

## **Asthma Basics for Tribal Environmental Professionals PowerPoint Talking Points**

### *Presentation Overview:*

The Asthma Basics for Tribal Environmental Professionals PowerPoint presentation aims to provide environmental professionals working in tribal communities with basic information on asthma. Certain factors in the indoor and outdoor environment can cause, trigger or exacerbate asthma symptoms. However, simple actions can reduce the impact of these environmental triggers, as well as reduce the burden of asthma in tribal communities.

The presentation is divided into the following sections:

- 1) Asthma Overview
- 2) Asthma Triggers
- 3) Actions to Take in Your Community

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### **Slide 1: Asthma Basics**

- *Introduction:* Good (morning, afternoon, evening), my name is \_\_\_\_\_, and I will present “Asthma Basics for Tribal Environmental Professionals.” My goal today is to help you learn more about asthma, as there are simple actions you can take as an environmental professional to help reduce the burden of asthma in tribal communities.
- The presentation is divided into the following sections:
  - Asthma Overview
  - Asthma Triggers
  - Actions to Take in Your Community
- This presentation was developed by the U.S. Environmental Protection Agency, as a tool for the Tribal Indoor Air Quality website ([www.epa.gov/iaqtribal/](http://www.epa.gov/iaqtribal/)). The website aims to act as a primary resource for tribal-related information on indoor air quality (IAQ) and as a facilitator of peer-to-peer learning and sharing.
- The Asthma Basics for Schools PowerPoint presentation, developed by the National Asthma Education and Prevention Program (NAEPP) of the National Heart, Lung, and Blood Institute (NHLBI), was used as the basis for this presentation ([www.nhlbi.nih.gov/health/prof/lung/asthma/basics\\_schools/part2.ppt](http://www.nhlbi.nih.gov/health/prof/lung/asthma/basics_schools/part2.ppt)).

### **Slide 2: Presentation Overview**

- During this presentation, I will be answering the following questions:
  - What is asthma?
  - How does asthma affect tribal communities?
  - What triggers asthma?
  - What can I do?

### **Slide 3: Asthma Fact or Fiction?**

- It is contagious. (Fiction. In fact: You cannot catch asthma from another person. Although the exact cause of asthma isn't known, researchers think a combination of factors (family genes and certain environmental exposures) interact to cause asthma to develop.)
- It is only an acute disease, and you can outgrow it. (Fiction. In fact: Asthma is a chronic disease, and you cannot outgrow it. Although the condition may become inactive in the teenage years, the symptoms may recur at anytime in adulthood.)
- It always limits normal activities. (Fiction. In fact: Daily asthma controller/pre-exercise medications allow children to be active.)
- It limits a child's ability to fully participate in sports. (Fiction. In fact: If well-controlled, asthma should not limit exercise and children can fully participate in sports.)

#### Slide 4: What is Asthma?

- Asthma is a condition that:
  - is chronic, meaning that it's an on-going, long-term health condition;
  - produces recurring episodes of breathing problems called asthma episodes;
  - is potentially life-threatening;
  - can occur at any age;
  - is not contagious, meaning it cannot be spread from one person to another; and
  - cannot be cured, but can be controlled.
- The cause of asthma is unclear. It is probably caused by a mix of genetic and environmental factors.
- *Note for presenter:* Some audiences may need a definition for genetic and environmental factors. Genetic factors are things passed down from your parents. Environmental factors are things in the environment around you that may contribute to the development of asthma.

#### Slide 5: Asthma in Tribal Communities

- A report by the Centers for Disease Control and Prevention (CDC) found that asthma affects almost 12 percent of people living in tribal communities – nearly double the current national average of 7 percent.<sup>1</sup>
- In the U.S., 13.0% of American Indian/Alaska Native children have asthma compared to 8.9% of children nationwide (aged 2 to 17 years).<sup>2</sup>
- It is important we manage asthma triggers and continue to improve the overall health of all of our tribal communities.

