Secretaries and Administrative Assistants

Each day as you do your job, you come in contact with students who have asthma. It may surprise you, but nearly one in 13 school-aged children has this chronic, but manageable, disease.[1] Because students who have asthma spend so much of their day in school, it's vital for them to be with adults who understand some basic facts about asthma and how to deal with it. It is also essential that you understand the legal issues and district guidelines that apply to dealing with children who have asthma. Together, we can help these students manage their asthma and get the most from their time in school. Healthy children learn better.

"Healthy children learn better."

Why Learning about Asthma is Important to Secretaries and Administrative Assistants

ASTHMA CAN BE DEADLY.

An asthma episode can escalate and may result in death without prompt medical attention.

ASTHMA IS THE SINGLE MOST COMMON CHRONIC DISEASE CAUSING ABSENCE FROM SCHOOL.

Over 14 million school days are missed due to asthma each year.[2]

ASTHMA CAN AFFECT A CHILD'S PERFORMANCE.

It can disrupt sleep, the ability to concentrate, memorize, and, when not managed properly can prevent a student from participating in "normal" school activities. Children who miss school due to uncontrolled asthma not only miss classroom instruction but they miss out on social interactions with other children which can lead to fears of social isolation, rejection and believing they are "different" from other children. A child who has asthma may feel drowsy or tired, anxious about taking medications, or even embarrassed when disruption to school activities occurs due to an asthma episode.

What Secretaries and Administrative Assistants Need to Know

What is Asthma?

Asthma is a chronic disease that causes broncho-constriction (tightening of the muscles around the airways) and swelling of the airways. During normal breathing, air flows freely in and out of the lungs. But, during an "asthma episode," linings of the airways (bronchioles) swell, muscles around the airways tighten and mucus clogs the tiny airways, making breathing difficult. The airways become overly responsive (twitchy) to environmental changes, sometimes resulting in wheezing, coughing, breathlessness, or tightness in the chest. During an asthma episode a child may feel he/she can't inhale enough air, but actually, his/her lungs are having trouble exhaling. The wheezing or whistling sound that they may hear when trying to breathe is air trying to make its way around the mucus and inflammation in the lungs. Coughing is the body's natural response to try and get rid of the mucus. The outcome is a child experiencing an "asthma episode" or a flare up of their symptoms.

Asthma symptoms can vary greatly from hour to hour and day to day. Symptoms are often worse at night and in the early morning hours. The severity of asthma varies from child to child and the severity may worsen or improve depending on the child's symptom control and amount of exposure to triggers or allergens. Some children have occasional symptoms (e.g., after strenuous exercise), while others have symptoms that interfere with their daily life, including having difficulty concentrating and participating in school.

Recognizing the Signs of an Asthma Episode

Children themselves are often the best source for identifying an asthma episode. Children who have asthma often learn to identify their own unique early warning signs — the physical changes that occur as their airways begin to close. These early warning signs usually begin long before the more serious symptoms appear and taking action quickly is paramount to preventing an asthma crisis! An asthma episode is easier to subdue if a child and school staff are aware of significant changes and the child is able to take medication quickly.

There should not be any delay once a child has notified school staff of a possible problem or developing asthma episode.

During the initial phase of an asthma episode a child may exhibit one or more of these signs:

Changes in breathing*:* Coughing, wheezing (a high pitched sound heard on exhalation), shortness of breath, breathing through the mouth, and or rapid breathing.

Verbal complaints*:* Often a child who is familiar with their asthma symptoms will know that an episode is about to happen. The child may tell school staff that his/her chest is tight, or hurts, or that he/she cannot catch a breath. Complaints may include "dry mouth" or a more general "I don't feel well" or "I'm scared."

Behavior changes and other signs: Clipped speech — a child may speak in very short, choppy sentences and appear to be gulping at air as he/she speaks. Some children may become very quiet (trying to control their breathing or simply out of fear) and subdued, while others may become highly agitated and panicky.

