Montana State Asthma Plan

2009

Montana Asthma Advisory Group

Montana State Asthma Plan

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Acronyms

AAP	Asthma Action Plan
ACMS	Asthma Care Monitoring System
ACT	Asthma Control Test
AE-C	Certified Asthma Educator
BMI	Body Mass Index
BRFSS	Behavioral Risk Factor Surveillance System
CDC	Centers for Disease Control and Prevention
DEQ	Montana Department of Environmental Quality
DPHHS	Montana Department of Public Health and Human Services
ED	Emergency Department
EPR-3	Expert Panel Report 3 Clinical Asthma Guidelines
ETS	Environmental Tobacco Smoke
HP 2010	Healthy People 2010
IAQ	Indoor Air Quality
ICS	Inhaled Corticosteroids
IHS	Indian Health Service
MAAG	Montana Asthma Advisory Group
MACP	Montana Asthma Control Program
MASN	Montana Association of School Nurses
MDI	Metered Dose Inhaler
MSU	Montana State University
MTUPP	Montana Tobacco Use Prevention Program
NAECB	National Asthma Educator Certification Board
NHLBI	National Heart, Lung and Blood Institute
OPI	Montana Office of Public Instruction
SABA	Short Acting Beta Agonist
WRA	Work Related Asthma
YRBS	Youth Risk Behavior Survey

Asthma in Montana

The Challenge of Asthma

Over the past 30 years, the prevalence of asthma has increased dramatically nationwide and in Montana. In 2007, 13.1% of Montana adults and 20.9% of Montana high school students reported ever being told they have asthma. In addition, 9.3% of Montana adults and 11.1% of high school students reported currently having the disease.[1] In all, an estimated 67,000 adults in Montana have asthma along with 24,000 children aged 0-17.

The National Heart Lung and Blood Institute (NHLBI) 2007 Expert Panel Guidelines (EPR-3) define asthma as: "a common chronic disorder of the airways that is complex and characterized by variable and recurring symptoms, airflow obstruction, bronchial hyperresponsiveness, and underlying inflammation."[2] Symptoms of asthma include wheezing, shortness of breath, chest tightness, and cough. The goal of asthma management is to control these symptoms so that individuals can lead full, active lives and minimize the risk of exacerbations.

Goals of Asthma Therapy[2]

Reduce Impairment

- Prevent chronic & troublesome symptoms
- Require infrequent use of short acting beta agonists for quick relief of symptoms
- Maintain normal pulmonary function
- Maintain normal activity levels
- Meet patients' and families' expectations of and satisfaction with asthma care

Reduce Risk

- Prevent recurrent exacerbations
- Minimize the need for ED visits or hospitalizations
- Prevent loss of lung function; for children, prevent reduced lung growth
- Provide optimal pharmacotherapy with minimal or no adverse effects

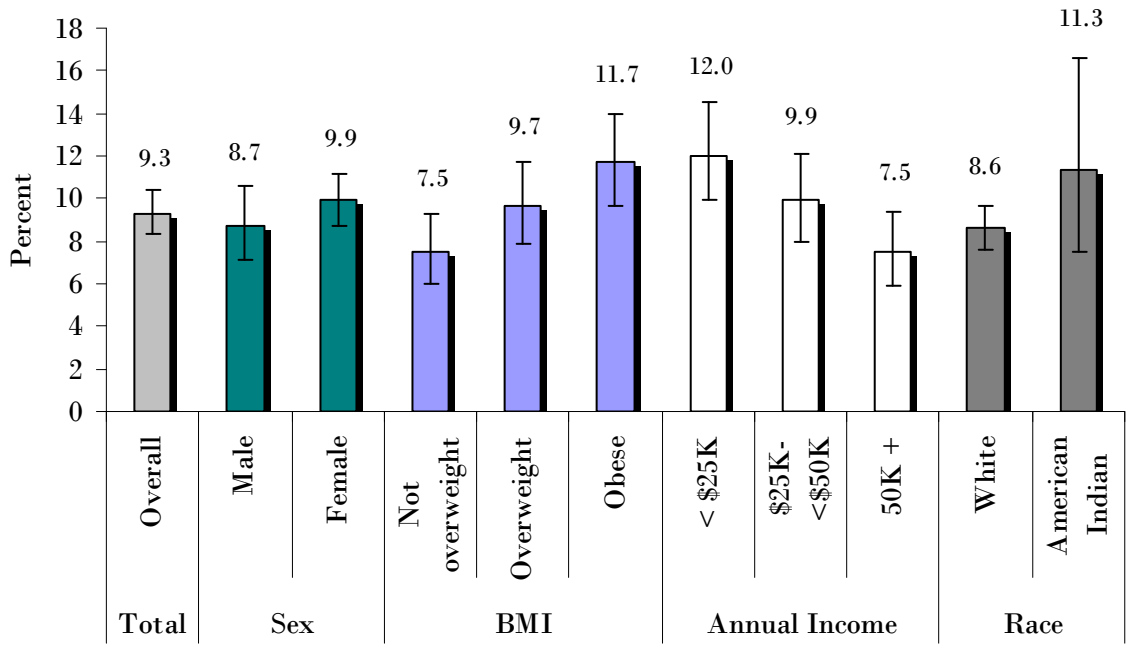
Asthma is caused by the interplay between genetics and environmental exposures. Children whose parents have a history of asthma or atopic disease are more likely to develop asthma, and new research focuses on identifying the specific genes that confer asthma risk.[2] Exposure to viral respiratory infections and a range of environmental allergens can trigger asthma symptoms and exacerbations. Important asthma triggers include exposure to tobacco smoke, air pollution, extreme temperatures and dry air, stress and strong emotions.

Asthma cannot be cured but can be controlled. Poorly controlled asthma affects health and quality of life, often disrupting sleep, exercise, activities of daily living, and causing missed work or school days. Asthma exacerbations can lead to emergency department (ED) visits, hospitalizations, and, in rare cases, death. Establishing and maintaining control of asthma requires regular medical evaluation to monitor disease control, use of recommended pharmacologic therapy, treatment of co-morbid conditions, elimination of environmental triggers, and intensive patient and family education. Given appropriate medical treatment, disease self-management education, and public policies that support asthma-friendly environments, Montanans with asthma can expect to lead healthy, normal lives.