#### Slide 6: What are the Symptoms of Asthma?

- What are the symptoms of asthma?
  - Shortness of breath: Complaints of being winded, or can't catch their breath.

<sup>1</sup> <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5307a1.htm>

CDC. Surveillance for asthma---United States, 1980--1999. In: CDC Surveillance Summaries (March 29). MMWR 2002;51(No. SS-1).

CDC. 2002 BRFSS summary data quality report. Available at <http://www.cdc.gov/brfss/ti-quality-req2002.htm>.

<sup>2</sup> Asthma Prevalence Among US Children in Underrepresented Minority Populations: American Indian/Alaska Native, Chinese, Filipino, and Asian Indian. Brim, Rudd, Funk, and Callahan. PEDIATRICS: 122(1). July 2008, pp. e217-e222. <http://pediatrics.aappublications.org/cgi/content/full/122/1/e217>

- Wheezing: Sounds like a high-pitched, raspy whistle. You may hear the wheeze when the person exhales. As the episode progresses, you may hear the wheeze when the person inhales and exhales.
- Tightness in the chest: Some kids may describe this sensation as a heaviness in the chest. You may even see them attempt to press down on their chest in an attempt to alleviate the pressure.
- Coughing at night or after physical activity, or a cough that lasts more than a week. Coughing can also be a warning sign of an impending episode for some people with asthma.
- Waking at night with any of the above symptoms, which is a key marker of uncontrolled asthma.
- One or more of these may be present and the absence of wheezing may mean there is no air moving through the lungs at all.

### **Slide 7: What Happens During an Episode of Asthma?**

- Three things can happen during an asthma episode:
  - Swelling of the airways.
  - Clogging – the mucus blocks the airways and thus allows less air to pass through the airways.
  - Squeezing – the air passages are squeezed together by the muscles that surround the outside of each airway.
- This combination of swelling, clogging and squeezing dramatically reduces the size of the airways.

### **Slide 8: What Can Make Asthma Worse?**

- Some things can make asthma worse and can initiate the onset of an asthma episode. Not all people with asthma are affected by the same factors, and their sensitivities can change over time.
- The most common cause of asthma episodes is colds or other upper airway infections, which is just one more reason to emphasize the importance of good hand washing.
- Some people only experience asthma symptoms during or after physical activity. This is referred to as exercise induced asthma (EIA).
  - EIA is distinct from allergic asthma in that it does NOT cause swelling and mucus production in the airways.
  - EIA can be avoided by taking pre-exercise medications and by warming up/cooling down.
- Changes in weather and temperature can affect some people's asthma as well.
- Strong physical expressions of feelings, such as crying or laughing hard, or yelling, can cause some people's asthma to flare up.

### **Slide 9: What Can Make Asthma Worse?**

- Most homes and schools in humid areas have dust mites. They are found in carpets, clothes, stuffed toys and fabric-covered items.
- Droppings, saliva and the body parts of cockroaches and other pests can cause asthma attacks for some students.
- Pets like rabbits, hamsters, gerbils and parakeets may cause some people to have an asthma attack and should be removed.

- Some people's asthma flares up when grass is cut nearby.
- Mold grows where moisture is present. All molds that are found growing inside a home, work place or school should be removed immediately.
- Nitrogen dioxide – An odorless gas that can irritate your eyes, nose and throat and may cause shortness of breath. Sources of nitrogen dioxide may include: unvented appliances (e.g., gas stoves), vented appliances with defective installations, welding and tobacco smoke.
- *Note to presenter:* The information found in this slide is found in the following sources:
  - <http://www.epa.gov/iaq/asthma/index.html>;
  - [http://www.epa.gov/mold/mold\\_remediation.html](http://www.epa.gov/mold/mold_remediation.html);
  - <http://www.cdc.gov/mold/faqs.htm>; and
  - <http://www.aafa.org>.
  - <http://breatherville.org/breatheatschool/> — has a Home, School & Play resource which describes these triggers and how to remediate them.

