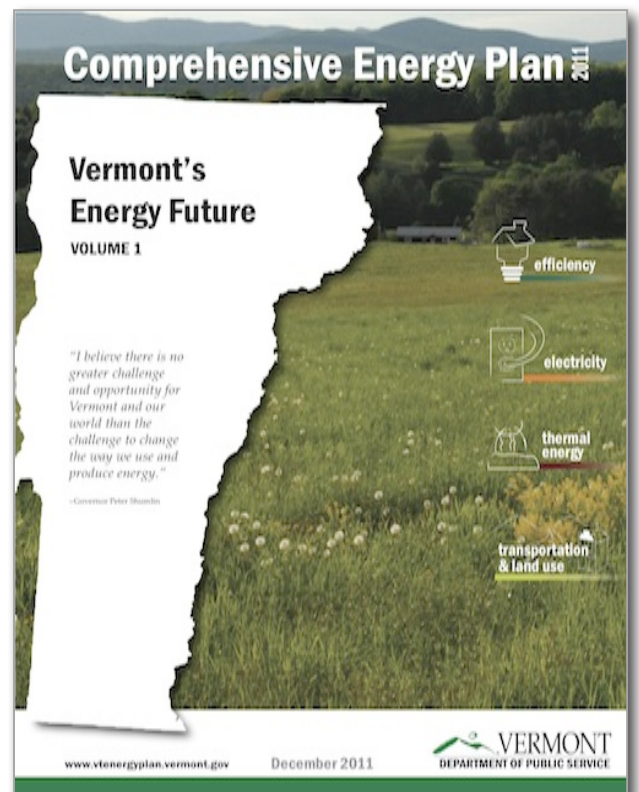
Activities/Strategies:

- Address work-related asthma through the promotion of asthma education and trigger identification through the state's Worksite Wellness Program.
- Assist mid-level and large employers in reducing absenteeism and insurance costs related to asthma and other chronic conditions, in particular among low wage sectors.
- Support efforts to create smoke/tobacco-free college campuses and work sites in Vermont.

Objective 3.3: By July 2018, improve indoor and outdoor air quality in Vermont schools (from two campaigns to six collaboration projects).

Activities/Strategies:

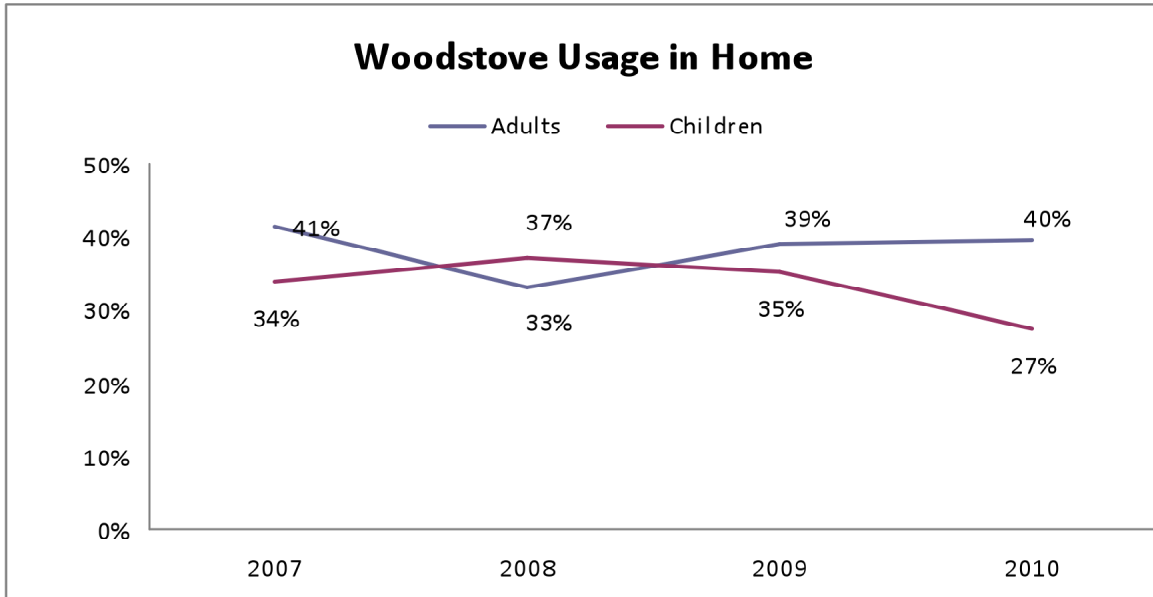
- Promote and integrate the Envision Program into Vermont's Coordinated School Health Model.
- Obtain a minimum of 45 out of the 60 school districts to pass and/or enforce idle-free campuses (aligns with the Vermont Energy Plan).
- Coordinate with the Vermont Department of Environmental Conservation and the Agency of Education on activity around air quality monitoring and/or reporting requirements for schools that use biomass for heating.
- Create and utilize a tracking system to document school walkthroughs and recommendations made to improve indoor air quality that are provided through programs such as the Envision Program as a component of the Coordinated School Health model.
- Train school personnel and pest control employees on the benefits of green cleaning Incorporate environmental components into the state's School Wellness Award Program that seek to improve indoor air quality management and education.



