

# What EXHALE Can Look Like in a State: An Example from Montana

For Public Health Professionals Working on Asthma

The Centers for Disease Control and Prevention's (CDC's) National Asthma Control Program (NACP) and its partners help Americans 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.

## What are the EXHALE strategies?



**E**  
**X**  
**H**  
**A**  
**L**  
**E**

### Education

on asthma self-management

### X-tinguishing

smoking and exposure to secondhand smoke

### Home

visits for trigger reduction and asthma self-management education

### 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

Each EXHALE strategy is proven to reduce asthma-related hospitalizations, emergency department visits, and healthcare costs

Learn how the Montana Asthma Control Program has carried out EXHALE-related activities to help children and adults with asthma



Centers for Disease  
Control and Prevention  
National Center for  
Environmental Health

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State public health departments, working in close collaboration with state and local partners, have the unique capacity to coordinate the implementation of activities related to all six EXHALE strategies. The **Montana Asthma Control Program (MACP)** in the Montana Department of Public Health and Human Services (MDPHHS) is funded by CDC's National Asthma Control Program. Here are some MACP accomplishments, listed by EXHALE strategy:

## **E**ducation on asthma self-management

**MACP has helped expand asthma self-management education (AS-ME) to people in rural areas of Montana with limited healthcare resources.** For this work, MACP partnered with MDPHHS' Community Health Emergency Medical Services (CHEMS) Program to provide a training webinar for rural healthcare partners on AS-ME components and how to coordinate care for individuals with asthma. These activities are part of a state Community Integrated Healthcare (CIH) program to expand the role of Emergency Medical Services providers to deliver more effective and efficient non-emergency services; more information about the CIH program is available [here](#) and [here](#).

**MACP has increased access to AS-ME for state of Montana employees and their dependents.** MACP has established a partnership with the Montana Department of Administration's Health Care and Benefits Division (HCBD), which manages the State of Montana Benefit Plan that provides health insurance benefits for employees of the state of Montana. When HCBD staff were starting to develop employee wellness programs, MACP helped HCBD create and implement an asthma wellness program for employees and their dependents that eventually became known as the Hometown Medication Therapy Management (Mtm) Asthma Care Program. The Hometown Mtm Asthma Care Program provides two one-hour AS-ME sessions per year, a valved holding chamber, and (if needed) a peak flow meter. Program participants pay lower copays on some asthma medication and they can also receive a discount on insurance costs as part of a "Next Steps" incentive program. People who could benefit from this program are identified by HCBD staff through an employee claims database and then contacted by mail. Additionally, healthcare providers at Montana Health Centers (clinics that specifically

serve State of Montana Benefit Plan members and other public employees) can refer their patients to this program. Other key partners in the Hometown Mtm Asthma Care Program include the University of Montana Skaggs School of Pharmacy and Montana Family Pharmacies, a group of 60+ independent community pharmacies that administer the program. More information about this program is available [here](#).

**MACP has supported workforce development of certified asthma educators (AE-Cs).** An AE-C is typically a licensed healthcare professional with an additional certification in asthma education obtained by passing the National Asthma Educator Certification Board (NAECB) exam. Non-healthcare professionals also can become AE-Cs if they have at least 1,000 hours of relevant experience and pass the NAECB exam. MACP has partnered with the Montana State Library to increase access to study materials that help people prepare for the NAECB exam. These study materials are free and available online through this library. Hard copies of these study materials are available at six libraries or via interlibrary loan within the Montana State Library.



## What EXHALE Can Look Like in a State: An Example from Montana (continued)

### X-tinguishing smoking and exposure to secondhand smoke

MACP has partnered with the Montana Tobacco Use Prevention Program (MTUPP) in MDPHHS to help people with asthma. Because of this partnership, people with asthma who call the Montana Tobacco Quit Line receive a brochure about the Montana Asthma Home Visiting Program, which is described in more detail in [Home visits for trigger reduction and asthma self-management education](#).

MACP has increased the capacity of healthcare professionals and home visit providers to extinguish smoking and exposure to secondhand smoke among people with asthma. For example, MACP organized an informational webinar to train nurses on tobacco cessation counseling and how to make a referral to Montana Tobacco Quit Line services, as part of MACP's implementation of the home visit program described in [Home visits for trigger reduction and asthma self-management education](#). Also, MACP has emphasized tobacco cessation resources during trainings for healthcare professionals mentioned in [Achievement of guidelines-based medical management](#).

### Home visits for trigger reduction and asthma self-management education

Since 2010, MACP has led the Montana Asthma Home Visiting Program (MAP), which helps people of all ages with uncontrolled asthma. MAP is designed to address asthma triggers in the home, provide AS-ME, and coordinate asthma care across clinical and community settings. MAP services are available in both urban and rural areas. The program includes up to six home visits for a person or family affected by asthma. Any individual is eligible for MAP if they have a current asthma diagnosis and had either: (1) an emergency department visit, hospitalization, or unscheduled medical office visit for asthma; or (2) an Asthma Control Test score of less than 20 in the past year; or (3) received a direct provider referral. More information about MAP, including a program referral form, brochure, and description of counties served, is available [here](#).

### Home visits for trigger reduction and asthma self-management education (continued)

MACP has contributed to MAP's success in multiple ways. For example, MACP has led the training of nurses who provide home visits in MAP, by coordinating presentations by topic experts who cover program logistics, how to conduct a home environmental assessment, asthma pathophysiology, asthma medication use, and data collection and reporting. Also, MACP has provided ongoing technical assistance to these nurses and their program sites through monthly conference calls, meetings, and ongoing training opportunities.