To understand how an asthma episode feels, put a straw in your mouth and, while blocking off the nasal passages, quickly move around the room. The ability to pull enough air in through a narrowed passage causes sensations of desperation and panic. A straw can be removed and the airways restored immediately, but the child experiencing an asthma episode must wait for the airways to relax and if severe, for mucus to clear before they can breath easier. TIME IS OF THE ESSENCE!

What Causes Asthma Episodes?

Children with asthma have airways that narrow more easily than children who do not have asthma. They may be allergic or sensitive to inhaled (or even some ingested) irritants. A variety of factors can set off an asthma episode including viral infections (cold and flu season is especially difficult) and exposure to allergens or "triggers." Each child who has asthma reacts to a different set of factors.

Some common "allergens" are:

- Dust mites
- Dander from furry or feathery animals (*including pets in the classroom*)
- Mold (*moist ceiling tiles or wet sink areas and outdoor molds such as Alternaria which is common in MN in the fall)*
- Seasonal pollens *(e.g., tree pollen in the spring, grass in the summer, ragweed in the fall)*
- Cockroach droppings
- Mice/rat dander, urine and their droppings
- Some foods*
- Some medications (*e.g., aspirin*)

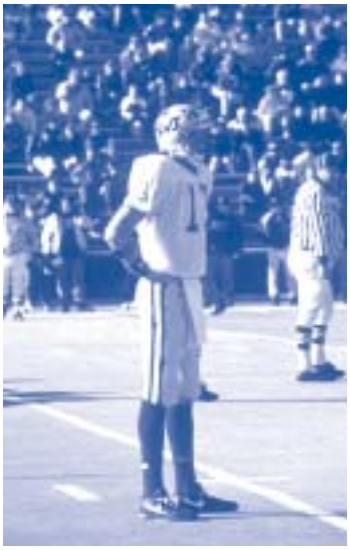
Some common "triggers" are:

- Exercise (*Exercise induced asthma or EIA)*
- Cold air
- Chalk dust
- Viral/upper respiratory infections, bronchitis, sinusitis
- Strong emotional expressions (*such as stress, anxiety, anger, crying)*
- Air pollution—both indoor and outdoor *(high ozone/high particulate matter)*
- Chemical irritants and strong smells *(cleaning supplies, perfumes, whiteboard markers, paints, pesticides, glues)*
- Tobacco smoke, secondhand smoke, smoke from burning wood and other substances

"About 6-8% of children who have asthma have food allergies that can trigger asthma symptoms." [3]

Exercise-Induced Asthma (EIA) and/or Exercise Induced Symptoms

Exercise is a very common trigger for asthma. However, since exercise and participating in sports are a part of healthy living, this is one trigger that should be managed and not avoided. Some students may experience symptoms only when they exercise or participate in very strenuous activity (true EIA). Other students experience symptoms that are brought on by exercise, but they also may have an underlying persistent asthma that is exacerbated by the exercise. Students with underlying persistent asthma require controller medications whereas students with true EIA frequently do not. Any child who develops asthma-like symptoms should be referred to the Health Office for evaluation and possible referral to a health care provider. For teenagers, exercise is often the most common cause of asthma symptoms. Fortunately, with better medications, monitoring and proper management, a children can participate in physical activity and sports and achieve their highest performance levels.



SYMPTOMS OF EIA AND/OR EXERCISE INDUCED SYMPTOMS

Symptoms may include coughing, wheezing, chest tightness and shortness of breath. Coughing is the most common symptom of EIA and may be the only symptom a child has at that time. The symptoms of EIA may begin during exercise and can be worse 5 to 10 minutes after stopping exercise or during the normal “cooling down” period rather than during the actual exercise. Symptoms can range from mild to severe and often resolve in 20 to 30 minutes. Occasionally, some individuals will experience “late phase” symptoms four to twelve hours after stopping exercise. These late phase symptoms are frequently less severe and can take up to 24 hours to go away. This is an important fact to remember when children are participating in school competitions that are repeated throughout the day.