Objective 3.4: Reduce the percentage of people with asthma who live with four or more triggers in their home environment (in adults from 43% to 39%; children from 35% to 32%).

Activities/Strategies:

- Reduce exposure to secondhand smoke among children and adults with current asthma by 15% (Asthma Call Back Survey 2008–2010) (adults from 15% to 13%; children from 4% to 3%).
- Reduce the percentage of children who live with one or more adults who smoke (from 25% to 20%).
- Support the Community Transformation goal of obtaining smoke-free status in 75% of public housing units by the end of 2018 and develop an awareness campaign to reach multi-unit private housing.
- Create an educational component on allergies and asthma for home assessments as part of the Healthy Homes Program.
- Find methods for educating home care professionals to assess and provide materials on reducing asthma triggers in the home environment of asthma patients.
- Increase opportunities for cleaner fuel use (solar, natural gas, propane, oil, wood) and educate regarding better practices for proper usage (aligns with Vermont Energy Plan).
- Educate on the proper use of woodstoves and encourage the use of Environmental Protection Agency-certified woodstoves (aligns with Vermont Energy Plan and the EPA Clean Air Act standards).
- Partner with the Vermont Outdoor Wood Boiler Exchange Program to encourage the replacement of outdated and inefficient wood boilers.



Note: This information is collected through the Asthma Call-Back Survey and is based on self-reporting from adults and/or parents of children.

Objective 3.5: By July 2016, improve indoor and outdoor air quality in Vermont childcare facilities (from zero to five childcare organizations).

Activities/Strategies:

- Teach childcare providers about reducing environmental asthma triggers.
- Encourage providers to adhere to guidelines outlined in the Vermont Department of Health’s *Child Care Provider’s Manual*.
- Promote the use of green cleaning products and Integrated Pest Management (IPM) policies.

**Healthy Vermonters 2020 Overarching Goal:
Promote quality of life, healthy development and
health behaviors across all life stages.**

Goal 4: Engage Vermonters with asthma, their families and other caregivers in appropriate self-management to encourage optimal asthma care.

Objective 4.1: Develop or use an established self-management rubric that helps the patient understand what having controlled asthma looks/feels like.

Activities /Strategies:

- Coordinate educational sessions with patients to help demonstrate the biomechanics of symptoms.
- Distribute health education materials to asthma patients to help increase health literacy levels and basic understanding of the disease.

Objective 4.2: Improve connections that those with asthma have with their medical homes.

Activities/Strategies:

- Schedule follow-up visits and communication plan for between visits.
- Ensure patient has a recent Asthma Action Plan to take home.
- Encourage patient to call provider if problems arise to help mitigate mild/intermittent exacerbations.

Objective 4.3: By 2018, increase the number of people with asthma who have Asthma Action Plans (Adults from 30% to 36%; children from 51% to 61%).

Activities /Strategies:

- Coordinate Asthma Action Plan utilization with school nurses and medical providers to ensure quality of care.
- Embed the Asthma Action Plan into electronic health record (EHR) systems.

Objective 4.4: By July 2018, increase the percentage of people with asthma who have had a routine asthma visit with their doctor in the last 12 months (adults from 52% to 58%; children from 71% to 78%).

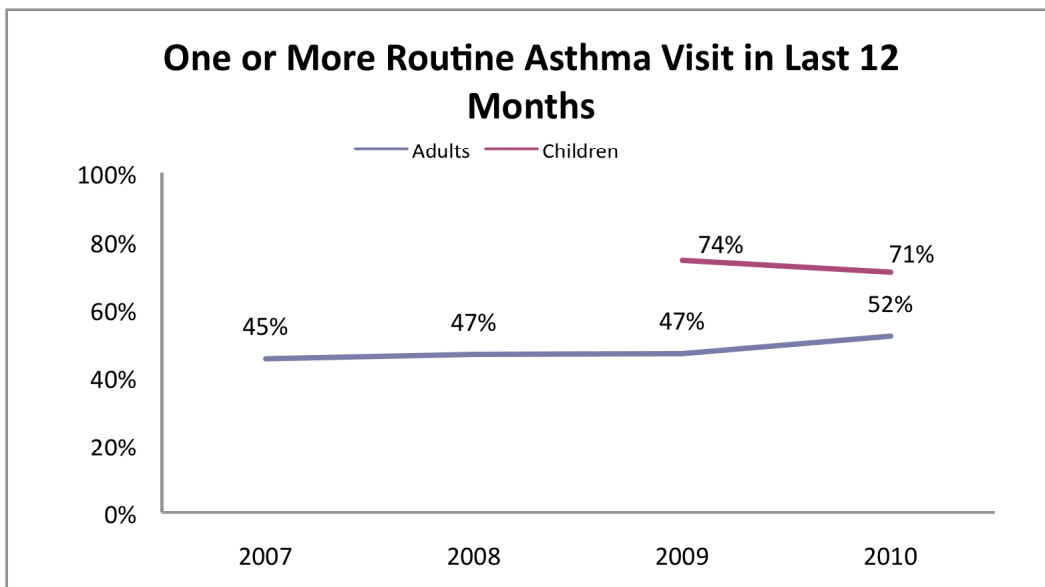
Activities /Strategies:

- Explicitly detail the need for a follow-up visit in the written Asthma Action Plan.

