Report Highlights:

◊ Recent research related to patients living with asthma, including:
  - COPD,
  - Wheezing, and
  - Mental health screening.

◊ Updated practice parameters for exercise-induced bronchoconstriction.

◊ Program updates and upcoming educational opportunities.

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dphhs.mt.gov/asthma

News

Registration will be open soon for the 2017 Big Sky Pulmonary Conference. To learn more about the agenda and registration details, head to the conference website at:

umt.edu/sell/cps/bigsksypulmonary

Research Updates

Asthma and COPD overlap syndrome (ACOS)


Researchers analyzed data from the 2012 South Carolina Behavioral Risk Factor Surveillance System (BRFSS) telephone survey. Data were reviewed with five categories of obstructive airway disease in mind: former asthma only, current asthma only, COPD only, ACOS, and none. 16.2% of men and 18.7% of women reported a physician diagnosis of COPD and/or asthma. Current asthma only and ACOS were both more prevalent among women than men. COPD only and ACOS were both associated with higher likelihoods of poor health and most comorbidities for men and women. These outcomes were also associated with current asthma only for women. Having only COPD did not differ between genders.

Join us at the Big Sky Pulmonary Conference 2017 to hear about ACOS from Dr. Tokunbo Matthews on Friday, March 17.

COPD and Veterans


Researchers saw that patients are often treated for COPD without first undergoing spirometry to confirm airflow obstruction (AFO). A cohort of veterans with spirometry performed at Pacific Northwest Dept. of Veterans Affairs medical centers between 2003 and 2007 was identified. Patients were included in the cohort if they had been empirically diagnosed with COPD in the 2 years prior to spirometry testing and also taking inhaled medication to treat COPD in the year prior to spirometry testing. Of 3,209 patients, only 62% had airflow obstruction. Somatic symptoms with the absence of AFO indicated congestive heart failure, depression, diabetes, obesity, and sleep apnea. Researchers state findings suggest empirical diagnosis and treatment of COPD may lead to inappropriate treatment of patients who do not have AFO.
Mental Health and Asthma

Note: EPR-3 Guidelines state that stress and depression should be seen as a comorbid condition that can impede asthma treatment, and should be considered with asthma that is not well controlled.


Researchers analyzed the Nationwide Inpatient Sample (2009-2011), limited to hospitalizations of those aged 18 years and older with ICD-9 codes that indicated asthma and mental illness discharges. Any mental illness was associated with increased length of stay in the hospital, total costs, and lower odds of routine disposition for patients with asthma, and approximately 29% of the asthma hospitalizations reported mental illness. Similar trends were identified across age groups. Researchers believe these results demonstrate the need to address mental illness as an integral component of routine care.


The purpose of this study was to validate the cut-off score of the Beck Depression Inventory II (BDI-II) in adult patients with asthma. Out of 801 adult outpatients with asthma, researchers identified 108 (13%) had current Major Depressive Disorder. The overall optimal BDI-II cut-off score was found to be 12, although can range from 11 to 15 depending on the individual. The cut-off score can be influenced by sociodemographic and clinical characteristics of patients.

At the BSPC 2017, Dr. Eric Arzubi will discuss chronic disease and mental illness on Saturday, March 18.

Wheezeing

Note: EPR-3 Guidelines state that, while the lack of wheezing and a normal chest examination do not exclude asthma, the presence of wheezing (a high-pitched whistling sound when breathing) can increase the probability of asthma when seen with other key indicators, such as a cough, recurrent difficulty in breathing, and recurrent chest tightness.


Researchers aimed to identify sex-specific risk factors for wheeze from birth through midchildhood, as well as distinct longitudinal wheeze phenotypes. Mothers of 1,623 children reported child wheeze symptoms over the past year through 9 years, starting at age 1. Three longitudinal wheeze phenotypes were identified, including: never/infrequent wheeze, early transient wheeze, and persistent wheeze. Maternal asthma, infant bronchiolitis, and atopic dermatitis were associated with persistent wheeze in both sexes. Persistent wheeze was associated with paternal asthma for boys only, and being black or Hispanic was a predictor of persistent wheeze for girls only.

Dr. Don Bukstein will present two breakout sessions reviewing infant wheezing and severe asthma on March 17 at the BSPC 2017.
Some chronic conditions, like asthma, can be heavily affected by Adverse Childhood Experiences (ACEs). Learn more about ACEs, how they can influence the health of your patients, and what is being done in Montana to address this issue at:


Congratulations to staff at St. Luke Community Healthcare for completing the requirements to become a recognized Emergency Department for guidelines-based asthma care.

To learn more about support for conducting quality improvement activities related to asthma, in either the clinic or ED setting, contact Megan Burton at mburton@mt.gov.

Exercise-Induced Bronchoconstriction: Updated Practice Parameter


This is a summary of the recent updates made to the exercise-induced bronchoconstriction, or EIB, practice parameter, which was originally developed in 2010. The Joint Task Force on Practice Parameters (JTFPP) represents members from the American Academy of Allergy, Asthma, and Immunology (AAAAI), the American College of Asthma, Allergy, and Immunology (ACAAI), and the Joint Council of Allergy, Asthma and Immunology.

The workgroup identified three main observations:

1. Dry powder mannitol for inhalation as a bronchial provocation test is not currently available in the United States, but is approved by the FDA and available in other countries.

2. If, in a person with EIB, baseline pulmonary function test results are normal to near normal pre– and post-use of a bronchodilator, further testing should be performed using a standardized exercise challenge of eucapnic voluntary hyperpnea (EVH).

3. The efficacy of nonpharmaceutical interventions, specifically the use of omega-3 fatty acids, has been challenged.

In order to effectively manage EIB, providers should understand that EIB susceptibility can vary among patients and occur in the presence or absence of asthma.

You can read more about this and other practice parameters at the AAAAI website.
### Upcoming Events

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<tr>
<th>Event</th>
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<th>Contact</th>
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<tbody>
<tr>
<td>MACP Winter Webinar: Spirometry 101</td>
<td>January 19, 2017</td>
<td>Via WebEx</td>
<td>Anna Bradley at <a href="mailto:abradley@mt.gov">abradley@mt.gov</a></td>
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<tr>
<td>Montana Diabetes Advisory Coalition</td>
<td>January 20, 2017</td>
<td>Radisson Colonial Hotel</td>
<td>Susan Day at <a href="mailto:sday@mt.gov">sday@mt.gov</a></td>
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<tr>
<td>Montana Asthma Home Visitor Training</td>
<td>January 26-27, 2017</td>
<td>Radisson Colonial Hotel</td>
<td>Sonja Tysk at <a href="mailto:stysk@mt.gov">stysk@mt.gov</a></td>
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<tr>
<td>Big Sky Pulmonary Conference</td>
<td>March 16-18, 2017</td>
<td>Fairmont Hot Springs</td>
<td>Anna Bradley at <a href="mailto:abradley@mt.gov">abradley@mt.gov</a></td>
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<tr>
<td>Montana Society for Respiratory Care Annual Conference</td>
<td>April 5-7, 2017</td>
<td>Fairmont Hot Springs</td>
<td>Jessie Fernandes at <a href="mailto:jfernandes@mt.gov">jfernandes@mt.gov</a></td>
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**Becoming an Asthma Care Manager**, offered through the Association of Asthma Educators (AAE)

- April 7, 2017
- Fairmont Hot Springs

For more information, please contact Anna Bradley at abradley@mt.gov

### Online Resources

- [dphhs.mt.gov/asthma](http://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