



2022-2026

VERMONT

ASTHMA STRATEGIC PLAN

Reducing the burden of asthma among Vermonters.



Table of Contents

- 3 Purpose**
- 5 Asthma in Vermont**
- 6 CDC EXHALE**
- 8 Overview of Goal Areas**
- 9 Medical Care**
- 11 Self-Management**
- 13 Environment**
- 15 Resources**

Putting the Plan into Action

REDUCING THE BURDEN OF ASTHMA TAKES ALL OF US

This document provides a plan, or roadmap, for how to continue building toward a more comprehensive system of care for asthma that meets the needs of all Vermonters. The strategies outlined in the plan cannot be accomplished by any one group of people – it needs all asthma champions to take little steps every day that support individuals and families by delivering care that reflects the highest standards, identifying and addressing barriers to asthma control, and making the underlying asthma infrastructure more robust. All of these steps must also include attending to equity to ensure that the system of care is effective and accessible to all Vermonters.

PURPOSE OF THE VERMONT ASTHMA STRATEGIC PLAN

This strategic plan identifies priority areas for building a more robust comprehensive system of care for people with asthma in Vermont. **Imagine an asthma-friendly environment and a continuum of asthma care exhibiting true principles of equity, where everyone gets the care they need to control their asthma and keep it controlled.** Asthma care for all Vermonters must (1) reflect highest best practice standards, (2) be tailored to the unique needs of individuals and families impacted by asthma, (3) offer a comprehensive array of supports with processes that can identify earlier when additional supports are needed, (4) involve strategies to overcome the challenges and barriers that confound personal and system efforts, including strong collaborations to improve health outcomes and quality of life for those carrying a disproportionately high burden of asthma in Vermont.

Vermont's strategic plan recognizes that **asthma control is influenced by a variety of complex, interacting factors.** Addressing disparities in asthma in Vermont requires coordinated and comprehensive efforts that emphasize equity and acknowledge the role of a variety of factors, including

- racism,
- policy,
- culture,
- socioeconomic status,
- indoor and outdoor environments, and
- individual behaviors.



For more information on the root causes of asthma disparities, visit aafa.org/asthmadisparities

The three goal areas outlined in this plan – medical care, self-management, and environment – articulate the Vermont Asthma Program's top priorities for the next 5 years that focus on creating systems that prevent and interrupt costly asthma-related adverse events. **Each of the priority areas require cross-sectoral investments of diverse partners and asthma champions.** These goal areas are

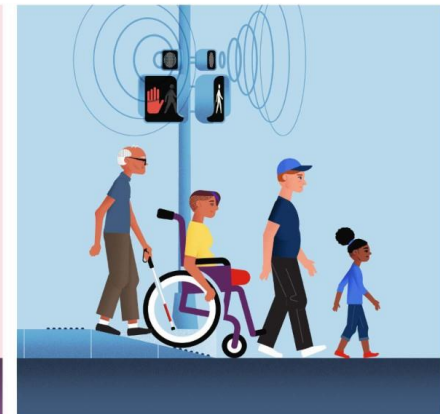
EQUALITY:

Everyone gets the same – regardless if it's needed or right for them.



EQUITY:

Everyone gets what they need – understanding the barriers, circumstances, and conditions.



not mutually exclusive goals but benefit from progress in the other priority areas, referrals across content areas, and mutually reinforcing collaboration between each to further strengthen Vermont's comprehensive system of asthma care.

Strategies outlined in this plan are developed to increase asthma control among Vermonters,


evaluated through the following measurable elements of asthma control, especially among children and at-risk populations with higher asthma burden:



- ▶ Reduced number of asthma-related deaths, hospitalizations, and emergency department visits.

All the strategies within this strategic plan also work to reduce other negative impacts of poor asthma control, including missed school and workdays and activity limitations. In addition, the strategies seek to improve the systems of asthma care for more affordable, effective, and expansive reach to ultimately improve quality of life and self-care for Vermonters with asthma.

In addition to the three goal areas and their respective objectives and strategies, a strategy specific to data and health equity addresses content in each of the goal areas.

- ▶ Monitor Vermont's asthma burden, focusing on identifying and monitoring populations and regions facing a disproportionately high burden.



Reducing the disproportionate burden of asthma among priority populations is incorporated throughout each of the three goal areas. An equity icon  is placed after strategies that specifically address the disproportionate burden of asthma in Vermont. A data icon  is placed after strategies that specifically incorporate data-related activities.

