

Asthma And Exercise

- Exercise is a very common asthma trigger. Since exercise and participating in sports is part of healthy living, it is one trigger that should be managed and not avoided.
- For years it was thought that children with asthma could not and should not take part in team sports and vigorous activities. We now know that this is not correct. Exercise keeps the heart and breathing muscles strong and efficient. Most students with well- controlled asthma can participate in regular physical activities and exercise programs with minimal difficulties.
- Each student with asthma will have a different level of tolerance to exercise; therefore individual coaching and education can help children learn to pace themselves, recognize symptoms early and respond appropriately.
- **Even with optimal conditions, however, highly strenuous exercise can provoke asthma symptoms in some students.**
- Exercise induced asthma may begin during exercise but most typically it begins after the exercise has ended.
- Exercise induced asthma generally happens after 6-8 minutes of vigorous exercise, peaks at 5-10 minutes after the exercise and lasts 30-60 minutes. Symptoms may occur again beginning 12-16 hours after the exercise.
- **If a student is sitting out of PE class often due to asthma, they need to see a doctor for evaluation and possible adjustment of medication.**

SYMPTOMS OF EXERCISE-INDUCED ASTHMA – WHAT TO LOOK FOR:

Obvious signs:

- ✓ wheezing
- ✓ shortness of breath on exertion
- ✓ chest tightness

More subtle signs:

- ✓ cough during or after activity
- ✓ chest discomfort or pain
- ✓ unable to catch breath
- ✓ displays lack of energy
- ✓ unable to run 5 minutes without stopping
- ✓ stomach-ache
- ✓ frequent throat clearing sounds
- ✓ chest congestion
- ✓ susceptibility to cold air
- ✓ tires easily
- ✓ unable to keep up with friends
- ✓ dizziness
- ✓ frequent colds

Exercise induced asthma (EIA) may begin during exercise but most typically it begins **after** the exercise has ended. EIA generally occurs following 6-8 minutes of vigorous exercise, peaks at 5-10 minutes after the exercise and last 30-60 minutes. Symptoms may occur again beginning 12-16 hours after the exercise.

Environmental factors that may contribute to exercise induced asthma are:

- ✓ cold air
- ✓ air pollution
- ✓ dust
- ✓ emotional stress
- ✓ air deodorizers
- ✓ automobile exhaust and commercial pollutants, esp. sulfur dioxide, nitrogen dioxide
- ✓ low humidity, i.e. cold dry air
- ✓ allergens e.g. seasonal pollens
- ✓ fatigue
- ✓ irritants such as strong fumes from art & cleaning supplies, scented personal care products or smoke
- ✓ respiratory infections—recent colds or asthma attack

EIA is more often brought on by *aerobic* sports. Running, cross-country, cycling and soccer require continuous, or near continuous activity. Intermittent high *anaerobic* activity is preferred such as circuit training.

WAYS TO REDUCE EXERCISE INDUCED ASTHMA: WHAT TO DO:

- Allow students to use their quick relief medications when needed/authorized.
- In colder weather, have students with asthma wear a scarf over their mouth to warm and humidify cold air before it reaches the airways. **If a child has an obvious wheeze or breathing difficulty prior to any physical activity, exercise, it will be hazardous.**
- Know which students need medications before PE or sports and allow those students to take medications before activities. Students with EIA should take prescribed medicine at least 15-30 minutes before exercise to prevent EIA.
- Allow students to self carry medication if school policies permit.

Adequate Warm Up - Allow for adequate warm-ups before exertion is encouraged. The warm-up period for the student with asthma may need to be longer than usual.

Modify exercise. There is no such thing as the perfect exercise for people with asthma. Either modify activity or substitute with less strenuous options.

Alternate Activities

More Difficult

Running
Cross Country
Cycling
Soccer
Swimming

Less Difficult

Baseball
Softball
Volleyball
Wrestling
Gymnastics
Golf
Walking

Allow adequate cool-down. Avoid stopping exercise abruptly. A warm-down period of 10 minutes is suggested.

What if a student has an asthma attack during PE class?

Follow the instructions on the “First Aid for Asthma” poster or card.