### **Slide 10: What Can Make Asthma Worse?**

- Tobacco smoke can actually contribute to causing asthma, in addition to causing people with asthma to experience asthma symptoms.
- Outdoor air pollution, including diesel exhaust from buses, can cause asthma episodes. Poor outdoor air quality can also be a problem.
- Scented products, such as perfumes, body creams or scented candles cause some people's asthma to flare-up.
- Strong fumes or odors from chemicals such as cleaning products, pesticides and paint can cause some people to have an asthma episode.

### **Slide 11: Is There A Cure For Asthma?**

- There is no cure for asthma, but it can be controlled.
- Most people with asthma should be able to live healthy, active lives with minimal symptoms.
- There are many simple actions you can take to reduce the burden of asthma in your community.

### **Slide 12: How Can Asthma Be Controlled?**

- Follow an individualized, written asthma action plan. Each person's asthma action plan should come from his/her physician or other healthcare provider. ([http://www.epa.gov/asthma/pdfs/asthma\\_action\\_plan.pdf](http://www.epa.gov/asthma/pdfs/asthma_action_plan.pdf))
- If a person is sensitive to specific allergens or irritants, reduce or eliminate those allergens or irritants.
- Encourage people with asthma to use their asthma medications, as prescribed. For some people with only occasional symptoms, this may mean using just a quick-relief medicine to relieve symptoms. For others, it may mean using daily, long-term control medicine as well as quick-relief medicine when needed.

#### *Note to presenter:*

- Sample asthma action plans can be found at: [http://www.nhlbi.nih.gov/health/public/lung/asthma/asthma\\_actplan.htm](http://www.nhlbi.nih.gov/health/public/lung/asthma/asthma_actplan.htm)
- Long-term control medicine handles inflammation and prevents episodes from occurring.

- Quick-relief medicine (many of these medicines are inhaled and start to work within a few minutes, such as albuterol inhalers, bronchodilators, metered dose inhalers or MDIs) should be used at the first sign of symptoms and need to be immediately available.

### **Slide 13: Asthma Action Plan (Image)**

- Available at [http://www.epa.gov/asthma/pdfs/asthma\\_action\\_plan.pdf](http://www.epa.gov/asthma/pdfs/asthma_action_plan.pdf).

### **Slide 14: What Actions Can I Take?**

- Reduce triggers in the home by using the EPA Asthma Home Environment Checklist.
- Example Actions:
  - ✓ Reduce exposure to dust mites by regularly washing bedding in hot water and drying completely.
  - ✓ Dry damp or wet items within 24-48 hours to avoid mold growth.

### **Slide 15: EPA Asthma Home Environment Checklist (Image)**

- Available at [http://www.epa.gov/asthma/pdfs/home\\_environment\\_checklist.pdf](http://www.epa.gov/asthma/pdfs/home_environment_checklist.pdf).

### **Slide 16: What Actions Can I Take?**

- Limit the amount of perfumed products you wear.
- Be conscious of exposure to certain cleaning products and use less toxic alternatives when possible.
- Choose not to smoke around others, especially children.

### **Slide 17: What Actions Can I Take?**

- Reduce triggers in school by using the EPA *Indoor Air Quality Tools for Schools* Program and Action Kit.
- Example Actions:
  - ✓ Minimize dust by reducing clutter.
  - ✓ Do not block ventilation ducts.
  - ✓ Avoid mold growth by reporting moisture problems or water leaks to the appropriate staff member immediately.

### **Slide 18: EPA *Indoor Air Quality Tools for Schools* Program and Action Kit and Managing Asthma at School (Image)**

- Available at <http://www.epa.gov/iaq/schools/managingasthma.html>.

