

Asthma: Practical Tips For Coaches



Developed by: The Minnesota Department of Health Asthma Program - updated 2008



How Many Kids Have Asthma?

- Approximately 2.5 students in a class of 30 are likely to have asthma.
- An estimated 7.9% of Minnesota children ages 0-17 have asthma which is equivalent to more than 98,000 children.¹

¹ Asthma in Minnesota, 2005 Epidemiology Report

Asthma:

- Accounts for 12.8 million lost school days annually. ¹
- 67% of US children with asthma have had at least one attack in the past year. ¹
- Is the 3rd leading cause of hospitalizations among children under 15. ²
- Close to 1 in 11 (8.9%) children have asthma. ¹
- 6.5 million children under 18 have asthma. ¹
- Is the most common chronic disease causing absence from school. ²

¹ National Health Interview Survey; Asthma Prevalence, Health Care Use, and Mortality, 2000-01, National Center for Health Statistics, CDC

² National Hospital Discharge Survey, 2002; American Lung Association Asthma and Children Fact Sheet, August 2006

The Good News

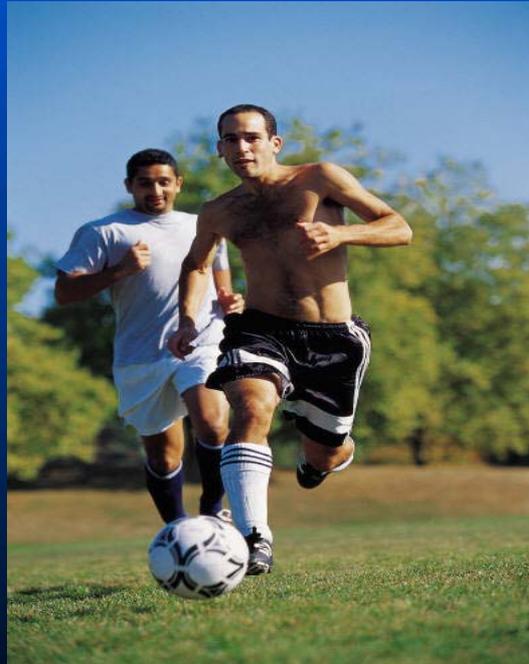


- Asthma can be controlled!
- Children with asthma are just like any other child!
- Children with asthma can play sports and compete just like everyone else!



The Goal of Asthma Management

" Children should live happy, healthy, physically active lives, without asthma symptoms slowing them down "





What Is Asthma?

A chronic disease that causes obstruction:

- ✓ Tightening of the muscles surrounding the airways.
- ✓ Swelling of the lining of small airways in the lungs.
- ✓ Airways that are overly sensitive to allergen and irritant triggers.
- ✓ Over production of sticky mucus clogging the airways.

Airway Obstruction

Normal bronchiole



Asthmatic bronchiole





Common Symptoms Of Asthma

- Frequent cough, especially at night
- Shortness of breath or rapid breathing
- Chest Tightness
- Chest pain
- Wheezing
- Fatigue
- Behavior changes



Every Child Is Unique!



- Wheezing and coughing are the most common symptoms *-but-*
- No two children will have the exact same symptoms or the same trigger.
- Every child who has a diagnosis of asthma should have access to a rescue inhaler!
- Every child who has asthma should have an asthma action plan (AAP).

Asthma Episodes (Attacks)



What's An "Episode"?

- Occurs when a child is exposed to a trigger or irritant and their asthma symptoms start to appear.
- This can occur suddenly without a lot of warning, or brew for days before the symptoms begin.
- Episodes are preventable by avoiding exposure to triggers and taking daily controller medications (if prescribed).



How Do I Handle An Asthma Episode On The Field/Rink/Gym?

1. Remain calm and reassure the child.
2. Check the child's asthma action plan or emergency card for actions.
3. Give “rescue or reliever” medications if ordered and available. (some children carry their own asthma inhalers with them)





Handling An Episode cont..

4. Have the child sit up and breathe slowly- in through the nose, out through pursed lips slowly.
5. Have the child sip room temperature water/ fluids.
6. Contact the parent or guardian as necessary - AND-
7. Do not leave the child unattended.



Call 911 if..



- Lips or nail beds are bluish.
- Child has difficulty talking, walking or drinking.
- Quick relief or "rescue" meds (albuterol) is ineffective or not available.
- Neck, throat, or chest muscles are pulling in (retracting).
- Nostrils flare out when trying to breathe.
- Obvious distress.
- Altered level of consciousness/confusion.
- Rapidly deteriorating condition.

Exercise Induced Asthma





What Is Exercise Induced Asthma (EIA)?

- Tightening of the muscles around the airways.
- Distinct from other types of asthma because it only happens with aerobic type exercise.
- Can be prevented by taking pre-exercise medication and by warming up/cooling down.
- About 10% of the general population without asthma, have EIA when they exercise. ¹



EIA - What Happens?

- Symptoms include coughing, wheezing, chest tightness and shortness of breath.
- Symptoms may begin during exercise and can be worse 5 to 10 minutes after exercise.
- EIA can spontaneously resolve 20 to 30 minutes after starting.
- Can be avoided by doing the following:

Preventing EIA

- ✓ Make sure your athletes give you an Asthma Action Plan -Keep it with you on a clipboard.
- ✓ Athletes should use reliever (Albuterol) 15 -30 minutes before strenuous activity begins.
- ✓ Do warm-up (5-10 minutes) and cool-down exercises before and after activities.
- ✓ Check outdoor ozone/air quality levels
www.aqi.pca.state.mn.us/hourly/
- ✓ Do not allow other athletes to tease or berate the athlete having asthma symptoms.