ASTHMA IN VERMONT

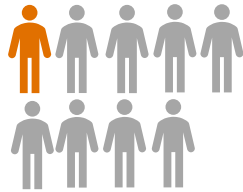
Asthma is common.

VERMONTERS WITH CURRENT ASTHMA

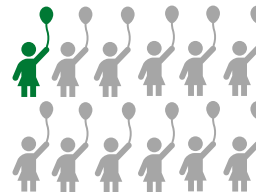
68,000 of Vermonters¹



12% of adults¹



8% of children¹



Asthma can be expensive, disruptive, & potentially deadly.



39.8 emergency department visits* per 10,000 people²



4.3 hospitalizations* per 10,000 people²

9

Vermonters died of asthma in 2019³

**with a primary diagnosis of asthma*

Asthma burden is disproportionate.



Vermonters who **rent** are more likely to have current asthma than those who own homes.⁴



Adults who **smoke** every day are more likely to have current asthma than Vermonters in general.⁴



Vermonters **insured by Medicaid** have higher current asthma prevalence than Vermonters in general.⁴

Asthma can be controlled.

People with uncontrolled asthma often have difficulty sleeping and breathing, may miss school and work, and often face costly medical bills due to hospitalizations and emergency department visits.

People with asthma can live active, healthy lives.

Asthma can be better controlled if the care system and the person with asthma:

- confirms proper inhaler & device use,
- updates and uses an asthma action plan to support asthma management,
- more frequently monitors & manages changing asthma symptoms,
- identifies and addresses asthma triggers, and
- develops and maintains a strong doctor-patient partnership to ensure medications are taken as prescribed.

The following pages outline strategies for ensuring that all Vermonters have access to the care they need to control their asthma and keep it controlled.



Strategies to help people with asthma breathe easier.

“The Centers for Disease Control and Prevention (CDC)’s National Asthma Control Program (NACP) and its partners help people with asthma achieve better health and improved quality of life. NACP developed EXHALE, a set of six strategies that each contribute to better asthma control.

Each EXHALE strategy has been proven to reduce asthma-related hospitalizations, emergency department visits, and health care costs. Using the EXHALE strategies together in a community can have the greatest impact. EXHALE can be used by public health professionals, healthcare organizations, schools, people with asthma and their families, and others.”

 Learn more at www.cdc.gov/asthma/exhale/index.htm

Applying the EXHALE strategies in Vermont

The Vermont Asthma Program’s Strategic Plan aligns with national EXHALE strategies to improve asthma control. Each of the six EXHALE strategies are integrated throughout the objectives and strategies outlined in this plan. To the right, the EXHALE strategies are depicted as a system of interlocking gears to demonstrate their interconnectedness.

Education
on Asthma
Self-Management



X-tinguishing
Smoking and Exposure to
Secondhand Smoke



Home
Visits for Trigger
Reduction and
AS-ME



Achievement
of Guidelines-Based
Medical Management



Linkages
and Coordination of
Care across settings



Environmental
Policies or Best Practices to
Reduce Asthma Triggers from
Indoor, Outdoor or
Occupational sources



Below are examples of how the EXHALE strategies have been or are being implemented in Vermont.

Education on Asthma Self-Management (AS-ME)

- Expansion of AS-ME infrastructure and reach including evaluation, quality improvement, & communication efforts.
- Development of an online AS-ME platform with videos.

X-tinguishing Smoking and Exposure to Secondhand Smoke

- Promotion of secondhand smoke screening campaigns.
- Support of tobacco and vaping screening, cessation, treatment, and referrals.

Home Visits for Trigger Reduction and AS-ME

- Implementation of business case studies demonstrating the effectiveness of AS-ME and home-visits.
- Collaboration and support of home plus health initiatives for trigger identification and elimination, energy and weatherization, together with health coaching.
- Promote policies for broader delivery and reimbursement of home health services that improve asthma control.

Achievement of Guidelines-Based Medical Management

- Convening of the Asthma Advisory Panel, a key partnership that shares information and informs asthma efforts.
- Expansion of guideline care through quality improvement efforts, resource-sharing, and provider trainings.