Asthma Disparities

Some groups in Montana shoulder a higher asthma burden than others. Mirroring national trends, adults with lower annual income and educational attainment have higher rates of asthma. In addition, adult females and individuals who are obese shoulder a higher asthma burden compared to males and adults who are not overweight or obese.[1,3] (See Figure 1) Asthma among American Indians, the largest racial minority in Montana, is also of concern. Though American Indian race is not independently associated with increased asthma prevalence among adults in the state, American Indians in Montana experience increased exposure to several key asthma risk factors including smoking, obesity and low socioeconomic status compared to whites.[3]

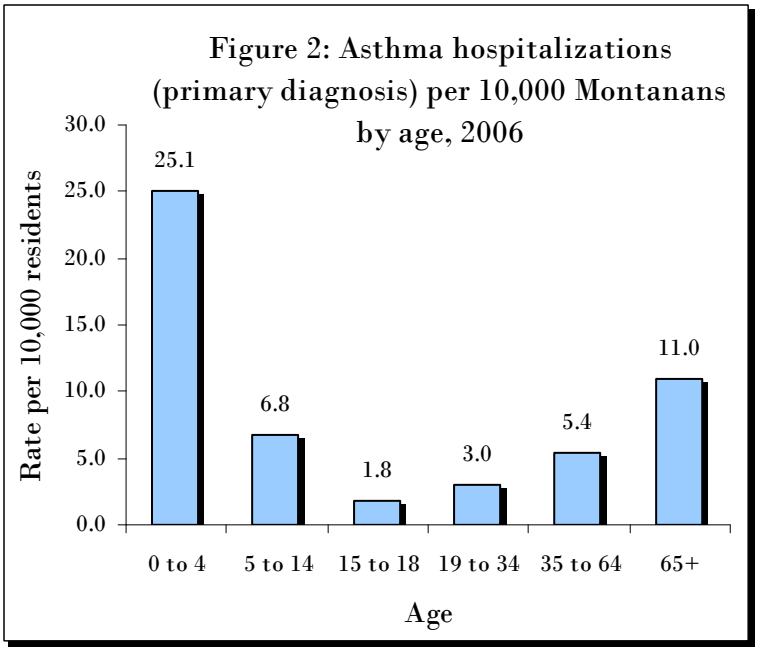
Figure 1: Asthma prevelance in Montana adults by sex, BMI, annual income and race, 2007



Source: 2007 BRFSS, Centers for Disease Control and Prevention

Asthma disparities also exist for children in Montana. Among children aged 0-18 enrolled in the Montana Medicaid population, males, young children aged 0-4, and American Indians access asthma related healthcare more often than females, children aged 5-18 and whites.[4] According to the results of the 2007 Youth Risk Behavior Survey (YRBS), high school youth who are overweight have significantly higher prevalence of asthma than their counterparts who are not at risk for being overweight (15.2% vs. 10.2%).[5] Clearly asthma disparities affect disease distribution in Montana. However more analysis is needed to further elucidate these disparities and help target programs and interventions toward high risk populations.

Asthma in Montana



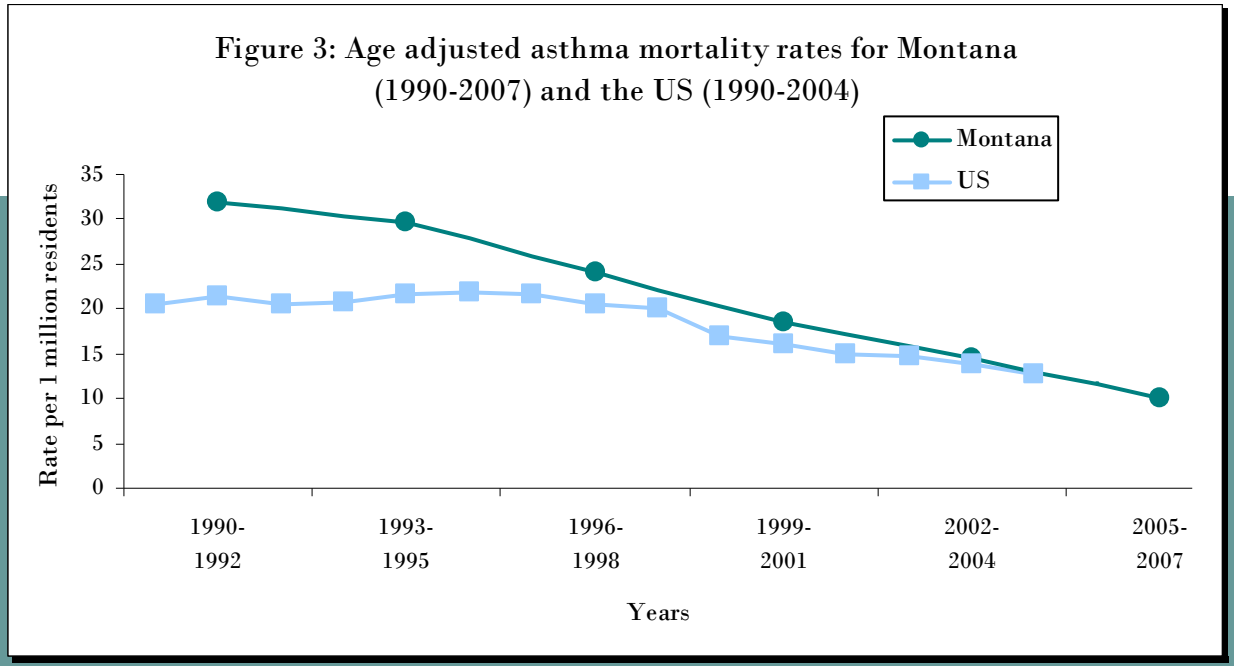
Source: Montana Hospital Association Hospital Discharge Data 2006

