Asthma in Athletes

Taken From:
National Athletic Trainers’ Association Position Statement: Management of Asthma in Athletes
Asthma

• A chronic inflammatory disorder of the airways characterized by variable airway obstruction.
• Can lead to recurrent episodes of wheezing, breathlessness, chest tightness, and coughing; particularly at night or early morning.
• Airflow limitations are often reversible, but as asthma symptoms continue, patients may develop “airway remodeling” that leads to chronic irreversible airway obstruction.
• Severe attacks of asthma can also cause irreversible airflow obstruction that can lead to death.
Asthma can be triggered by many stimuli, including:

- Allergens (pollen, dust mites, animal dander)
- Pollutants (carbon dioxide, smoke, ozone)
- Respiratory Infections
- Aspirin
- NSAIDS
- Inhaled Irritants (cigarette smoke, household cleaning fumes, chlorine)
- Particulate Exposure (ambient air pollutants)
- Exposure to Cold
- Exposure to Exercise
Asthma Considerations

- All athletes with asthma should have a rescue inhaler available during games and practices.
- Athletic trainers should also have an extra rescue inhaler for each athlete to administer during emergencies.
- Athletes with asthma should have asthma management examinations at regular intervals, as determined by the PCP or specialist; to monitor and possibly alter therapy.
- Proper warm-up before exercise may lead to a refractory period of as long as 2 hours, which may result in decreased reliance on medications by some athletes with asthma.
Exercise Induced Asthma (EIA)

- A temporary narrowing of the airways induced by exercise in which the patient has asthma symptoms.
- EIA is commonly seen in athletes in all levels of athletic competition.
- EIA can occur in patients who do not otherwise have asthma.
- EIA can be a significant disability for an athlete. This is especially true in regards to endurance athletes.
- EIA is believed to be present in 12-15% of the general populations and as high as 23% in athletes.
  - Can be more common in urban environments than in rural areas.
One goal of management is to enable patients to participate in any activity they choose without experiencing asthma symptoms. EIB should not limit either participation or success in vigorous activities.

Recommended Treatments for EIB include:

- Beta$_2$-agonists will limit EIB in more than 80 percent of patients. Short acting inhaled beta2-agonists used shortly before exercise (or as close to exercise as possible) may be helpful for 2 to 3 hours. Other medications may be considered as well. Contact your asthma specialist.

- A lengthy warm-up period before exercise may benefit patients who can tolerate continuous exercise with minimal symptoms. The warm-up may preclude a need for repeated medications.
Institutional Policies on Asthma Management

• Insert specific institutional policy on identification and specific asthma management methods (include medication use recommendations) and information for coaches
Resources

Management of Asthma in Athletes
http://www.nata.org/sites/default/files/MgmtOfAsthmaInAthletes.pdf