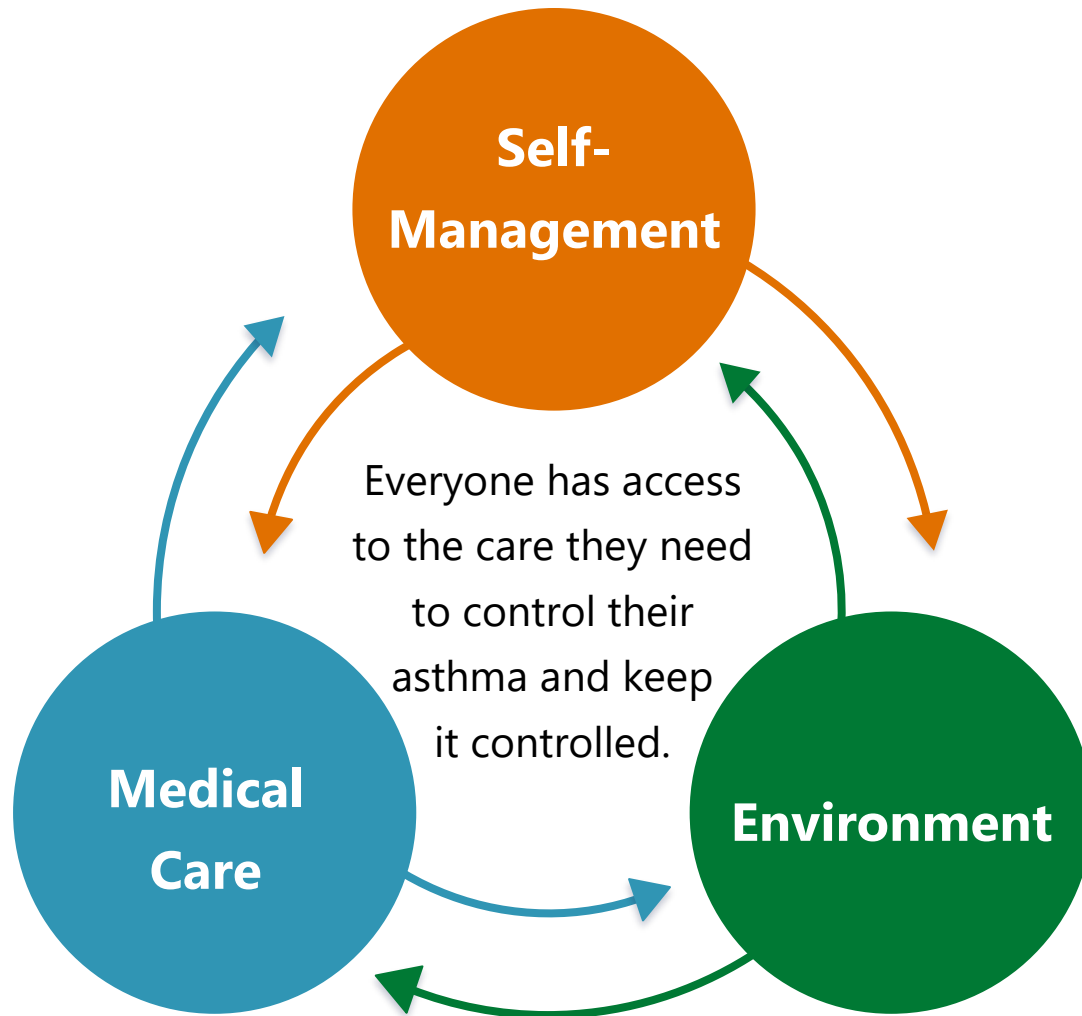
Linkages and coordination of care across settings

- Surveillance of asthma in Vermont to inform strategic planning and priority setting.
- Increasing referrals to connect health, energy, and housing home visiting and repair programs.
- Cross sectoral collaborations to address complex challenges and barriers.

Environmental policies or best practices to reduce asthma triggers from indoor, outdoor, or occupational sources

- Promotion of Asthma Friendly Schools recognition to encourage asthma-friendly practices in schools and recognize current efforts in schools.
- Expansion of the availability of environmental assessments to reduce exposure to asthma triggers in homes, schools, and workplaces.
- Pilot of an initiative emphasizing the relationship between weatherization and health.

OVERVIEW OF GOAL AREAS




Medical Care

Provide guideline-based and coordinated asthma medical care and management.

Guideline-based medical care and management is one of the cornerstones of comprehensive asthma care. Asthma care by healthcare professionals is essential to quickly recognizing uncontrolled asthma, preventing asthma symptoms and costly asthma emergencies, and supporting and maintaining well-controlled asthma. Medical care for asthma can be enhanced by ensuring national best practice guidelines for asthma are followed during standard clinical visits and supplementing those visits with systems and processes that include more frequent screening, supplementary delivery and/or referrals to other best practice services, especially for patients with severe, persistent uncontrolled asthma. Best practice services may include an intensive asthma self-management course, home visiting, smoking cessation services, among others.