Asthma Related Hospitalizations

Every year, nearly 5,000 hospitalizations with a primary or secondary diagnosis of asthma occur in Montana. Children aged 0-4 and seniors aged 65+ have the highest rates of asthma related hospitalization. (Figure 2). Females with asthma in Montana are hospitalized at higher rates than males (7.7 vs. 6.0 per 10,000 in 2006).[4]

Asthma Mortality

Though asthma mortality rates have steadily decreased in the last 20 years, deaths due to the disease still occur in Montana. Asthma mortality rates dropped from 32 per million Montana residents in 1990-1992 to 10 per million residents in 2005-2007. (Figure 3) Adults aged 65+ have the highest rates of asthma related mortality (56 per million in 2005-2007).[4]



Source: Montana Office of Vital Statistics, 1990-2007

Asthma Control

Despite a sharp increase in the prevalence of asthma in recent years, new medical and public health advances make controlling the disease an achievable and realistic outcome for most patients. Today, asthma patients who properly self manage their disease and receive optimal drug therapy can expect to experience few symptoms and almost no activity limitations due to asthma. Despite these exciting advances, many people in Montana still live with uncontrolled asthma, experiencing near constant symptoms and limiting their activities of daily life because of the disease.[6] (Table 1)

Table 1. Disease control among adults with current asthma in Montana:

- 50% had asthma symptoms in the last week
- 25% had asthma symptoms every day in the last month
- 21% had difficulty staying asleep during the last month due to asthma
- 53% limited their usual activities in some way due to asthma during the past year

Source: BRFSS Asthma Call-Back Survey, Montana, 2006

Access to Care

Because asthma is a chronic disease that must be managed over the long term, it is important that persons with asthma have regular access to quality, evidence-based health care. Access to care is an especially salient topic for this disease as asthma disproportionately affects individuals of low socioeconomic status, who may be more likely to be uninsured or underinsured. In Montana, access to care is a significant problem with one in five adults with asthma reporting that they are uninsured or have been without insurance in the last year.[6] (Table 2)

Table 2: Access to care among adults with current asthma in Montana:

- 20% do not have health insurance or have been without insurance in the last year
- 11% needed to buy an asthma medication in the past year but could not because of cost
- 38% have not talked with a health care professional about their asthma in the past year

Source: BRFSS Asthma Call-Back Survey, Montana, 2006

More information on asthma in Montana

For a full report on asthma in Montana see *The Burden of Asthma in Montana* at: http://dphhs.mt.gov/asthma. For a summary of Montana's progress toward the Healthy People 2010 goals, see Appendix 1.

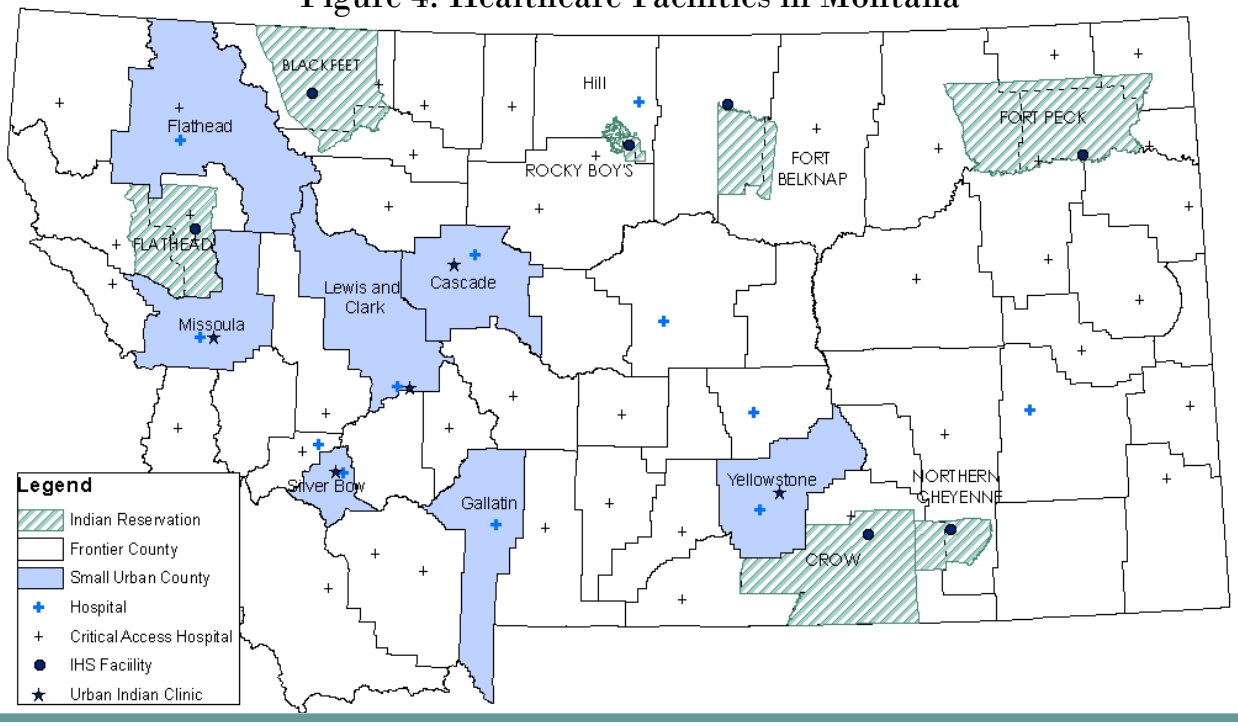
Asthma Control in Montana: Unique challenges

Rural and frontier communities: Montana is a large state in terms of land area, but has a total population of 944,632 and a population density of only 6.4 persons per square mile.[7] Of Montana's 56 counties, 49 are classified as "frontier" as they do not contain a city with a population of 10,000 or more.[8] The seven remaining "small urban" counties in Montana contain over 60% of Montana's population. (Figure 4) The State Asthma Plan takes the rural nature of the state into consideration and seeks to address the special challenges related to providing access to comprehensive healthcare services in frontier communities.

