

ALBUTEROL SULFATE

DRUG CLASSIFICATION	Sympathomimetic Amine Short-Acting Beta-2 Adrenergic Receptor Agonist (SABA) Bronchodilator Agent
MECHANISM OF ACTION	Initiates short-acting preferential activation of beta-2-adrenergic receptors, promoting relaxation of the bronchial smooth muscle tissue within all airway components. Inhibits the release of immediate hypersensitivity mediators from cells. Assists hyperkalemia by promoting the movement of potassium back into cells. Effect on beta-1 adrenergic receptors is small, minimally affecting heart rate.
CLINICAL INDICATIONS	Bronchospasm Associated with Reversible Obstructive Airway Disease (i.e., Asthma, COPD, etc.) Bronchospasm Associated with Moderate to Severe Allergic Reaction Crush Syndrome Trauma with Signs of Hyperkalemia or Hemodynamic Instability
STANDARD CONTRAINDICATIONS	Hypersensitivity to Albuterol, Levalbuterol, or Other Relative Components
POTENTIAL ADVERSE EFFECTS	Hypertension / Bronchospasm / Chest Pain / Palpitations / Tachycardia / Excitement / Nervousness / Tremors
GENERAL RISKS & PRECAUTION	1) If Paradoxical Bronchospasm occurs, discontinue Albuterol therapy, and consider other treatment. 2) May cause transient increase in blood glucose level in diabetic patients, similar to effect of steroids. 3) Use with caution for patients with cardiovascular disease as Albuterol can induce arrhythmias or other abnormal ECG presentations. 4) Use with caution as Albuterol may exacerbate various conditions for those with underlying Seizure Disorders, Hyperthyroidism, Glaucoma, and Hypokalemia. 5) Do not assume all wheezing is pulmonary, especially in a cardiac child; avoid Albuterol unless strong history of recurrent wheezing secondary to pulmonary etiology.
PROTOCOL INDEX	Allergic Reaction / Anaphylaxis (AM-1) Pediatric Allergic Reaction (PM-1) Adult COPD / Asthma (AR-4) Pediatric Respiratory Distress (AR-7) Crush Syndrome (TB-3)

MEDICATION ADMINISTRATION

ADULT

PEDIATRIC

Moderate-to-Severe Adult Allergic Reaction

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

If indicated, continue Albuterol therapy with or without combining Ipratropium:

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

Respiratory Distress with Prevalent Wheezing or Stridor (Asthma / COPD)

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

If indicated, continue Albuterol therapy with or without combining Ipratropium:

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

Consider additional Albuterol doses as needed.

Systemic Signs of Crush Syndrome with Prolonged Entrapment > 2 Hours

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

Moderate-to-Severe Pediatric Allergic Reaction

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

If indicated, continue Albuterol therapy with or without combining Ipratropium:

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

Respiratory Distress with Prevalent Wheezing or Stridor (Asthma / Croup)

1.25 – 2.5 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

If indicated, continue Albuterol therapy with or without combining Ipratropium:

1.25 – 2.5 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)

Consider additional Albuterol doses as needed.

Systemic Signs of Crush Syndrome with Prolonged Entrapment > 2 Hours

2.5 – 5.0 mg [NEB]; Repeat as needed.

(Maximum of 3 Doses)