Breathing Difficulties Related to Physical Activity for Students With Asthma: Exercise-Induced Asthma

Information for Physical Educators, Coaches and Trainers

First Aid for Exercise-Induced Asthma

If, during physical activity, you notice that a student is having difficulty breathing, coughing frequently, or wheezing (noisy when breathing out), it may be asthma:

- STOP the student's activity and encourage the student to sit and rest.
- **Call 911** immediately if student requests or is in severe distress—struggling to breathe, lips blue, unable to walk or talk.
- Follow the designated **asthma management plan** (individual student plan, if available, or school protocol).
- Follow the school protocol to notify the school nurse (or other designated staff)
 if medication is not available or if symptoms are not resolved within 5 to 10
 minutes after using the inhaler.
- Never let a child with breathing problems leave the gym or field alone.
- If symptoms resolve, permit students to **resume activity** when they are ready, according to their asthma management plan.
- Follow the school protocol to inform parents of the event and document actions taken.



This guidance sheet was developed as a partnership activity facilitated by the NAEPP, coordinated by the NHLBI of the NIH/DHHS

Ways To Help Students with Asthma Participate in Physical Activity

Identify Students with Asthma in Your Class or on Your Team

- Ask your school nurse or use student health information to identify those students who
 have a diagnosis of asthma or a history of asthma symptoms with physical activity.
- Ask the school nurse for a copy of each student's asthma management plan. Keep the copies easily available for all on-site and off-site activities.
- Discuss with students (and parents, if appropriate), the individual student's triggers, signs and symptoms that relate to physical activity.
- Take appropriate steps to inform a student's parents/guardians if the student frequently
 experiences asthma symptoms with physical activity. The student's asthma
 management plan may need to be re-evaluated by the student's physician because most
 students with asthma should be able to participate fully in physical activities, most of the
 time
- Help students and the school nurse make sure that the students' prescribed asthma
 medicines are available for use, according to their asthma management plans, before
 physical activity and as needed for acute symptoms,

Encourage Students to Prepare for Physical Exercise

- Students who have been prescribed pre-exercise treatment (usually an inhaled quick relief bronchodilator) should take their medicine 5 to 10 minutes prior to exercise
- Encourage a period of warm up activity before exertion (e.g., walking, flexibility exercises, or other low intensity activities).
- Check the student's asthma management plan for information about his or her triggers, and help the student avoid them when possible. Each student with asthma is sensitive to different factors in the environment, called triggers. Common triggers include dust, pollen, mold, air pollution, and smoke. Cold, dry air can also trigger asthma; wearing a scarf or cold air mask will help because it warms and humidifies the air before it reaches the airways.

Consider Modified Exercise as Needed

- If a student has obvious wheeze, breathing difficulty, or measures a low peak flow rate prior to exercise, have the student treat his/her symptoms according to the asthma management plan. The treatment is usually with prescribed inhaled quick-relief bronchodilator. Physical activity may then be either resumed, modified or halted, depending on the student's response to treatment.
- When a student is having mild symptoms or when triggers are present, consider modifying the intensity, location, or duration of physical activity. Very intense, continuous activity is more likely to cause asthma symptoms than intermittent or very light or non aerobic exercise (e.g., walking, some field events, or weight training). There is no perfect physical activity for people with exercise-induced asthma. All sports are tolerated well when a student's asthma is under control.
- When environmental conditions are bad (e.g., ozone alerts, high pollen counts, freshly cut or sprayed fields) students with asthma may need to avoid being physically active outdoors.