American Indians: American Indians comprise 6% of Montana's population and are the state's largest minority population. Montana is home to 7 Indian reservations and 12 federally recognized tribes.[7] (Figure 4) Each reservation has a sovereign Tribal government. Montana has a network of 7 Indian Health Service Facilities and 5 Urban Indian Clinics across the state (Figure 4). The State Asthma Plan seeks to develop meaningful partnerships with Tribal governments and health agencies, Indian Health Service (IHS) providers and other American Indian stakeholders to create initiatives that will benefit American Indians with asthma in Montana.

Rural healthcare facilities: Montana has a total of 54 hospitals, 42 of which are critical access hospitals with 25 beds or less. (Figure 4). Most patients in Montana will not be seen at large medical facilities or by specialty providers. In addition, establishing a medical home with a primary care provider may be more difficult for asthma patients in frontier communities. This plan seeks to address gaps in training and access to quality care in rural settings.

Figure 4. Healthcare Facilities in Montana



Montana Asthma Advisory Group

Addressing Asthma in Montana

In 2007, the Montana State Legislature provided funding to create the Montana Asthma Control Program (MACP) in the Department of Public Health and Human Services (DPHHS). This program is responsible for developing an asthma surveillance system for the state and for coordinating a statewide asthma control effort.

One of the first priorities of the MACP was to develop a workgroup of interested stakeholders to give feedback and input on asthma control activities. Stakeholders were recruited from government agencies, academic institutions, the clinical community, and non-profit organizations among others. The first meeting of the Montana Asthma Advisory Group (MAAG) was in January, 2008. A diverse cohort of over 30 individuals representing 25 separate agencies and organizations participate in the MAAG.

The MAAG is a diverse group of asthma stakeholders who give feedback and input on asthma control activities

The MAAG exists to serve as the advisory body guiding asthma control efforts in the state. MAAG members bring a unique perspective on the problem of controlling asthma in Montana and the necessary steps needed to address the disease. This multidisciplinary advisory group is essential to creating a coordinated asthma control effort in Montana.

Creating the State Asthma Plan

One of the first tasks undertaken by the MAAG was to create a State Asthma Plan for Montana. To do so, MAAG members were asked to participated in one of four state plan workgroups: Surveillance, Healthcare Interventions, Environmental Interventions, and School and Childcare Interventions

Over a series of months the workgroups communicated via teleconference and over email to provide input on which goals, objectives and strategies to include in the state plan. Groups were tasked with creating data driven goals and objectives based on the best existing surveillance information. Strategies included in the state plan were to be feasible, prioritized and likely to be implemented. In November 2008, each of the four state plan workgroups presented the goals, objectives and strategies in their section to the entire asthma workgroup at an in-person MAAG meeting. The entire workgroup gave feedback on each section and on the document as a whole. In December 2008, final edits from the workgroup and outside reviewers were compiled and included in the final version of the plan.

State Plan Overview

Overarching Goals

The items listed below represent the overarching goals of the Montana State Asthma Plan. These goals reflect the mission of the Montana Asthma Control Program as well as the Healthy People 2010 Objectives and NHLBI EPR-3 Clinical Asthma Guidelines.

Overarching Goals

- Increase understanding of asthma in Montana through ongoing, systematic data collection and program evaluation
- Increase public awareness of asthma
- Promote policy and environmental changes to create systems with increased capacity to manage asthma
- Empower persons with asthma and their families to actively manage their disease
- Reduce activity limitations and school/work days missed due to asthma
- Improve the quality of life for all Montanans with asthma
- Reduce geographic, racial and socioeconomic disparities in asthma morbidity and mortality
- Reduce ED visits for asthma
- Reduce hospitalizations for asthma
- Reduce direct and indirect asthma costs
- Reduce asthma deaths

Underlying themes

The following themes are the foundation of the entire Montana State Asthma Plan:

- Disparities: Address groups at highest risk for asthma morbidity and mortality
- Communication: Foster resource and information sharing between stakeholders
- Sustainability: Implement lasting, systems-based change
- Evaluation: Measure the impact of the State Plan on asthma outcomes in Montana

State Plan Overview

Organization of the Plan

The Montana State Asthma Plan is divided into three sections representing the three main focus areas for asthma control activities in the state:

- Surveillance
- Partnerships
- Interventions

The interventions section is further divided into three specific areas of focus to address asthma in Montana:

- Healthcare
- Environment
- School and Childcare

In each section, there is one overall goal followed by objectives and specific strategies designed to meet the goal for the section. The five section goals for the Montana State Asthma Plan are:

Section Goals

- **Surveillance:** Establish and maintain a comprehensive state asthma surveillance system
- **Partnerships:** Establish and maintain effective partnerships to increase the reach and impact of asthma control efforts
- **Healthcare:** Improve systems and quality of asthma care
- **Environment:** Reduce exposure to environmental irritants and allergens that cause and/or exacerbate asthma
- **School & Childcare:** Increase the capacity of Montana schools and childcare facilities to manage asthma

To see a logic model of the Montana State Asthma Plan and a diagram of how the sections overlap, see Appendices 2 and 3.

