

Information for the Physical Education Teacher Regarding Asthma

The following information about asthma can be given to your child's physical education teacher.

Exercise is important to the development and maintenance of a healthy body in all individuals, including asthmatics. Approximately 80-90 percent of nearly all asthmatics have exercise-induced asthma. Certain activities, running for 6-8 minutes or longer, will cause the asthmatic to go into bronchospasm. It is suspected that breathing rapidly through the mouth cools and dries the airway causing bronchospasm. Even world-class athletes in top condition can experience asthmatic symptoms.

Bronchospasm causes the asthmatic to have chest tightness, rapid breathing, coughing, and/or wheezing, and may decrease their endurance abilities. There is no way of predicting the severity of this, exercise-induced component from the asthmatics 8l normal lung function while at rest. Lung function studies done prior to exertion and again following strenuous and continuous exercise are necessary to determine the extent and severity of airway obstruction induced by the exercise. Symptoms usually may occur during or even following the exercise and are the same as for any acute episode of asthma.

Management of exercise-induced bronchospasm is usually preventive. This includes:

1. Avoiding exercise in cold, dry environments
2. Breathing through the nose to warm and moisten the air or using a face mask or scarf which can help trap moisture and keep the air warmer
3. The use of a pre-medication plan
4. Warm-up exercises of at least 5-15 minutes before the activity
5. Avoidance of running outdoors on high pollen or mold days (i.e., windy days in the spring and fall) if allergic as well as asthmatic
6. Avoidance of running activities if peak flow is _____ or below
7. Avoidance running or strenuous activity for one week following an asthma episode or until the peak flow has stabilized.

General Guidelines

1. The asthmatic should be able to engage in regular physical education activities most of the time.
2. During asthma episodes, activities should be temporarily curtailed until peak flows are well stabilized.
3. Each asthmatic child has a different limit of tolerance to exercise.
4. Please permit the child to set his/her pace on a daily basis. Prolonged running, soccer, and basketball are the events that usually present the most difficulty. Do not force the child to participate above his/her level for that day.
5. In case of difficulty breathing, coughing, wheezing, and/or chest tightness:
 - Talk calmly and reassuringly to the child
 - Have him/her sit down
 - Have him/her get a drink of water
 - Administer _____
 - If the treatment does not resolve symptoms within 10-15 minutes or symptoms are getting worse, notify the school nurse or parent immediately (The physician's office or 911 may be necessary in certain rare situations).

If pre-treatment medications and warm-up exercises are used prior to the activity and asthma symptoms result anyway, this is an indication of airway instability. The activity should be stopped for that day. The child may use a bronchodilating inhaler again to alleviate symptoms even though it is sooner than the 4 hour interval normally required. One should also suspect that the asthma has been triggered by something else prior to the activity or that asthma is unstable. The treatment plan indicated by the doctor for increased symptoms should be started. If the inhaler is required sooner than four (4) hours for a second time, it is time to contact the parent.

If the asthmatic is being treated for increased symptoms or has had a recent asthma episode which is in the process of resolving, he/she should avoid running activities or strenuous activities for a week following the episode or until peak flows are well stabilized. The asthmatic's airways are more irritable at this time and the underlying inflammation has not totally resolved. He/She will usually be well enough to return to school on additional medication, but will not be ready to participate in strenuous physical activities. Once stability has returned, the child should be able to fully participate in physical activities. If the child is unable to do so, discuss this with the parent. A new plan of action may need to be developed with the doctor.