Objective 4.5: By July 2018, increase the percent of people with asthma who have had a routine doctor visit in the last 12 months (adults from 65% to 72%; children from 60% to 66%).

Activities /Strategies:

- For asthma patients with other co-occurring chronic diseases, encourage compliance for routine visits in Asthma Action Plan and through other means of communication (phone, mail, email, web-based).



Objective 4.6: By July 2018, increase the percent of people with asthma who have a flu vaccination in the past 12 months (adults from 54% to 60%; children from 73% to 80%).

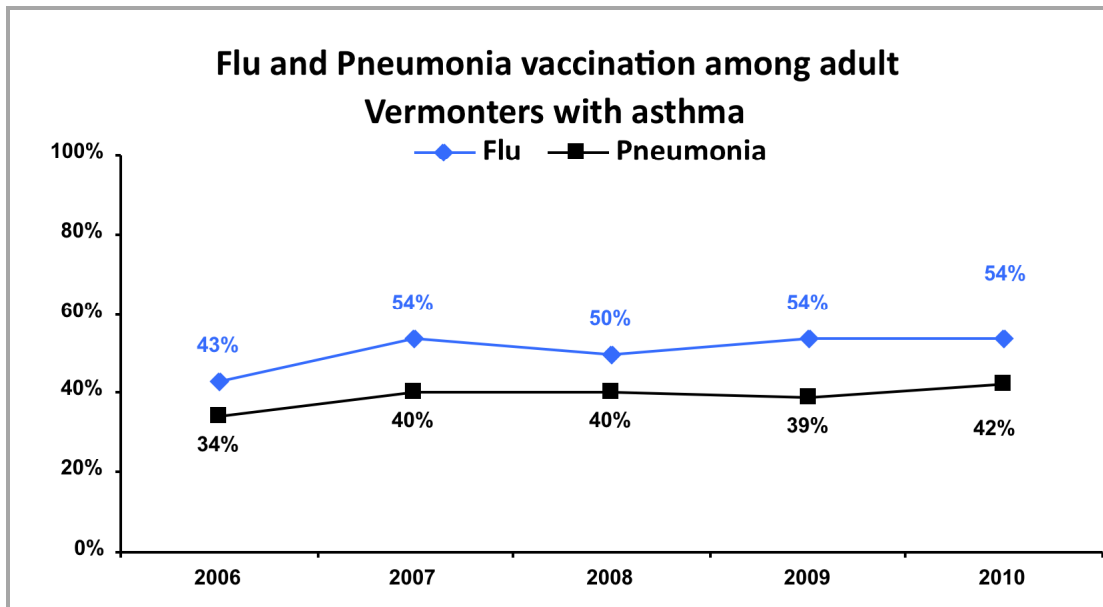
Activities /Strategies:

- Partner with local community clinics, organizations and medical practices to disseminate information (brochures, fact sheets) on the importance of flu vaccinations.
- Launch a media or education campaign starting in October of each year that highlights vaccines.

Objective 4.7: By July 2018, increase the percentage of adults with asthma who have had a pneumonia vaccination in the past 12 months (from 42% to 47%).

Activities /Strategies:

- Partner with local community clinics, organizations, and medical practices to disseminate information (brochures, fact sheets) on the importance of flu vaccinations.
- Launch a media or education campaign starting in October of each year that highlights vaccines.



Objective 4.8: Encourage improved provider training to ensure quality improvement and care coordination.

Activities /Strategies:

- Create a Medical Practice Committee on the Asthma Advisory Panel in 2013 to oversee efforts to increase quality of asthma care.
 - Explore training/outreach opportunities with local physicians for education in schools and clinics.
- Partner with worksite wellness groups for outreach and training.
- Promote Medication Therapy Management in pharmacies for asthma patients.
- Provide educational resources for distribution to patients; disseminate information on key asthma management topics for providers to use when seeing patients.

- Expand provider education and quality improvement practice through collaboration with Blueprint for Health.
 - Hold three to four Asthma Learning Collaborative sessions per year in varying geographic locations.
 - Implement online collaborative information sharing to extend learning and engagement by August 1, 2013.
- Hold annual trainings for community health workers and allied professionals related to asthma management for better integration in their practice and to learn about community-based asthma education models in traditional and non-traditional settings.

References

- Behavioral Risk Factor Surveillance System Survey* (2010). Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention.
- Healthy People 2020* (2013). Washington, D.C.: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention.
- Healthy Vermonters 2020* (2013). Burlington, Vermont: Vermont Department of Health.
- National Asthma Education Prevention Project* (2013). Bethesda, Maryland: U.S. Department of Health and Human Services, National Institutes of Health.
- Child Care Provider's Manual*. Vermont Department of Health, 2013.
- Vermont State Asthma Plan*. Vermont Department of Health, 2008.
- Vermont Energy Plan*. Vermont Department of Public Service, 2012.



healthvermont.gov

