

Quality Improvement Report

Report Highlights:

- Recent asthma-related research findings
- Tools for examining environmental management of asthma
- Program updates, ongoing activities, and upcoming educational opportunities

Montana Asthma Control Program

1400 E Broadway
Helena, Montana 59620-2951
dphhs.mt.gov/asthma

Introduction

One goal of the Montana Asthma Control Program (MACP) is to provide ongoing education and information to the health care community about treating patients living with asthma. This new quarterly report series is designed to provide you with a summary of some of the latest research on asthma-related subjects and on the state of various quality improvement activities in Montana.

Asthma Research Updates

Asthma and Heart Health

From Allergy and Asthma Today, Spring 2015, Volume 13, Issue 1, page 8

Two recent studies done through the Mayo Clinic have demonstrated that adults with asthma could be at increased rate for heart attack. In one study, after controlling for traditional heart attack risk factors, patients with active asthma were at a 70 percent increased risk of heart attack. In another study, patients with persistent asthma had a 60 percent higher risk of cardiovascular events than those without asthma. The cause of this relationship is still unclear.

Asthma, Depression, and Obesity

Boudreau, M., Bacon, S.L., Ouellet, K., et al. (2014). Mediator effect of depressive symptoms on the association between BMI and asthma control in adults. *CHEST*, 146 (2), 348-354. doi: 10.1378/chest.13-1796

The purpose of this study was to examine the way in which depressive symptoms may mediate the obesity-asthma relationship in adults. A total of 798 patients were recruited from an outpatient asthma clinic; they provided demographic and medical history information and completed a variety of questionnaires, including the Beck Depression Inventory (BDI)-II and the Asthma Control Questionnaire (ACQ). Results indicate that depression and a high BMI are both associated with worse asthma control, and the relationship between BMI and worse asthma control is mediated by depressive symptoms.

Guidelines-Based Care

Quality Improvement Activity: Inhaled Corticosteroid (ICS) Prescribing Practices

Note: The EPR-3 Guidelines state at all steps of care for persistent asthma ICSs are the most consistently effective long-term control medication. All patients should be considered for initiating ICS upon discharge from the emergency department following an acute exacerbation.

Andrews, A.L., Russell, W.S., Titus, M.O., et al. (2014). Quality improvement methods improve inhaled corticosteroid prescribing in the emergency department. *The Journal of Asthma*, 51 (7), 737-742.

People living with persistent asthma underutilize their inhaled corticosteroids (ICS), and because of low outpatient follow-up rates after emergency department visits, many patients are unlikely to be prescribed an ICS after an acute exacerbation. Quality improvement methods were used to encourage physicians to prescribe ICS for patients at the time of ED discharge. Activities were focused on education, streamlined prescribing, and directed provider feedback. Multiple plan-do-study-act cycles were utilized during implementation. The ICS initiation rate for children seen in and discharged home from the ED following an acute asthma exacerbation increased from 11.25% to 79%, and has been sustained for 8 months over the goal rate of 75%.

Environmental Control

Note: The EPR-3 Guidelines recommend reducing exposure to irritants or inhalant allergens in order to “reduce inflammation, symptoms, and need for medication.” Asthma self-management is multifaceted, and requires controlling environmental triggers whenever possible.

Environmental Management of Pediatric Asthma: Guidelines for Health Care Providers

You may already be using validated surveys, such as the Asthma Control Test (ACT), to learn more about your patients and their asthma symptoms. A new resource was recently developed to learn more about environmental asthma triggers with funding from the Centers for Disease Control and Prevention (CDC), the National Institute of Environmental Health Sciences, and the American Legion Child Welfare Foundation. It was developed to be used with children aged 0 to 18 already diagnosed with asthma. You can learn more about this resource here: <http://neefusa.org/health/asthma/asthmaguidelines>. Some of the tools developed are:

- The “Environmental History Form,” which can be used as a quick intake tool to help determine a patient’s environmental asthma triggers; and
- The “Environmental Intervention Guidelines,” which provides suggestions for follow-up questions and intervention solutions for environmental asthma triggers.

Contact the MACP for requests for topics to be covered either in this quarterly report or in our webinar series, either at avongohren@mt.gov or asthmainfo@mt.gov.

Patient Education

Note: The EPR-3 Guidelines emphasize the importance of partnerships between health professionals and patients in effective asthma self-management.

Cabana, M.D., Slish, K.K., Evans, D., et al. (2014). Impact of Physician Asthma Care Education on patient outcomes. *Health Education and Behavior*, 41 (5), 509-517.