MACP has conducted several data analyses to assess and communicate the impact of MAP. For one analysis, MACP analyzed aggregated, deidentified MAP participant data that had been collected quarterly (through a secure website) from MAP sites during 2010–2016. These data showed MAP significantly improved Asthma Control Test scores, self-management skills, and self-efficacy related to asthma management among MAP participants. Further details about this analysis are available in a [peer-reviewed publication](#). For another project, MACP analyzed Medicaid claims data of MAP participants to determine hospitalization and emergency department use before, during, and after MAP interventions. MACP was able to conduct these analyses because of relationships they maintained with data stewards. This analysis found significant reductions in asthma-related hospitalizations, emergency department visits, urgent care visits, and healthcare costs among MAP participants. These cost savings were sustained for up to two years after completing MAP. MACP used these results to develop a business case for MAP and then shared this business case with partners in Montana Medicaid and in [CDC's 6|18 Initiative](#). Leadership from MACP and Montana Medicaid have participated in ongoing meetings to discuss possible mechanisms for reimbursement of MAP services. MACP has described their experience working toward MAP reimbursement in this [webinar](#).

## What EXHALE Can Look Like in a State: An Example from Montana (continued)

### **A**chievement of guidelines-based medical management

#### **MACP has helped develop and offer training opportunities for healthcare professionals on guidelines-based medical management of asthma.**

For instance, MACP has met regularly with academic and healthcare partners to develop the agenda for the annual Big Sky Pulmonary Conference, which educates healthcare professionals including pharmacists, AE-Cs, nurses, respiratory therapists, physicians, public health partners, and MAP home visiting staff. These activities have ensured that training on guidelines-based medical management of asthma is offered at this conference. In addition to their work on this conference, MACP has developed guidelines-based training for the outpatient setting (spirometry training and a separate training called “Diagnose and Manage Asthma” or “DMA”) and for the emergency department setting (“Asthma Hospital and Emergency Department Patient Education, Action Plan, and Discharge” or “AHEAD”). MACP has delivered DMA and AHEAD trainings to healthcare professionals in various parts of Montana, including healthcare professionals who serve many American Indian patients. These trainings are often delivered through partnerships with healthcare organizations, which are described further in the next paragraph.

#### **MACP has collaborated with healthcare partners to improve quality of care for people with asthma.**

MACP has partnered with hospital emergency departments and outpatient primary care clinics to implement and complete asthma-related quality improvement (QI) projects. MACP has supported these QI projects in multiple ways, including by providing ongoing educational opportunities for healthcare providers (including onsite training), patient education materials, pre- and post-implementation chart review and data analysis to provide site-specific feedback, expert support in using electronic health record software, and a year-long grant to support delivery of guidelines-based asthma services. More information about MACP’s healthcare QI activities is available at this [website](#) and [fact sheet](#).

**MACP has worked to increase access to asthma devices that can help people with asthma.** Spacers and valved holding chambers are asthma devices that help deliver inhaled asthma medication to people’s lungs, where this medication is needed. MACP partnered with a healthcare professional to develop and publish information to help pharmacists provide these asthma devices to people who need them. This information is available in this [document](#) and includes practical tips, as well as medical billing code information. MACP has also worked with healthcare providers and pharmacists across the state to establish collaborative practice agreements allowing the partnering pharmacies to provide spacers directly to patients without obtaining a prescription from the healthcare provider.



## What EXHALE Can Look Like in a State: An Example from Montana (continued)

### **L**inkages and coordination of care across settings

MACP has supported linkages between public health and education partners to promote the health of students with asthma. MACP coordinated meetings with public health and education partners to review proposed amendments to the School Administrative Rules of Montana regarding public health and safety in schools. These new rules ([published online January 2020](#)) include requirements for schools to create policies for responding to chronic disease emergencies such as asthma exacerbations, as well as multiple requirements to assess and address indoor and outdoor air quality. The strategic partnerships formed as part of this effort can improve understanding and compliance on the part of school leaders charged with meeting these rule requirements.

MACP has helped expand access to care coordination for people with asthma. MACP has collaborated with MDPHHS' CHEMS Program to facilitate care coordination for people with asthma in rural Montana; this program can connect people with asthma to AS-ME, home visit services through MAP, housing services, and other community resources. More information about the CHEMS program is available above in [Education on asthma self-management](#). Also, MACP has expanded access to care coordination through MAP itself; more details about MAP are available in [Home visits for trigger reduction and asthma self-management education](#).

### **E**nvironmental policies or best practices to reduce asthma triggers from indoor, outdoor, or occupational sources

MACP has collaborated with programs that facilitate home energy efficiency for people with lower incomes. Loan or grant programs that help people with lower incomes repair or improve their homes can reduce asthma triggers (such as mold and pests), asthma-related emergency department visits, and missed work or school days because of asthma. MACP has established partnerships with the MDPHHS Low Income Energy Assistance Program (LIEAP) and Weatherization Program (WAP). Through these partnerships, MACP has analyzed data to help LIEAP and WAP learn more about the burden of asthma among LIEAP and WAP participants, and how assistance from LIEAP and WAP can help people with asthma.

MACP has established multiple partnerships to support environmental policies or best practices to reduce exposure to asthma triggers. For example, MACP has supported efforts led by the Montana Tobacco Use Prevention Program to increase the number of multi-unit smokefree housing buildings in the state. Also, MACP has partnered with schools and others to improve indoor and outdoor air quality in the school setting; more information about this work is available above in [Linkages and coordination of care across settings](#).

**For more information, visit:**

<https://www.cdc.gov/asthma/exhale/>