Objectives and Strategies

1.1 Support providers in delivering guideline-based care to asthma patients.





- ▶ Support providers in staying up to date on guidelines through trainings, learning collaboratives, and resource-sharing.
- ▶ Expand quality improvement efforts to sustain exceptional asthma care.
- ▶ Encourage integration of guideline-based medical care into workflows through tools, resources, and checklists.
- ▶ Provide resources to identify and address barriers to asthma control. 
- ▶ Increase clinical screenings and interventions for tobacco use and exposure to secondhand smoke.






Data Highlights

- 51% of adults and 64% of children with current asthma had at least 1 routine visit for asthma in the past year.⁴

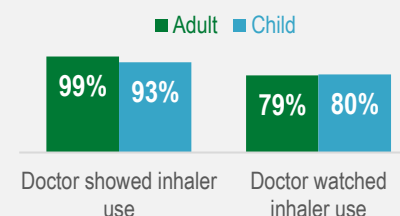
1.2 Systematically identify patients with uncontrolled asthma and intervene sooner.

- ▶ Promote the use of recommendations in the electronic medical record when there is evidence of uncontrolled asthma. 
- ▶ Promote screening of asthma control at each patient encounter using a validated asthma assessment tool to monitor control over time. 
- ▶ Encourage healthcare systems to develop screening to referral processes to supplement asthma control supports.
- ▶ Use data to identify subpopulations at risk for uncontrolled asthma.  

1.3 Increase communication and coordination between healthcare professionals, partners, and systems for improved asthma care.

- ▶ Identify and develop data sharing practices between healthcare professionals, partners, and systems. 
- ▶ Develop and strengthen linkages between medical management systems and the AS-ME infrastructure for expanded access to self-management interventions. 
- ▶ Expand linkages and coordination to fill gaps and strengthen the care coordination.
- ▶ Expand sharing of updated asthma action plans as a communication tool between providers, school nurses, patients, and caretakers.
- ▶ Increase asthma knowledge and education across non-traditional partners. 

- Most adults and children with asthma were educated on inhaler-use by a provider.⁴



- 1 in 5 adults and 3 in 5 children received an asthma action plan from a provider.⁴

Self-Management




Empower individuals with asthma and their families through self-management education and resources.

The Vermont Asthma Program aims to create a system of asthma care that utilizes a robust, widely understood asthma self-management education (AS-ME) infrastructure to prevent adverse events by identifying and addressing uncontrolled asthma earlier. An essential part of the infrastructure is a predictable, recognized platform that incorporates delivery standards, accessibility, and a dedicated workforce. The strategies for this goal area outline beginning steps to create this infrastructure for AS-ME in Vermont.

What is AS-ME? AS-ME involves educating people with asthma and their families to use asthma medication correctly, reduce exposures to asthma triggers, and manage their condition when asthma symptoms worsen guided by a best practice curriculum. It can be delivered in various settings, including clinics, emergency departments, hospitals, pharmacies, schools, and homes. AS-ME is an integral part of connecting clinical, community, and environmental sectors. It is also an important way to empower individuals and their families to take control of their asthma.

Objectives and Strategies


2.1 Expand AS-ME infrastructure for sustainable and tailored patient education statewide.

- ▶ Develop a centralized AS-ME platform for delivery of AS-ME statewide for patients that integrates referrals, registrations, and tracking of course completions and health outcomes. 
- ▶ Expand integration of AS-ME in various settings, styles, and modalities within patient care settings, especially for disproportionately burdened populations.  






Data Highlights

- Only 9% of adults with current asthma report having taken an asthma management course.¹

- ▶ Build a learning community for providers in clinics, hospitals, communities, and schools around AS-ME.
- ▶ Expand and disseminate business case studies of AS-ME.
- ▶ Elevate AS-ME as a valuable resource to support self-care.
- ▶ Create and distribute patient education materials that are culturally responsive, accessible, use plain language, and are the appropriate health literacy level. 

2.2 Support individuals in developing self-management skills to support asthma management.

- ▶ Increase completion* of AS-ME among uncontrolled and high-risk asthma patients. 
- ▶ Increase access to self-management tools and resources. 
- ▶ Identify and address barriers to self-management behaviors. 
- ▶ Increase sharing of success and impact stories.