A randomized trial in 10 regions of the United States was conducted with 101 primary care providers who were recruited and randomly assigned by site to receive a continuing education program provided by local faculty. Two interactive seminar sessions, lasting for 2.5 hours each, reviewed national asthma guidelines, communication skills, and key educational messages using short lectures, case discussions, and videos. Follow-up interviews were conducted with 731 patients who reported that physicians in the intervention group were more likely to inquire about patient's concerns about asthma, encourage patients to be physically active, and set goals for successful treatment, compared with control subjects. Patients of physicians who participated in the educational program had a greater decrease in days limited by asthma symptoms and decreased emergency department visits than those that did not participate.

PROGRAM UPDATES

You can find the MACP's most recent webinar, *Spirometry: Application in Practice*, provided by Bill Pruitt, MBA, RRT, CPFT, AE-C, FAARC, at our website: <http://dphhs.mt.gov/Asthma/webinars>

Congratulations to Carrie Bates, RT and her team at North Valley Hospital, as well as Maggie Roddam, RT and her team at St. Luke Community Healthcare, for being the first two recipients of the MACP's \$5,000 grant for asthma-related quality improvement activities in an emergency department setting! Contact Anna von Gohren at avongohren@mt.gov for more information on how to apply for the grant.

Our most recent surveillance report provided an analysis of emergency department discharge data in Montana by reviewing asthma ED rates by year (2011-2013), age group, sex, and month of occurrence. Download your copy here: <http://dphhs.mt.gov/Asthma/data>

The Montana Department of Public Health and Human Services (MT DPHHS) has a goal of becoming a trauma-informed agency in 2015. Studies have shown that Adverse Childhood Experiences (ACEs) are major risk factors for the leading causes of illness and death in the United States, as well as poor quality of life. To learn more about ACEs and how they can influence the health of your patients, visit <http://www.cdc.gov/violenceprevention/cestudy/> or <http://www.elevatemontana.org/>.

For more information, contact:

Jessie Fernandes, MPH, CPH
Program Manager
(406) 444-9155
jfernandes@mt.gov

William Biskupiak
Health Educator
(406) 444-0995
wbiskupiak@mt.gov

Anna von Gohren, MS, CHES
Quality Improvement Coordinator
(406) 444-7304
avongohren@mt.gov

Luke Baertlein, MPH
Epidemiologist
(406) 444-4592
lbaertlein@mt.gov

Upcoming Events

2015 Montana Society for Respiratory Care Conference

April 15-17, 2015
Holiday Inn, Missoula, MT
For more information, please visit <http://www.msrgmt.org/2015-conference.php>

Association of Asthma Educator's "Becoming an Asthma Educator and Care Manager" Course

April 17, 2015
Holiday Inn, Missoula, MT
For more information, please email Anna von Gohren at avongohren@mt.gov

Montana Asthma Control Program Spring Webinar: "Talking with People about Tobacco" with Clare Lemke, RN, BSN, CTTs

May 14, 2015 (Online)
For more information, please email Anna von Gohren at avongohren@mt.gov

Montana Asthma Advisory Group Spring Meeting

May 15, 2015
Three Forks, MT
For more information, please email Anna von Gohren at avongohren@mt.gov

2015 Worksite Health Promotion and Employer Sponsored Benefits Conference

May 12-13, 2015
Best Western GranTree Inn, Bozeman, MT
For more information, please email Chelsea Pelc at cpelc@mahcp.org

National Asthma and Allergy Awareness Month

May 2015

The Asthma and Allergy Foundation of America (AAFA) promotes May as a time to focus on issues regarding asthma and allergies. As a peak season for asthma- and allergy-related medical problems, it is a great time to educate and spread awareness.

In particular, asthma patients should be receiving information about asthma pathophysiology, asthma triggers, the correct use of medications, and Asthma Action Plans to better self-manage their conditions.

May 6, 2015 is World Asthma Day.

May 11-17, 2015 is Food Allergy Awareness Week.

For more information, go to www.aafa.org or dphhs.mt.gov/asthma. Keep an eye out for our advertisement airing on your televisions starting in May!

Online Resources

dphhs.mt.gov/asthma

- Montana Asthma Control Program State Asthma Plan and Strategic Evaluation Plan
- Reports on the burden of asthma and environmental asthma triggers in Montana
- Archived asthma-related webinars with free CEUs
- Archived surveillance reports on asthma-related subjects
- Resources for health care facilities, asthma educators, schools and school nurses, coaches, day care providers, and people living with asthma