Surveillance

Goal: Establish and maintain a comprehensive state asthma surveillance system

Objective 1: Analyze existing asthma data sources to assess the burden of asthma in Montana and trends over time, including the following population level indicators:

- Asthma prevalence
  Source: Behavioral Risk Factor Surveillance System (BRFSS) and Youth Risk Behavior Survey (YRBS)
- Asthma related healthcare utilization
  Source: Montana Hospital Association's hospital discharge data, Medicaid claims data, BRFSS Asthma Call-Back Survey, and IHS claims data
- Asthma mortality
  Source: Montana Office of Vital Statistics death records
- Quality of life for persons with asthma and asthma related co-morbidities
  Source: BRFSS and BRFSS Asthma Call-Back Survey
- Asthma disparities
  Source: BRFSS, YRBS, Hospital discharge data, and Medicaid claims data
- Asthma control
  Source: BRFSS Asthma Call-back Survey and Medicaid claims data

Objective 2: Improve existing data sources and develop new sources to measure key public health indicators like the Healthy People 2010 Objectives. Priority areas for improved surveillance data include:

- Asthma related hospitalizations: Support legislation to improve quality of existing hospital discharge data and require reporting to DPHHS
- Asthma related ED visits: Support legislation to establish an ED surveillance system and require reporting to DPHHS
- Asthma among Montana children: Along with partners, assess potential sources for child asthma data such as Medicaid and the Women Infants and Children program. Review other states' methodologies for collecting data on childhood asthma

Objective 2: Continued

- The burden of asthma in schools: Partner with the Montana Association of School Nurses and the Office of Public Instruction (OPI) to develop surveillance on the impact of asthma in Montana schools including school days missed due to asthma
- The cost of asthma care: Partner with Medicaid, the Montana Hospital Association, the Montana Primary Care Association, and key payers like Blue Cross Blue Shield and New West Health Services to identify sources of data related to the cost of asthma care, including pharmacy utilization and primary care visits for asthma
- Geographic, socioeconomic and racial disparities: Create partnerships to better understand and utilize existing surveys that contain data on at risk populations such as the Adult Tobacco Survey and the Rocky Mountain Tribal Epi-Center Child Health Measures Project

Objective 3: Regularly communicate surveillance findings with key stakeholders across the state of Montana

- Publish regular surveillance reports containing asthma related analysis and distribute to key stakeholders across the state
- Update the report *The Burden of Asthma in Montana* every five years, incorporating updated data and novel data sources
- Present asthma related data at local, state and national conferences and to other stakeholders as requested
- Provide technical support and evaluation assistance to stakeholders as requested

Objective 4: Evaluate the impact of asthma control activities in Montana

- Develop process and outcome evaluation plans for key asthma control program activities
- Involve stakeholders in the development and execution of evaluation plans
- Commit staff time and program funding specifically for program evaluation
- Share evaluation findings with program stakeholders and the MAAG and use findings to inform future program decisions

Partnerships

Goal: Establish and maintain effective partnerships to increase the reach and impact of asthma control efforts

Objective 1: Facilitate the Montana Asthma Advisory Group (MAAG), regularly recruiting new participants and maintaining a diverse membership that is representative of asthma stakeholders across the state

- Host MAAG meetings at least two times a year, sharing updated surveillance information, obtaining feedback on asthma control activities, and allowing partners to network across disciplines and programs
- Regularly communicate with MAAG members about asthma control activities
- Seek ongoing feedback from the MAAG about the MACP website, program materials and other initiatives
- As needed, form subcommittees and work teams using MAAG members to give structured feedback and accomplish program tasks

Objective 2: Actively develop and maintain partnerships with organizations and groups throughout Montana that address asthma issues

- Maintain partnerships with state, academic and non-profit organizations as well as informal advocacy groups such as the Children's Environmental Health Network that address asthma related issues
- Develop new partnerships with groups not yet engaged in the MAAG such as state legislators, insurers and the media
- Actively communicate with and provide relevant clinical information to professional medical groups in the state such as the Montana Society of Respiratory Care, the Montana Nurses Association the Montana Chapter of the American Academy of Pediatrics, and the Montana Academy of Family Physicians
- Effectively utilize partnerships to increase asthma awareness in the state, share resources and broaden the impact of asthma control efforts
- Include analysis of partnerships as part of the evaluation plan for the MACP

Healthcare Interventions

Goal: Improve systems and quality of asthma care

Objective 1: Support delivery of evidence-based healthcare according to EPR-3 Asthma Guidelines in the primary care setting

- Increase asthma related continuing education opportunities for healthcare providers across the state including primary care and specialty physicians, pharmacists, physicians assistants and nurses. Sponsor evidence based courses like the Association of Asthma Educator's "Becoming an Asthma Educator and Care Manager"
- Increase use of spirometry as a diagnostic and assessment tool for asthma. Provide free clinic-based spirometry trainings and distribute resources such as *Simple Office Spirometry* to interested healthcare providers
- To increase utilization by primary care providers, summarize key elements of the EPR-3 guidelines and make them available in an accessible, user-friendly format
- To reach rural providers across the state, provide on-line resources on evidence-based clinical asthma management in the primary care setting
- Support appropriate referrals to specialty asthma care according to the EPR-3 guidelines. Work with specialists across the state to develop strategies to increase appropriate referrals and foster communication between primary care physicians and specialists
- Implement clinic based asthma registry, the Asthma Care Monitoring System (ACMS), across the state that allows practices to track care based on the EPR-3 Guidelines and implement continuous quality improvement projects in response to registry feedback. At clinics with ACMS registry:
    - Increase use of the Asthma Control Test (ACT) and other self assessment tools to improve patient's awareness of their impairment and risk
    - Increase percentage of patients with an updated Asthma Action Plan (AAP)
    - Increase percentage of patients with asthma who receive an annual influenza vaccine and pneumococcal vaccinations
    - Increase prescription of Inhaled Corticosteroids (ICS) and other preferred controller medication for patients with persistent asthma
    - Increase percentage of patients with asthma who receive spirometry at diagnosis and annually

Healthcare Interventions

Objective 2: Support delivery of evidence-based healthcare according to EPR-3 Asthma Guidelines in Emergency Departments (ED) and hospitals

- Pilot an ED/hospital education program that ensures patients receive the following upon discharge:
    - An AAP
    - Standard education on disease self management
    - Prescription for ICS and education on using asthma devices
    - A scheduled appointment with a primary care provider or asthma specialist for follow-up and asthma education
- Support delivery of asthma education in ED and inpatient settings by targeting continuing education opportunities to ED physicians, hospitalists, respiratory therapists and other healthcare professionals who interact with patients in acute care situations
- Work with the Montana Hospital Association to specifically target Critical Access Care Hospitals in rural areas and provide them with evidence based hospital/ED management and discharge protocols