2.3 Promote policies and practices that support asthma self-management.

- ▶ Increase referrals to tobacco cessation services for those with asthma who smoke or vape.
- ▶ Promote flu shots and other vaccinations that protect against respiratory infections.
- ▶ Coordinate efforts with programs that promote health behaviors that prevent and control chronic disease, including asthma.

- 1 in 6 adults with asthma report missing at least one day of work in the last year.



- 1 in 3 children with asthma had activity limitation in the last month.



- Vermonters with current asthma are more likely to report having another chronic disease than those without current asthma.¹

*Completion is defined as completion of a minimum of 60% of AS-ME sessions or content areas.




Environment

Create healthy environments where those with asthma breathe better.

Indoor and outdoor environmental factors where we live, work, and play account for many of the triggers that can make asthma symptoms worse. Products and materials used in buildings can negatively impact air quality and respiratory health, but asthma-friendly tools and best practices can identify and address many asthma triggers. Climate change further complicates asthma management by altering our environment in ways that increase the presence of asthma triggers including more intense storms, extreme heat and cold, drought, and wildfires that result in worsened air quality, altered pollen types and levels, increased humidity, and other environmental triggers.

Strategies and Objectives

3.1 Implement programs and policies that promote asthma trigger reduction in homes, schools, and workplaces.

- ▶ Promote and develop initiatives that increase awareness of the connection between housing and health. 
- ▶ Expand the use of green cleaning products and protocols.
- ▶ Increase the number of environmental assessments in schools and workplaces.
- ▶ Promote the use of Z Codes to document social determinants of health.  

3.2 Promote tobacco-free environments.

- ▶ Communicate the impact of smoking and secondhand smoke on asthma.




Data Highlights

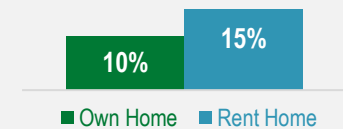
- 83% of adults and 84% of children with current asthma report 2 or more triggers in their home.⁴

- ▶ Support policies that create tobacco-free homes and communities.
- ▶ Advocate for policies that eliminate youth access to tobacco products, including e-cigarettes.

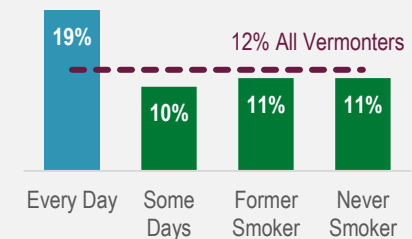
3.3 Collaborate with partners on policies and interventions that help mitigate climate change impact on Vermonters with asthma.

- ▶ Expand adherence to policies and practices that improve outdoor air quality.
- ▶ Promote the expansion of energy and weatherization programs that emphasize the impact on asthma and other respiratory conditions.
- ▶ Increase awareness of how climate change increases asthma control challenges for the healthcare system and Vermonters with asthma and their families among leadership and the public.
- ▶ Form strategic partnerships to strengthen systems and infrastructure across Vermont that address the impact of climate on asthma and other respiratory conditions. 

- Vermonters who own homes are less likely to have current asthma than those who rent.¹



- Adults who smoke every day are more likely to have current asthma than Vermonters in general.¹



FIND MORE ASTHMA INFORMATION AND RESOURCES

▶ **[Asthma surveillance](#) in Vermont**

View the asthma burden report, data briefs, and the goal tracker to learn about the most recent asthma data in Vermont.

▶ **[Envision Program](#) for schools**

The Envision Program addresses indoor air quality issues by providing model environmental health management plans, policies, and guidance to schools.

▶ **CDC's [EXHALE](#) strategies**

Learn more about CDC EXHALE strategies to help people with asthma achieve better health and improved quality of life.

▶ **Asthma Management Guidelines – [Clinician's Guide](#)**

This guide summarizes the 2020 Focused Updates to the Asthma Management Guidelines to help clinicians integrate the new recommendations into clinical care.

▶ **Apply to be recognized as an [asthma-friendly school](#)**

Asthma-friendly schools take steps to create environments that help students with asthma grow, learn, and succeed, and prevent asthma attacks and missed school days.

References

1. 2019 Behavioral Risk Factor Surveillance System (BRFSS), Vermont Department of Health
2. Vermont Uniform Hospital Discharge Data Set 2006-2015, Vermont Department of Health
3. 2009-2019 Vermont Vital Records, Vermont Department of Health
4. 2018 Adults Asthma Call-Back Survey, 2015-2017 Child ACBS, Vermont Department of Health



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Questions about the Vermont Asthma Program can be directed to AHS.VDHAsthmaProgram@vermont.gov.