CAUSES OF EIA AND/OR EXERCISE INDUCED SYMPTOMS

When a child exercises, he/she breathes faster due to increased oxygen demands. Usually, during exercise a child inhales through the mouth, causing the air to be dryer and cooler than when breathing normally and through the nasal passages. Decreases in warmth and humidity are both causes of bronchospasm or “airway constriction.” Exercise that exposes a child to cold air like skiing, skating or hockey is therefore more likely to cause symptoms than exercise involving warm and humid air such as swimming. Pollution levels, high pollen counts and exposure to other irritants such as smoke and strong fumes can also make EIA symptoms worse. A recent cold or asthma episode can cause a child to have more difficulty exercising too.

PREVENTING EIA

- ✔ If EIA is an issue with the child, check his/her asthma action plan or asthma care plan for instructions. The most common preventive action is to have the child use reliever medications 15 minutes prior to strenuous activity. If the student isn’t carrying a inhaler, then he/she will need to go to the school health office for medication administration.
- ✔ Be aware of your district and school policies and procedures for administering medications.
- ✔ Check ozone/ air quality levels for outdoor activity prior to exercise outside at: http://aqi.pca.state.mn.us/hourly/ High pollen or high ozone levels can make EIA worse in some children.
- ✔ Never encourage a child or athlete with asthma to “tough it out” and don’t allow other children to tease or encourage another who is wheezing to continue the activity.
- ✔ Respect the child’s right to confidentiality and privacy. Discussion and questions about how he/she feels (in detail) should be asked quietly and with discretion.

Asthma Medications

Treatment for asthma is based on how severe a child's symptoms are at any given time. Typically, there are two types of medications used to treat asthma:

- quick relief (reliever) or rescue, and
- controller or preventive.

The most common asthma medications most school staff will come in contact with are the quick relief (reliever) or "rescue" medications which are taken by inhalation.

QUICK RELIEF (RELIEVER) OR "RESCUE"

These medications are taken when asthma symptoms flare up or a child is experiencing an "asthma episode." They work fast to relieve symptoms as they happen, or to help prevent exercise-related symptoms. This is the medication you most frequently see a student use in an inhaler form when symptoms are flaring up or in the case of exercise-induced asthma (EIA) 15-30 minutes prior to strenuous physical activity. They relax the muscles surrounding the airways usually within 10-15 minutes after using the inhaler.

Typical brand names of these medications are: *Albuteral, Maxair, Proventil, Ventolin, Combivent, and Alupent.*

It is important to remember that all medications carry the potential for side effects. Some common complaints with rescue medications include ***nervousness, jitteriness, nausea*** and, in some cases, ***drowsiness.*** If side effects are excessive or the child is complaining of not feeling well, promptly contact the school nurse for evaluation and follow-up and do not leave the child unattended.

LONG-TERM CONTROLLER OR "PREVENTIVE"

A note about inhaled corticosteroids:
When you hear the word "steroid" you might think of the steroids used by athletes. But inhaled corticosteroids are not the same steroids used by athletes to build muscles and do not have the same side effects. They are the most consistently effective controller medication available.

Some children require medications that are taken daily to prevent symptoms or episodes from developing. These are the *controller or "preventive"* medications. School staff may not see a child actually taking these medications, because children may only take them at home, it is important to understand that there is a difference between short acting reliever medications and long acting controller medications. These controller medications either reduce or prevent inflammation from occurring or in some cases, prevent symptoms by relaxing the muscles surrounding the bronchioles (airways) over a long period of time.

Typical controller medications are: *Advair, AeroBid, Azmacort, Beclovent, Flovent, PulmicortTurbuhaler, Pulmicort Respules Vanceril, Flovent, Rotadisc, Accolate, Singulair, Zyflo Filmta, Serevent, Foradil, Intal and Tilade.*

- Oral (pills) corticosteroids are taken when an episode becomes severe, or when a child's asthma requires very intensive treatment.