Objective 3: Decrease barriers to accessing medical care for persons with asthma

- Support efforts by Community Health Centers and the Montana Primary Care Association to reach out to uninsured/underinsured patients with asthma
- Increase the efficacy and reach of the Medicaid Disease Management Program that provides services to high cost/high risk patients with asthma
- Compile list of programs that provide assistance to low income patients to cover drug costs and distribute to pharmacists statewide
- Target funding and educational opportunities to providers that serve low income populations. For example, waive fees for continuing education opportunities for providers from Community Health Centers and the IHS

Healthcare Interventions

Objective 4: Increase access to quality asthma education at multiple points of care

- Work with major payers in the state (Medicaid, Blue Cross Blue Shield and New West Health Services) to ensure that asthma education is reimbursable
- Increase the number of certified asthma educators (AE-C) in the state of Montana through the Montana Certified Asthma Educator Initiative that:
    - Sponsors a comprehensive, low-cost review course for the AE-C exam at least once every two years in Montana
    - Provides a free lending library of study materials for the AE-C exam
    - Provides informal mentoring from providers who are already certified to those who are studying for the exam
- Increase training opportunities for and communication between asthma educators by hosting conference calls two times a year where best practices and emerging research on asthma education are presented
- Support ongoing asthma education programs such as the University of Montana School of Pharmacy's Missoula Shopko Project that provides pharmacy based asthma management to patients with uncontrolled asthma
- Identify and provide training and resources to non-traditional professionals who interact with asthma patients such as WIC nutritionists and senior center staff
- Provide useful clinical tools to providers to supplement asthma education efforts such as free patient materials and demonstration device toolkits
- In conjunction with tribal and IHS partners, review and develop culturally appropriate asthma education materials for American Indians in the state and ensure their widespread availability
- Ensure materials promoted by the MACP are useful to patients with low health literacy and contain accurate, evidence based information

Environmental Interventions

Goal: Reduce exposure to environmental irritants and allergens that cause and/or exacerbate asthma

Objective 1: Reduce exposure to environmental tobacco smoke (ETS) and decrease percentage of persons with asthma who are current smokers

- Work with the Montana Tobacco Use Prevention Program (MTUPP) to support full implementation of the Clean Indoor Air Act in October 2009
- Work with the Office of Public Instruction (OPI) and MTUPP to support the implementation of comprehensive tobacco free school policies in all Montana districts
- Create materials specifically outlining the impact of ETS on individuals with asthma and distribute to the clinical community, school nurses and other stakeholders. Work with tribes and IHS to create and disseminate culturally relevant materials for American Indian communities across the state
- Promote the Montana Quit Line to healthcare providers at asthma related conferences and events
- Work with the MTUPP cessation specialist to develop a protocol for callers to the Montana Quit Line who have asthma

Objective 2: Provide education and training to professionals across the state who can impact exposure to asthma triggers

- Sponsor continuing education for medical providers on how to assess environmental exposures and educate patients on trigger reduction
- Include Indoor Air Quality (IAQ) information and education in all asthma related trainings for school personnel and childcare providers
- Work with the OPI to sponsor IAQ training for school janitors and maintenance staff
- Provide resources and trainings for county public health sanitarians on asthma triggers and IAQ
- Identify health professionals who do home visits (public health nurses, social workers etc) and target trigger identification and reduction trainings to these groups
- Support inclusion of more asthma related material in existing training programs like the *Essentials for Healthy Homes Practitioners* sponsored by MSU Extension

Environmental Interventions

Objective 3: Increase public awareness about environmental asthma triggers and ways to avoid/mitigate their exposure

- Promote DEQ's *Today's Air* website that provides hourly updates on outdoor air quality
- Sponsor a public awareness campaign to educate the public about asthma triggers common in Montana and ways to avoid/reduce exposure
- Utilize interdepartmental partnerships like the Montana Children's Environmental Health Network to increase scope and impact of public communication efforts
- Encourage appropriate referral to specialty care to identify specific environmental triggers

Objective 4: Support ongoing data collection on environmental asthma triggers and their health impact in Montana

- Enhance surveillance efforts and utilize research conducted by academic partners to better understand which environmental triggers and IAQ issues are most prevalent in Montana
- Utilize research like that conducted at the University of Montana's Center for Environmental Health Sciences and other academic institutions to better understand the scope and impact of asthma triggers unique to Montana's rural setting like in home wood burning stoves and wildfire smoke
- In conjunction with the Montana Children's Environmental Health Network, conduct a legislative review to assess which entities have jurisdiction to handle complaints related to IAQ at schools, worksites, and places of residence in the state

Objective 5: Support initiatives that focus on Montana populations most at risk for exposure to asthma triggers and provide education directly to persons with asthma

- Support programs like MSU Extension's Native AIR, Rocky Mountain College's Montana Indian Country CARE Project, and the Blackfeet Healthy Homes Project that address environmental asthma triggers in tribal communities
- Increase scope and reach of these activities and support evaluation efforts that will better assess the unique environmental issues on Montana reservations and gauge the impact of targeted interventions
- Continue to develop partnerships with tribal leaders and IHS providers to guide the development of efforts that focus on American Indians

School & Childcare Interventions

Goal: Increase the capacity of Montana schools and child care facilities to manage asthma

Objective 1: Increase the capacity of school nurses to provide comprehensive asthma management and education in the school setting

- Along with the Montana Association of School Nurses, support a recommendation by the Montana Board of Public Education to increase funding for school nurses and require a nurse to student ratio of 1:750
- Provide quality educational opportunities for school nurses related to asthma management in schools such as the National Association of School Nurses' *Managing Asthma Triggers* workshop
- Provide mini-grants to school nurses to implement evidence based asthma control activities in their schools
- Distribute standardized tools for school nurses to assess asthma, increase communication with primary care providers and aid in disease management including:
    - Asthma Action Plans
    - The Asthma Control Test
    - Standardized care plans

Objective 2: Increase asthma training opportunities and resources available to school and child care staff