### **Slide 19: Resources for More Information**

- EPA's Tribal Indoor Air Quality website
  - <http://www.epa.gov/iaqtribal>

- This new resource is designed to bring together the community of tribal IAQ professionals to share, network and learn in order to take action to promote healthy indoor environments in tribal communities.
- Take action to improve IAQ in tribal communities by using this website to:
  - Share your success stories and materials that are specific to tribal communities and access other communities' materials to build a library of information for your community members.
    - Contribute materials and resources made by and for tribal community members about IAQ and healthy indoor environments.
    - Spotlight your best practices in reaching out to tribal communities and implementing IAQ initiatives.
  - Network with other tribal environmental professionals so you can share successful approaches, materials and information about IAQ in tribal communities.
    - List your program and contact information in the national Directory and then use it to find other tribal environmental professionals located in your area or across the nation.
    - Post your events and find other event listings in your area on the national Events Calendar.
  - Learn the latest information about IAQ and IAQ-related health issues, such as asthma and allergies, and discover how tribal IAQ initiatives have successfully helped community members improve their indoor environments.

## Slide 20: Resources for More Information

- EPA's Asthma Program  
A wealth of resources on managing asthma and reducing exposure to environmental triggers.
  - <http://www.epa.gov/asthma/publications.html>
- EPA's *Indoor Air Quality Tools for Schools* Program  
A comprehensive resource to help schools maintain a healthy environment (and reduce asthma triggers) in school buildings by identifying, correcting and preventing IAQ problems. Poor indoor air quality can impact the comfort and health of students and staff.
  - <http://www.epa.gov/iaq/schools>
- NoAttacks.org  
Offers crucial information for families to reduce triggers in their homes, as well as a sample asthma action plan (<http://www.noattacks.org/asthmaaction.html>) for families to complete with the help of their health care provider. Also available on the website are radio public service announcements (<http://www.noattacks.org/psa.html>) in Anishinaabe, Lakota and Navajo. NoAttacks.org is a partnership between EPA and the Ad Council.
  - <http://www.noattacks.org/>
- AsthmaCommunityNetwork.org  
Provides field-tested strategies, a searchable resource bank and mentor opportunities.

- <http://www.asthmacommunitynetwork.org/>
- Aberdeen Area Tribal Chairmen's Health Board Asthma Prevention Campaign  
This toolkit provides information on creating an asthma action plan, starting an asthma registry, coordinating asthma teams and much more.
  - <http://aatchb.org/asthma/>
- Native AIR program  
The Native Asthma Intervention and Reduction Program (Native AIR), run by Montana State University Extension Service, provides a comprehensive website of asthma resources and links for further information.
  - <http://www.nativeasthma.org>

### Additional Resources:

1. Visit the American Lung Association's [Asthma Management Web page](#) for information on everything from asthma medications to school asthma programs.
2. [Asthma Factsheet](#) (2pp) Highlights the most up-to-date asthma statistics (May 2008).
3. [Asthma Home Environments Checklist](#) (8pp) Designed to help home care visitors identify and mitigate environmental asthma triggers commonly found in and around homes.
4. [Asthma Action Plan](#) With a doctor's help, you can create an asthma action plan to help you take care of your child and reduce the triggers in your home.
5. [Help Your Child Gain Control Over Asthma](#) A low-literacy asthma management guide, providing parents with the information to improve their children's quality of life.
6. [Dusty The Asthma Goldfish and His Asthma Triggers Funbook](#) (8pp) An educational tool to help parents and children learn more about asthma triggers.

You can order EPA publications free of charge from EPA's [National Service Center for Environmental Publications \(NSCEP\)](#), phone: 1-800-490-9198.

### Slide 21: References

- NAEPP Asthma Basics for Schools PowerPoint presentation – The introductory content should contain basic information and have flexibility to be customized by any tribal group.  
[http://www.nhlbi.nih.gov/health/prof/lung/asthma/basics\\_schools/part2.ppt](http://www.nhlbi.nih.gov/health/prof/lung/asthma/basics_schools/part2.ppt)

### Slide 22: Conclusion

- Together we can make a difference.
- Simple actions can greatly reduce the burden of asthma in your tribal community.
- Ask the audience if they have any questions (be prepared to respond or refer questions).
- Then, thank the audience for attending the presentation.