Asthma Action Plans

WHAT ARE THEY? HOW ARE THEY USED?

An asthma action plan (AAP) is an individualized tool that assists a caregiver in evaluating, monitoring and providing care to a child who has asthma. It is advisable for all children who have asthma to have a personalized AAP and or emergency care plan available at all times. A sample can be found in the Resource Section of this manual.

AAP's come in a number of different formats but the most common use the 3 color system: **green = go**, **yellow = caution** and **red = danger**." Under each color, there are measurements and instructions specific to that level of condition. When you match the symptoms (and Peak Flow, if available) to the correct color section, you'll find the steps to take.

A Peak Flow Meter (PFM) is simple measurement tool used to determine if a child's ability to exhale air (true asthma) is lessening. Every child's peak flow (PF) is different but a dropping level indicates reduced breathing abilities. The school nurse may have a PFM for a student who has asthma asthma. Talk to your school nurse for additional information.

The Peak Flow Meter measures the amount of air forcefully exhaled in 1 second. Using it determines how a child's large airways are performing. A dropping peak flow rate can indicate a child's asthma is becoming worse and an episode is developing. It is important to note that peak flow readings are effort-dependent, meaning if the student doesn't blow hard or use his/her best effort in blowing, the reading may not be accurate. Ask the child to take a deep breath and while standing, blow into the meter as hard as possible. This should be repeated 3 separate times. Take the best of the 3 readings as the reading that you record.

See Resources Section for specific instructions on how to use peak flow meters (PFM), Medication device inhalers (MDI), Nebulizers, Dry powder inhalers (DPI), Spacers etc. Once again, check on district/school policies regarding your role in providing care with these devices.

GREEN = GO
Contains the controller medication the child takes everyday (if he/she does in fact require a daily medication.) It will also include instructions for medicating a child who has exercise induced asthma (EIA) prior to strenuous activity. The peak flow range for that child and the normal acceptable ranges can be included.

YELLOW = CAUTION
Gives the caregiver specific instructions for medications when the child is starting to have asthma symptoms. Instructions for how much and how often the child should receive rescue medication should be found here. A peak flow range will show a drop in numbers; typically 20% or more. The yellow zone is perhaps the most important because it gives the caregiver the opportunity to take action before symptoms become life threatening.

RED = DANGER
Means the child's symptoms have progressed to the point where emergency care is needed. A description of escalating symptoms and a PF that has dropped to below 50% indicates a child's lungs are filling with mucus and that the bronchial muscles are so contracted that the lungs cannot pull in air. Caregivers should call 911 immediately!

What Secretaries and Administrative Assistants Can Do

Communicating with Students

When working with a child who may be experiencing an asthma episode, above all, don't panic! Remaining calm and reassuring the child that he/she will be okay helps alleviate the child's anxiety and may prevent symptoms from becoming worse. Remember that it is important to respect the child's right to privacy and confidentiality.

Emergency Measures for Handling an Asthma Episode or Emergency

Symptoms of breathing trouble:

- Unusually slow or fast breathing
- Breathes unusually deep or shallow
- Gasping for breath
- Wheezing, gurgling, high-pitched noises
- Skin unusually moist
- Skin flushed, pale, ashen/ bluish looking
- Person feels short of breath
- Person feels dizzy or light-headed
- Chest pain or tingling in hands or feet
- Person feels apprehensive or fearful
- Coughing
- Speaking in clipped or short bursts of speech
- Possibly restlessness or upset stomach

Provide prompt care for students who are having breathing difficulty.

Care of asthma and breathing trouble:

- Remain calm and reassure the child.
- Have the child sit up and breathe evenly, breathing in through nose, and breathing out with pursed lips.
- If an asthma episode is suspected, give a glass of room temperature water to sip.
- Elevate arms to shoulder level and provide support for the arms (*desk or back of chair*).
- Notify your health office nurse or responsible medical party.
- Give medication if ordered and available (*some students carry their asthma inhaler with them*).
- Contact parent/guardian.