- Working with the OPI, the School Administrators of Montana, the Montana Daycare Licensing Bureau and other partners, promote established resources like *Creating Asthma Friendly Schools in Montana: A Resource Guide* and *Asthma Education for Childcare Providers* across the state at relevant conferences and training events
- Identify key school stakeholders for whom there are no established training opportunities (office staff, bus drivers, maintenance staff) and work with partners to provide specific asthma training to these groups
- Provide training to physical education teachers and coaches on preventing and responding to exercise induced asthma. Promote use of the *Coaches Asthma Clipboard* online training program

School & Childcare Interventions

Objective 2: Continued

- To accommodate rural school and childcare staff, broadcast trainings across the state using existing infrastructure and technology such as iLinc and MetNet
- To make training more widely accessible to those who cannot attend real time meetings, establish web-based training modules and resource repositories that are electronically available statewide
- Work with coaches and administrators to promote resources like DEQ's *Today's Air* website to aid in determining whether to hold outdoor practices, recess and sporting events during wildfire season, especially for at-risk groups like children with asthma

Objective 3: Support ongoing programs that identify children with asthma and/or provide management services in school and childcare settings, especially programs that target at risk groups such as American Indians and low income youth

- Support continued inclusion of asthma related measures on the Rocky Mountain Tribal Epi-Center Child Health Measures project
- Support efforts like the school based clinic being implemented by the Fort Peck Tribes Wellness Program that provides on site asthma assessment and management for students
- Identify other school or childcare based programs and create partnerships to maximize resources and increase impact

Conclusion

The State Asthma Plan

The goals, objectives and strategies contained in this document represent a public health approach to addressing asthma in Montana over the next three to five years. The MACP and its partners acknowledge that asthma control is a complex public health problem that must be addressed within a multidimensional framework. Implementing the strategies outlined in this document will affect both short and long term asthma outcomes in the state and improve the lives of Montanans with the disease.

The goals, objectives and strategies in the Montana State Asthma Plan encompass many existing asthma related programs in the state. In a rural state like Montana, public health resources and infrastructure are often lacking, so it is essential to leverage the resources that do exist and maximize their impact. Because the State Plan focuses on expanding and supporting existing programs, there are some areas of potential asthma intervention that are not included in this document, but should be considered as areas for future intervention.

Asthma is a complex public health problem that must be addressed within a multidimensional framework

Potential Future Intervention Areas

- Work Related Asthma: According the 2006 BRFSS Asthma Call-Back Survey, 39.6% of adults with asthma in Montana say that their asthma was either caused or made worse by chemicals, smoke, fumes or dust at a current or previous job. Clearly, a large percentage of adults with asthma in the state suffer from work-related asthma (WRA). However, more data are needed on the industries and professions most affected by WRA so that interventions can be developed and targeted toward at-risk populations.
- Asthma and Older Adults: Adults aged 65 and over have one of the highest rates of asthma related hospitalizations in the state and are much more likely to die from asthma than their younger counterparts. In the future, asthma control efforts in Montana should focus on this population, partnering with senior centers, assisted living facilities, and other organizations that serve senior populations.
- Emerging Issues: The MACP and its partners are committed to staying abreast of the latest asthma control research. We will remain responsive to emerging issues in the field of asthma management and augment the State Plan as new evidence based approaches arise.

Conclusion

Using the State Plan

The Montana State Asthma Plan will be used to increase awareness of and support for asthma control efforts in the state. In the coming years, we hope to expand the scope of our work and leverage additional funding for asthma control in Montana. The MACP will encourage the use of the State Asthma Plan by:

- Drafting a statewide press release to announce the completion of the plan
- Distributing hard copies of the plan to key stakeholders including MAAG members, asthma specialists, local public health officials and IHS providers statewide
- Encouraging MAAG participants and other partners to use the State Asthma Plan to leverage funding and garner administrative support from their own organizations
- Using the State Plan in grant applications for MACP funding and encouraging our partners to do the same

In January 2009 the MACP and its partners will begin implementing the strategies outlined in the State Asthma Plan. Because the plan builds on existing programs, many of the strategies outlined in the plan are already underway. The MACP will actively support these ongoing efforts and will seek input from partners on prioritizing new strategies. Periodically, the MAAG will revisit the State Asthma Plan in order to evaluate its use and effectiveness, and update sections to include new asthma related efforts around the state. Working together, we can achieve the goals, objectives and strategies outlined in this plan, and make Montana a healthier place for all people with asthma.

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Appendix 1: Healthy People 2010

Report Card: Montana and the HP 2010 Asthma Goals

Objective[9]	Target	Montana Data
24-1 Reduce asthma deaths	Age group: < 5: 1/million 5-14: 1/million 15-34: 2/million 35-64: 9/million ≥ 65: 60/million	2005-2007: - 2.9/million 2.7/million 6.0/million 56.0/million
24-2 Reduce hospitalizations for asthma	Age group: < 5: 25/10,000 5-64: 7.7/10,000* ≥ 65: 11/10,000*	2006: 25.1/10,000 4.7/10,000* 11.0/10,000*
24-3 Reduce ED visits for asthma	Age group: < 5: 80/10,000 5-64: 50/10,000 ≥ 65: 15/10,000	No ED surveillance system currently available in MT. The rate of ED visits for kids 0-18 enrolled in Medicaid in MT from 2005-2006 was 255/10,000.
24-4 Reduce activity limitations among persons with asthma	From 20% to 10%	53% of adults with asthma report limiting their usual activities in some way during the past 12 months (2006)
24-5 Reduce the number of school or workdays missed by persons because of asthma	No baseline data and no target specified for 2010	21% of adults with asthma report not being able to work or carry out usual activities at least one day in the past year (2006)
24-6 Increase the proportion of persons with asthma who receive formal patient education, including information about community and self-help resources	From 8.4% to 30%	7% of adults with asthma report having taken a course on how to manage their asthma (2006)
24-7 Increase the proportion of persons with asthma who receive appropriate asthma care according to the National Asthma Education and Prevention Program guidelines. Measured as persons with asthma who receive: 1) an asthma action plan 2) instructions on inhaler technique 3) education on recognizing signs of an asthma attack and peak flow monitoring 4) medication regimens that prevent need for > one canister of SABA per month 5) follow up medical care for long-term management after an asthma hospitalization 6) assistance with assessing and reducing exposure to environmental risk factors	No baseline data and no target specified for 2010	Percent of adult asthma patients in 2006 who report having been: •Given an AAP: 29% •The recipient of an inhaler technique demonstration: 92% •Trained to know the early signs of an asthma attack: 67% •Trained to use peak flow monitor: 50% •Told by health professional to change their home environment: 41% *No measures currently available for SABA use and hospitalization follow-up*

