A student with asthma symptoms should be placed in an area where he/she can be closely observed. Never send a student to the health room alone or leave a student alone. Limit moving a student who is in severe distress. Go to the student instead.

See list of Possible Observations/Symptoms on back.

Immediate Assessment: Is student at high risk?
- Marked breathlessness, inability to speak more than short phrases, use of accessory muscles, or drowsiness.
- Risk factors for a fatal attack (see back).

Take Immediate Actions
- Treat with inhaled SABA.
- Call 911 (student to ED)
- Contact parent/guardian.

If available, measure PEF: Is PEF < 50% of predicted or personal best?

Check and record respirations, pulse, and PEF rate.

Initial Treatment
- Inhaled SABA: Up to two treatments 20 minutes apart of 2–6 puffs by MDI or nebulizer treatments. Medication must be authorized by a personal physician order or standing protocol signed by the school physician or public health physician.
- Restrict physical activity. Allow student to rest.
- Administer oxygen (if appropriate and available).
- Contact parent/guardian.
- Assess response after ~ 10 minutes.

Good Response
PEF ≥80% and no wheezing or dyspnea.

Actions:
- Reassess after 3-4 hours.
- Follow school protocol for returning to class.

Incomplete Response
PEF 50–79% or persistent wheezing or dyspnea.

Actions:
- Repeat inhaled SABA.
- Reassess after ~ 10 minutes.
- Call parent immediately if response remains incomplete.

Poor Response
PEF <50% or marked wheezing and dyspnea.

Actions:
- Repeat inhaled SABA.
- Call 911 (Student to ED)
- Contact parent/guardian.

With parental permission, send a copy of the health room encounter report to the student’s physician. Obtain a personal asthma action plan.

To ED

ED: emergency department
PEF: peak expiratory flow
MDI: metered-dose inhaler
SABA: short-acting beta2-agonist (quick-relief inhaler)

SEPTEMBER 2008
Possible Observations/Symptoms (May include one or more of the following):
- Coughing, wheezing, noisy breathing, whistling in the chest.
- Difficulty or discomfort when breathing, tightness in chest, shortness of breath, chest pain, breathing hard and/or fast.
- Nasal flaring (nostril opens wide to get in more air).
- Can only speak in short phrases or not able to speak.

Risk Factors for Death from Asthma

Asthma history
- Previous severe exacerbation (e.g., intubation or ICU admission for asthma).
- Two or more hospitalizations for asthma in the past year.
- Three or more ED visits for asthma in the past year.
- Hospitalization or ED visit for asthma in the past month.
- Using >2 canisters of SABA per month.
- Difficulty perceiving asthma symptoms or severity of exacerbations.
- Other risk factors: lack of a written asthma action plan, sensitivity to Alternaria.

Social history
- Low socioeconomic status or inner-city residence.
- Illicit drug use.
- Major psychosocial problems.

Comorbidities
- Cardiovascular disease.
- Other chronic lung disease.
- Chronic psychiatric disease.