

Asthma Emergency Treatment Plan

Assess Severity

- Students at high risk for a fatal attack (see Risk Factors for Fatal Asthma Attacks below) require immediate attention after initial treatment.
- Symptoms and signs suggestive of a more serious exacerbation such as marked breathlessness, inability to speak more than short phrases, use of accessory muscles, or drowsiness should result in initial treatment while immediately calling 911.
- Less severe signs and symptoms can be treated initially with assessment of response to therapy and further steps as listed below.

Initial Treatment

- Inhaled SABA (albuterol) up to two treatments 20 minutes apart of either :
 - 2-6 puffs by metered-dose inhaler (MDI) and spacer (when available)
 - Nebulizer treatments with albuterol sulfate inhalation solution 0.083% (2.5 mg/3 ml).

Key: SABA: short acting beta2-agonist (quick relief inhaler)

Good Response

No wheezing, cough, or dyspnea (assess tachypnea in young children).

- Contact parent/guardian for follow-up instructions and further management.
- May continue inhaled SABA every 3 to 4 hours for 24-48 hours.
- Return to class and recheck later.

Incomplete Response

Persistent wheezing, cough, and dyspnea (assess tachypnea).

- Continue inhaled SABA as listed under initial treatment above.
- Contact parent/guardian, who should follow up urgently with health care provider.
- If parent/guardian not available, call 911.

Poor Response

Marked wheezing, cough, and dyspnea.

- Repeat inhaled SABA immediately.
- If distress is severe and nonresponsive to initial treatment, call 911, then call parent/guardian.

To Hospital Emergency Department

Modified by Robert Lemanske, MD and Kathleen Shanovich, RN, CPNP from Guidelines for the Diagnosis and Management of Asthma, National Asthma Education and Prevention Program, Expert Panel Report 3, U.S. Department of Health and Human Services, National Institutes of Health, and National Heart, Lung and Blood Institutes of Health, and National Heart, Lung and Blood Institute, October 2007, page 382.

SA³MPRO™

Risk Factors for Fatal Asthma Attacks

Asthma History

- Previous severe exacerbation (e.g., intubation or intensive care unit admission for asthma)
- Two or more hospitalizations for asthma in the past year
- Three or more emergency department visits for asthma in the past year
- Hospitalization or emergency department visit for asthma in the past month
- Using > 2 canisters of short-acting beta2-agonist (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

Co-morbidities

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

From Guidelines for the Diagnosis and Management of Asthma, National Asthma Education and Prevention Program, Expert Panel Report 3, U. S. Department of Health and Human Services, National Institutes of Health, and National Heart, Lung and Blood Institute, October 2007, p. 377