Quarterly Asthma Newsletter

Report Highlights:

◇ Recent research related to patients living with asthma, including:
  - Gun violence and asthma;
  - Asthma and COPD Overlap Syndrome (ACOS); and
  - Environmental exposures.
◇ Information about asthma in schools and keeping kids healthy this year.
◇ Program updates and upcoming educational opportunities.

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

News

Have you used the Chronic Disease Prevention and Health Promotion Bureau’s (CDPHPB) new guide that shows what activities are available to support healthy living in your community yet? You can find it on the CDPHPB’s coordinated community-based program website.

Research Updates

Gun Violence and Asthma

Researchers studied Puerto Rican children aged 9 to 14 years in both San Juan, PR (n=472) and Hartford, CT (n=275). Researchers found a significant interaction between African ancestry, measured by genome-wide genotypic data, and gun violence, defined as the child’s report of hearing gunshots more than once. There was no significant association between asthma and African ancestry in children not exposed to gun violence.

The authors emphasize that the link between asthma and African ancestry or exposure to violence is unclear. However, “exposure to violence may lead to childhood asthma through increased psychosocial stress.”

Asthma and COPD Overlap Syndrome (ACOS)

Authors sought to identify the prevalence of ACOS in the general population in this retrospective cohort study. Data were extracted from the Balearic Islands, Spain: the Majorca Real-Life Investigation in COPD and Asthma cohort. 5,093 patients with ACOS were compared with 22,778 patients with COPD. Researchers found that ACOS is prevalent in the general population. Also, females with less smoking exposure compared with patients with COPD alone are largely affected, and cardiovascular comorbidities contribute heavily to overall hospitalization risk of patients with ACOS.

See our latest surveillance report on ACOS, along with other available data on asthma in Montana.
Environmental Exposures

Note: EPR-3 Guidelines state that if patients who have asthma are exposed to irritants or allergens to which they are sensitive, their asthma symptoms may increase and potentially lead to an asthma exacerbation. Substantially reducing exposure to these factors may reduce inflammation, symptoms, and the need for medication.

As such, home and work environment can impact overall asthma control. Continued reinforcement of the importance of trigger reduction and environmental exposure control, as well as engaging the patient in discussion to learn about precipitating and/or aggravating factors for their asthma, is recommended.

Learn more about triggers and the environment at www.epa.gov/asthma.


Researchers examined associations between environmental risk factors and a family history of asthma in children with asthma. 823 children were enrolled in this prospective cross-sectional study. Environmental risk factors were identified as exposure to second-hand tobacco smoke (STS) and pet ownership. The authors reported two main findings:

- Children with a family history of asthma were significantly more likely to have a pet at home and exposure to STS than children in families without a history of asthma; and
- Children with asthma who were exposed to STS were significantly more likely to have a pet at home and a family history of asthma than children with asthma who have no STS exposure.

Researchers believe this indicates an association between lifestyle choices, environmental exposures, and family history of asthma.


Researchers conducted a review of existing literature examining the way in which work environment exposures, specifically related to the agricultural sector, influenced asthma in adults. Studies published during 1999 or after were included in the review. The authors found that the results are inconclusive. Researchers believe that, along with well-accepted factors such as genetics, gender, and atopic predisposition, the type of livestock, pesticide exposure, and magnitude and duration of exposure all interact with each other to determine asthma risk.

While the literature does suggest that longer exposure to occupational farming is associated with decreased asthma risk, it also suggests that agricultural work and exposure to multiple types of livestock are independent risk factors of developing asthma.

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:

http://www.cdc.gov/violenceprevention/acestudy/ and
http://www.elevatemontana.org/.
Support for Schools to Keep Children Healthy and Safe

with BJ Biskupiak

Asthma Action Plans
Because children spend most of their day at school, it is important that school professionals understand asthma and asthma management. Asthma action plans give school professionals detailed information about the student's asthma management and include steps to take in the event of an asthma exacerbation. Having an asthma action plan on file in the school setting can help school nurses coordinate care with primary care providers or specialists and ensure that students don’t miss school days due to their asthma.

New Nurse Delegation Rules
After much work by the Board of Nursing (BON), the changes to the administrative rules related to delegation are officially changed and were effective June 4, 2016. Delegation by a nurse, as defined by the BON, is not the same as a school administrator or a district assigning a (non-nurse) staff member to provide a health care service. Nursing delegation may not always be appropriate, but it can be a useful mechanism for workload distribution and meeting the needs of students.

These rules are made by the BON in order to protect the safety of all Montana citizens. A copy of the new rules is available on the Secretary of State website.

School Chronic Disease Grants
Asthma Mini-Grants
School nurses and certified asthma educators may apply for $500-$1,500 grants to carry out one of 8 pre-designed asthma projects. Since 2010, over 50 school nurses have received grants to help create more asthma friendly schools. Visit the MT School Health website for more information.

Montana Heart Rescue — CPR in Schools
Montana Heart Rescue is launching a statewide effort to increase the number of Montanans who can perform compression-only CPR. Compression-only CPR is ideal for the middle/high school setting. The course can be taught in a single class period with 20-30 students at a time. Montana Heart Rescue can provide assistance in training school staff to present the course as well as provide all the necessary materials needed to teach the class. Contact Mike McNamara for more information.

To learn more about the new School Health Program at the Montana Department of Public Health and Human Services, and to stay informed on new resources being developed for school-aged children with chronic conditions, visit the School Health website.

You may also contact the School Health Program Coordinator, BJ Biskupiak, at wbiskupiak@mt.gov.
Upcoming Events

Montana Cancer Coalition Conference
October 18, 2016
Helena, MT
For more information, please visit www.mtcancercoalition.org

Montana Diabetes Professional Conference
October 27-28, 2016
Helena, MT
For more information, please contact Susan Day at sday@mt.gov

Montana Asthma Advisory Group: Winter Meeting
December 2, 2016
Helena, MT
For more information, please contact Jessie Fernandes at jferndanes@mt.gov

MACP Winter Webinar: Spirometry 101
January 19, 2017
Via WebEx
For more information, please contact Anna von Gohren at avongohren@mt.gov

Big Sky Pulmonary Conference
March 16-18, 2017
Fairmont Hot Springs
For more information, please contact Anna von Gohren at avongohren@mt.gov

Montana Society for Respiratory Care Annual Conference
April 4-6, 2017
Fairmont Hot Springs
For more information, visit www.msrcmt.org

Becoming an Asthma Care Manager, offered through the Association of Asthma Educators (AAE)
April 6, 2017
Fairmont Hot Springs
For more information, please contact Anna von Gohren at avongohren@mt.gov

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