Call 911 if:

- Lips are blue or nail beds are blue -or-
- Child is having difficulty talking, walking or drinking -or-
- Quick relief or reliever medication (*inhaled reliever such as albuterol*) is ineffective,
- unavailable, or used too recently to repeat -or-
- You see neck, throat, or chest retractions (*Sucking in of the skin between ribs or at base of the neck*) -or-
- There is nasal (*nares*) flaring when inhaling -or-
- Child is in obvious distress -or-
- There is an altered level of consciousness/confusion -or-
- Child's condition is rapidly deteriorating

REMEMBER

Secretaries who perform duties typically delegated to licensed health care personnel should be trained and evaluated in order to meet state regulations.

Non-medical personnel must be trained to administer medications properly and be overseen by an RN who has evaluated their ability to perform those tasks.

Performing these duties without proper training, licensure and supervision can put the individual as well as administrators and the school district at legal risk.

ALWAYS check school district policies and procedures.

Actions in a setting with Licensed School Nurse/ Public Health Nurse/ Registered Nurse

1. Be sure you have been properly instructed and evaluated by the school nurse for proficiency before performing caregiver tasks according to school district policies.
2. Notify the school nurse of students with asthma or symptoms of asthma.
3. Document in the Student Asthma Record all children with asthma medication and/or children who need documentation of peak flow or asthma management assistance.
4. Ask about symptoms and check peak flow (as ordered by medical provider):
   - Of children who have asthma symptoms
   - To determine if medication is needed per AAP or medication care plan
   - Of children as designated by the RN
5. Administer medication according to medication orders/Asthma Action Plan/ Medical Care plan and your district policy.
6. Notify parent if a child is seen in the health office with asthma symptoms and/or distress. Send notification home with the child or via US Mail. Retain one copy for the school nurse to review.
7. Document asthma visit and parental notification on your daily log or other means of recording the child's visit to the health office.
8. Daily Log Documentation:
   - All children seen in the health office with asthma signs or symptoms.
   - All children coming in for "as needed" asthma medication due to symptoms.

Role in a setting without a Licensed School Nurse/Public Health Nurse/ Registered Nurse

If you are the only individual providing health services in a school or district and not supervised by a Licensed School Nurse, Registered Nurse, or Public Health Nurse, your role may be very limited.

- Verify that your school/district has a policy that addresses meeting the health needs of students and any related policies. Make sure you are familiar with the details of any policy.
- Be aware that MN statute 121A.22 (Administration of drugs and medicine) states that parents can request that school personnel administer medications. The school must have a medication policy developed in conjunction with a medical advisor or nurse consultant.
- Be aware that MN Statute121A.221 (Possession and use of asthma inhalers by students who have asthma) states that in schools without a school nurse or school nursing services, a parent must submit written verification from the prescribing professional that documents an assessment of the student's knowledge and skills to safely possess and use an asthma inhaler in a school setting.
- If you do not receive written verification of the above, go back to the parent to request this information, and also share this with your immediate supervisor.
- Follow written instructions given to you by the parent and health care provider. If you have questions or concerns or are unable to follow the orders, ask the parent for further clarification, and also share it with your immediate supervisor.
- Follow emergency/911 instructions (per district policy).

Relevant Legislation:

There are legal requirements and statutes that regulate schools working with not only children with asthma but with children with special needs in general. The following are simplified summaries of current statutes.

FEDERAL LAWS (IDEA 1997) AND SECTION 504 OF THE REHABILITATION ACT OF 1973

These mandates require that schools promote the health, development and achievement of students with asthma, when the disease interferes with their learning. Schools are required to remove "disability barriers" that impede health, participation and achievement The law requires schools and parents to work together as partners to develop and implement health plans to protect the welfare of the child.