* Age adjusted to the 2000 US population

Appendix 2: Logic Model

Montana State Asthma Plan Logic Model

Input

Montana Asthma Advisory Group Partners

•

Montana Asthma Control Program Staff

•

Resources and time from stakeholders statewide

•

Coordinated planning and implementation of the State Asthma Plan

Activities

- **Surveillance:** Establish and maintain a comprehensive state asthma surveillance system
- **Partnerships:** Establish and maintain effective partnerships to increase the reach and impact of asthma control efforts
- **Healthcare:** Improve systems and quality of asthma care
- **Environment:** Reduce exposure to environmental irritants and allergens that cause and/or exacerbate asthma
- **Schools & Childcare:** Increase the capacity of Montana schools and childcare facilities to manage asthma

Outcomes

- Increase public awareness about asthma
- Promote policy and environmental changes to create systems with increased capacity to manage asthma
- Empower persons with asthma to manage their disease
- Reduce activity limitations and school/work days missed due to asthma

Impacts

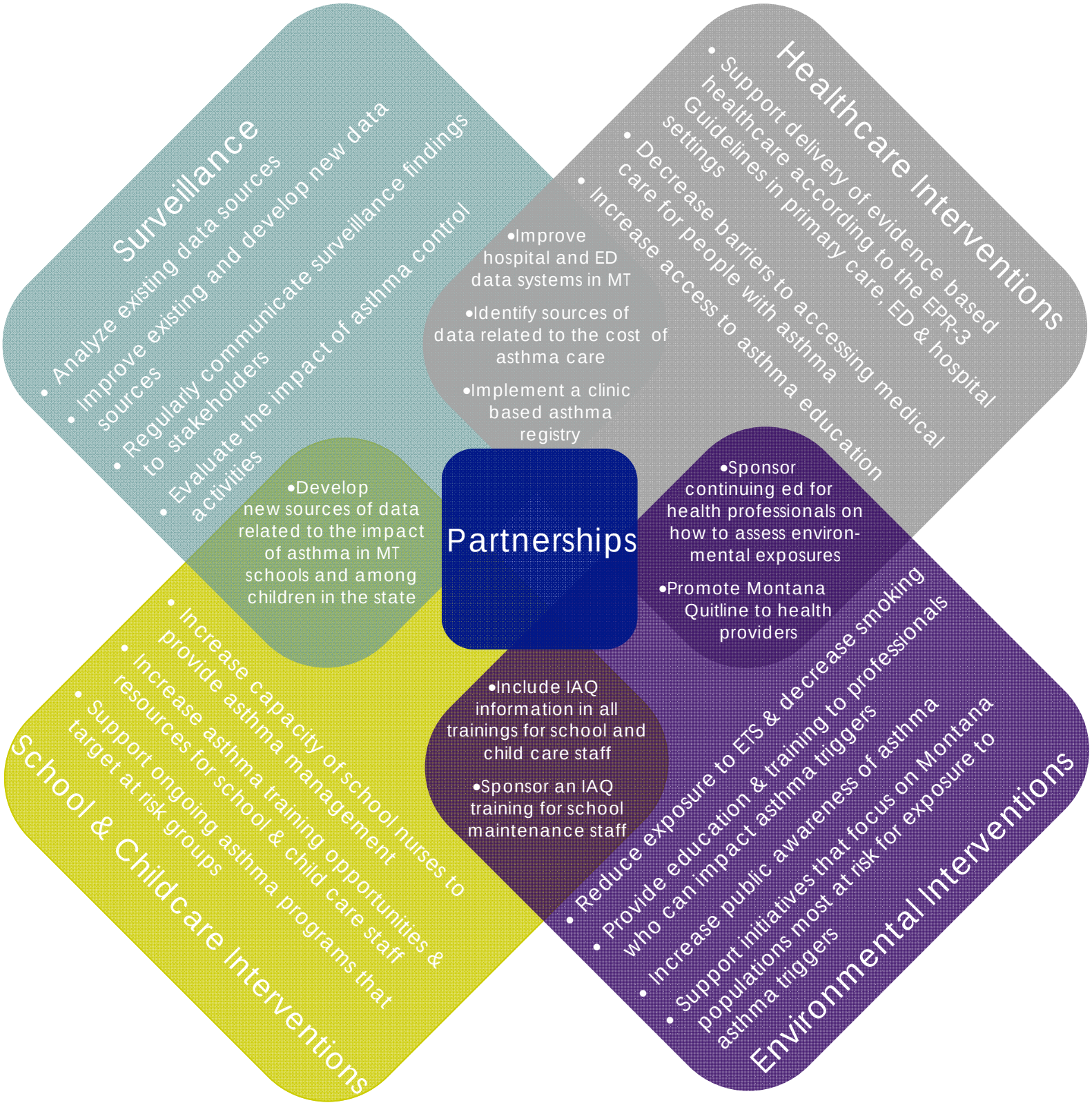
- Improve the quality of life for all Montanans with asthma
- Reduce geographic, racial and socioeconomic disparities in asthma morbidity and mortality
- Reduce ED visits for asthma
- Reduce hospitalizations for asthma
- Reduce direct and indirect asthma costs
- Reduce asthma deaths

Surveillance and Evaluation: Increase knowledge of asthma in Montana through ongoing, systematic data collection and program evaluation

Underlying Themes:

Disparities, Communication, Sustainability and Evaluation

Appendix 3: Integration Diagram



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