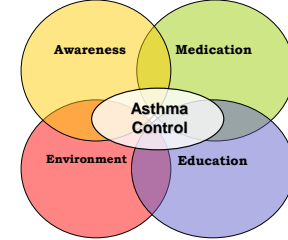




North East Independent School District Department of Environmental Health Asthma Awareness Education Program

Mission Statement: Department of Environmental Health will address the needs of students and staff by creating a healthy environment and by providing technical and educational resources for the students and staff on air quality and asthma management.

Our commitment to classroom indoor air quality and asthma management results in higher student/staff productivity and attendance which benefit the district with increased state funding, lower healthcare costs, and increased student performance.



Awareness

Asthma is the number one reason why students miss school days nationwide accounting for over 14 million days annually. In NEISD this common health issue affects close to 7,000 of students (11% of population) and generates over 70,000 visits to the school nurse for use of asthma medications each year.

Executive summary of report from 'Children and Asthma in America'² stated that:

- Many children with asthma experience frequent and/or severe symptoms that indicate their asthma is not well controlled; additionally, parents tend to underestimate the frequency of their child's symptoms, contributing to inaccurate perceptions of control.
- Poorly controlled asthma causes missed school days for children, lost work days for parents, activity avoidance and limitations and emotional burdens that interfere with the everyday lives of children and their families and often force them to accept a much lower quality of life.
- Finally, a widespread lack of understanding about asthma causes, treatment and symptom prevention remains a major obstacle to improved management of this condition.

Program goals for all students are to improve attendance (increase state funding), decrease class time interruptions due to symptoms (increase student performance), and fully participate in desired physical activities (promote healthy lifestyle).

Environment

Asthma Triggers

Allergies, Irritants, and Infection = Inflammation within the airway

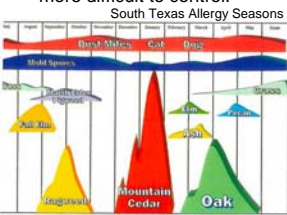
Evidence continues to strengthen that reducing exposure to inhalant indoor allergens can improve asthma control and that a multifaceted approach is required; single steps to reduce exposure are generally ineffective¹. The cumulative effect of asthma triggers directly impacts the level of asthma control and symptom development by reaching the asthmatic's symptom threshold. If you have asthma other things can also contribute to reaching your symptom threshold and trigger an asthma attack, including a cold, respiratory infection, or irritants (smoke, fragrances, or pollution). (Figure 1). Exposure to these triggers in individuals who have asthma to irritants or allergens in which they are sensitive have been shown to increase symptoms and precipitate exacerbations.³ Effective asthma management is to reduce exposure to these triggers.

Inhaled Allergies – pollens, molds, dust, animal dander, cockroach

Irritants – tobacco smoke, exhaust, strong odors, perfumes/ fragrances, chemicals, ozone, weather changes

Infection – colds, viruses, flu, infections

Co-morbid conditions – sinusitis, rhinitis, gastric reflux, obesity, sleep apnea make asthma more difficult to control.



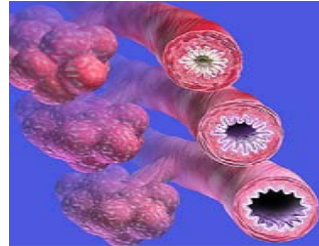
Common Asthma Triggers



Healthier children learn better.

EPA Tools for Schools Awards Received:

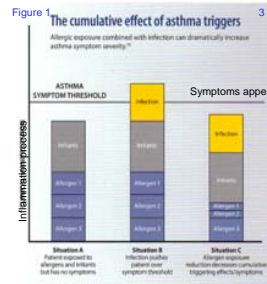
- 2009 National Mentorship Award
- 2008 National Excellence Award
- 2008 Special Achievement Award: Asthma Program
- 2007 Leadership Award



What is Asthma?

Asthma is a chronic inflammatory disorder of the airways with:

- Airway obstruction that may or may not be reversible either spontaneously or with medication
- Airway inflammation caused by many cellular components
- Increased airway hyper-responsiveness
- Airway remodeling in some patients



Selected Resources

NEISD: Asthma Awareness Education Program
<http://staff.int.neisd.net/wellness/asthma.html>
<http://www.neisd.net/maint/EnvironmentalHealth.html>

Asthma Coalition of Texas
<http://www.texasasthma.org/>
 Allergy and Asthma Network: Mothers of Asthmatics
<http://www.aanma.org/>

EPA Asthma
<http://www.epa.gov/asthma/index.html>

American Lung Association: Open Airways for Schools
<http://www.lungusa.org/lung-disease/asthma/in-schools/>

¹ National Heart Lung Blood Institute, National Guidelines for the Diagnosis and Management of Asthma - National Asthma Education Prevention Program Expert Panel Report 2007.
<http://www.nhlbi.nih.gov/health/public/lung/index.html#asthma>

² Children and Asthma in America
http://www.asthmainamerica.com/children_index.html

³ Cumulative Effect of Asthma Triggers: ImmunoCAP-Is it Allergy?
<http://www.isallergy.com>

Medication

2 types of Medications: Controller and Reliever

Controller/Maintenance medicines are used to achieve and maintain control of persistent asthma

- Taken every day whether or not experiencing asthma symptoms
- Key** to managing asthma; does not stop an episode once it starts
- Reduces the inflammation (swelling) in the lungs¹
 - The most effective long-term controller medications are those that ease the chronic inflammatory aspect of asthmatic airway
 - Inhaled corticosteroids: The most consistently effective long-term controller medication
- Two years of daily use of a low-dose inhaled corticosteroid substantially less medication is absorbed by the body than the 5-day burst of oral corticosteroids used during an episode.

Quick-relief medications: taken as needed, relaxes airway muscles to give prompt relief of symptoms

- Work in 5 to 10 minutes
- For symptom relief or pre-medicating before exercise
- Frequent use for symptoms may be sign of asthma not in control

NEISD Emergency Nebulizer protocol: available to decrease EMS occurrences for **documented diagnosed asthmatics** in need of reliever medication (Albuterol)

Education/Management

NEISD developed a **four-component**, comprehensive approach to asthma control that provides a proactive approach to address the most common childhood disease that generates multi-day, recurring absenteeism. Using a collective approach, we educate not only our staff in asthma awareness, but we also provide education and disease management strategies for our students and parents. This brings awareness to asthmatics, as well as undiagnosed asthmatics, in order for them to receive **self-management tools** and the **empowerment** to understand and control the disease. By closing the gap between parents and the medical community through our 'Asthma Blow Out' program we can help parents improve their child's **quality of life** by educating them on the tools available to achieve asthma control.

The Asthma Control Test is a means to assess asthma symptoms and evaluate asthma control. This test can help caretakers identify and assess the asthmatic to determine if medication is adequate and/or environmental factors are being addressed.

Asthma Friendly Campus Award is awarded to NEISD campuses that are committed to Indoor Air Quality best practices.

For educational awareness purposes only. NEISD does not endorse a particular medication or product.



Asthma Control Test