FAMILY EDUCATION RIGHTS AND PRIVACY ACT (FERPA)

Generally prohibits schools from disclosing personally identifiable information in a student's education record, unless the school obtains the consent of the student's parent or the eligible student (a student who is 18 years old or older or who attends an institution of postsecondary education). FERPA does allow schools to disclose this information, without obtaining consent, to school officials, including teachers, who have legitimate educational interests in the information, including the educational interests of the child. Schools that do this must include in their annual notification to parents and eligible students the criteria for determining who constitutes a school official and what constitutes a legitimate educational interest. Additionally, under FERPA, schools may not prevent the parents of students, or eligible students themselves, from inspecting and reviewing the student's education records.

MINNESOTA INHALER LAW OVERVIEW

Minnesota Statutes, Section 121A.22

This law allows public elementary and secondary school students to possess and use inhalers prescribed for asthma or reactive airway disease. The following provides an overview of the requirements that must be met before a student is given permission to carry asthma medication and self-medicate in school:

1. The parent has not requested that school personnel administer the student's asthma medication; *and*
2. The school district receives annual written authorization from the student's parent for the student to self-administer; *and*
3. The inhaler is properly labeled for that student; *and*
4. The school nurse or other appropriate party assesses the student's knowledge and skills to safely possess and use his/her inhaler in a school setting and enters a plan to implement safe possession and use of the inhaler into the student's school health record; *or* for schools without a school nurse or nursing services, the student's parent or guardian submits written verification from the student's physician documenting that the physician has assessed the student's knowledge and skills to safely possess and use his/her inhaler in a school setting.

Summary, August 2001 ALAMN

SCHOOL BUS IDLING LAW

Minnesota Statutes, Section 123B.885

Diesel School bus idling:

"All operators of diesel school buses must minimize, to the extent practical, the idling of school bus engines and exposure of children to diesel exhaust fumes.

"(*This pertains to bus drivers lining up buses waiting for the children to exit the school and load the buses. Unless, due to inclement weather (i.e. too cold or too hot), the buses engine should be shut off until all children are loaded onto the bus).*

Parking:

"On and after July 1, 2003, diesel school buses must be parked and loaded at sufficient distance from school air-intake systems to avoid diesel fumes from being drawn into the systems, unless, in the judgment of the school board, alternative locations block traffic, impair student safety, or are not cost effective."

(*IAQ can suffer greatly when diesel fuel fumes are pulled into the building and circulated via the ventilation system. These fumes/odors are potent asthma triggers for some children).*

PESTICIDE STATUTES

Minnesota Statutes, Section 121A.30

The Parents Right to Know Act requires public and non-public K-12 schools that plan to apply pesticides specified in the law, to provide notices to parents and employees. This law also requires the Minnesota Department of Health (MDH) to develop and make available model notices for schools to use, if they choose to do so.

(Secretaries or Administrative Assistants may be called upon to notify parents/guardians of planned pesticide use in the school and surrounding area. Your school custodian should be familiar with the process. Also see the Custodial Section for further information).

Resources

Using the preformatted forms and questionnaires provided in this manual can help school staff feel more confident when providing care for the child who has asthma.

The following forms are located in the Resource Section and on the asthma manual CD-rom. Other resources are listed with Internet link addresses at the back of this manual.

Forms/information available in Resource Section

- Student Asthma/Breathing Questionnaire
- Asthma/Breathing Problem Visit Notification
- Asthma "permanent pass" for students
- Asthma visit notification form
- Student agreement for self-carrying and administering asthma medications
- Asthma Action Plan
- Peak Flow Instructions
- Metered Dose Inhaler (aerosol) with Spacer/Chamber Instructions
- Dry Powdered Inhaler Instructions
- Nebulizer instructions

Citations

[1] National Center for Health Statistics, National Health Interview Survey, 1999.

[2] "Surveillance for Asthma – United States, 1980–1999," MMWR Surveillance Summaries, Centers for Disease Control and Prevention, March 29, 2002.

[3] "Update on Food Allergies and Asthma" by Hugh A Sampson, M.D. Food Allergy News, Volume 6, No. 1, October–November 1996.