Preventing EIA continued..

- ✓ If an athlete is complaining of breathing difficulty- BELIEVE IT and take action!
- ✓ Allow the athlete to continue to play only when you know their breathing is normal again.
- ✓ Inform athletes parents' of breathing difficulties and request they see a provider to be checked.
- ✓ Assign someone to stay with the athlete off the field/gym etc. while the event continues.
- ✓ Never encourage an athlete to "tough it out" when having asthma symptoms.



Improved Athletic Performance

- Athletes whose asthma is well controlled perform as well as those without asthma.
- Any athlete with asthma who is already “the best” can improve when they’re breathing better!
- More oxygen to the lungs means better performance on and off the field!



Olympians

A study in the November 1998 Journal of Allergy and Clinical Immunology found that 1 in 6 athletes representing the United States in the 1996 Summer Olympics had asthma. Thirty percent of the asthmatic athletes took home team or individual medals. They fared as well as athletes without asthma (28.7%) who took earned team or individual medals.



Picture courtesy of American Lung Association of the Inland Counties CA 2004



Pro's Who Have Asthma:

- Isiah Thomas – NBA
- Jerome Bettis - NFL
- Dominique Wilkins - NBA
- Gary Roberts - NHL
- Donnell Bennett - NFL
- Amy Van Dyken - Olympic Gold Medallist (swimming)
- Jackie Joyner-Kerse - Olympic Gold Medallist (track & field)
- Greg Louganis - Olympic diver

Medications





Two Categories of Medications

✓ Controller Medications

- Taken every day to prevent swelling in the lungs.

✓ Reliever or Rescue Medications

- Taken only when needed to relieve symptoms.
- Taken before strenuous exercise to prevent exercise induced asthma (EIA) from developing.



Reliever or "Rescue" Medications

- ✓ Should be taken 10-15 minutes before strenuous or aerobic activity begins.
- ✓ Taken when needed to relieve symptoms.
- ✓ Should be immediately and easily accessible at every sporting event.
- ✓ Coaching staff must be aware that an athlete is using this medication and ready to assist.
- ✓ Should be taken using a spacer or holding chamber (MDI) unless otherwise directed.

Athletes, Keep Asthma in Good Control:

- ✓ Get & use an Asthma Action Plan
- ✓ Know symptoms and Peak Flow readings for each of the green-yellow-red zones.
- ✓ Take “controller” medicine daily.
- ✓ Avoid exposure to triggers.
- ✓ Find a health care provider you trust and go in for asthma check-ups at least twice a year.
- ✓ Tell your coach and team mates about your asthma.

The image shows a sample Asthma Action Plan form. It is titled "ASTHMA ACTION PLAN" and "HGMC". The form is divided into three color-coded zones: Green, Yellow, and Red. Each zone has a corresponding color circle and a small illustration of a person. The Green Zone is labeled "GO! All Clear!" and includes instructions for controller medicines. The Yellow Zone is labeled "Caution!" and includes instructions for reliever medicines. The Red Zone is labeled "STOP! Medical Alert!" and includes instructions for when to seek medical attention. The form also includes fields for patient and provider information, a section for peak flow readings, and a section for parent/guardian and NUN/PA signatures.

Zone	Color	Instructions
GREEN ZONE	Green	"GO! All Clear!" The GREEN ZONE means to take the following medicines every day. Controller medicines: How much to take: When to take it: Sprint used: [] with nose or [] without nose [] Inhaler [] with nose or [] without nose Take this medicine 15-30 minutes before sports at ALL OTHER ATHLETIC ACTIVITIES. [] Student may carry and use this medicine at school after checking in with the School Nurse.
YELLOW ZONE	Yellow	"Caution!" The YELLOW ZONE means to keep taking your Green Zone controller medicine every day. Add the following reliever medicines to keep an asthma episode from getting bad! Reliever medicine: How much to take: When to take it: If you are in the YELLOW ZONE for more than 12-24 hours, call your doctor. If your breathing symptoms get worse, call your doctor. [] Student may carry and use this medicine at school after checking in with the School Nurse.
RED ZONE	Red	"STOP! Medical Alert!" The RED ZONE means that you take your Red Zone medicine and Call your doctor NOW!! - Take these medicines until you talk with your doctor. - If your symptoms do not get better and you can't reach your doctor, go to the emergency room or call 911 immediately. Take the following reliever medicines until you talk with the doctor. Reliever medicine: How much to take: When to take it: If you are in the RED ZONE for more than 24 hours, call your doctor. If your symptoms do not get better and you can't reach your doctor, go to the emergency room or call 911 immediately.

Take Home Messages

- Athletes with asthma can participate in exercise/sports without restrictions.
- If an athlete is having trouble participating, their asthma may not be in good control.
- Athletes having difficulty should be allowed to rest.
- If athletes are having symptoms with activity, encourage them to use rescue inhalers before the event.
- If you have a concern about an athlete, talk with the child and the parents.
- Encourage flu shots annually and regular asthma check-ups with their health care provider.

Everyone Wins When An Athlete Plays Their Game To The Fullest!

