# Breathing Difficulty

Effective: 11/01/2022
Supersedes: N/A

**Reference Procedures:** 12-Lead, BVM, CPAP, Cricothyroidotomy, Endotracheal Intubation, ETCO2, I-gel, Pulse Oximetry, Z Vent

**Goals for Patient Care:**

- Recognize and begin to treat patients in respiratory distress
- Improved clinical stability and patient comfort

**Medications:**

| MEDICATION | ADULT | PEDIATRIC (Refer to Handtevy) |
|---|---|---|
| **ALBUTEROL** | • 2.5 mg in 3cc N.S. repeat PRN | • 2.5 mg in 3cc N.S. repeat PRN |
| **IPRATROPIUM BROMIDE** | • 0.5 mg in 2.5cc NS | • 0.5 mg in 2.5cc NS |
| **METHYLPREDNISOLONE** | • 125mg IV slow or IM | • 2 mg/kg IV slow or IM |
| **MAGNESIUM SULFATE** | • 1 g IV/IO over 20 minutes<br>• (*50 gtts/min in 100cc NS w/10gtt set*) | • 25-50 mg/kg IV/IO over 20 minutes<br>• (*50 gtts/min in 100cc NS w/10gtt set*) |
| **EPINEPHRINE** | • 0.3mg IM (1/1,000) | • 0.01 mg/kg (1/1,000) IM (max 0.3 mg) |
| **KETAMINE** | • 0.3 mg/kg IV/IO/IM | • 0.3 mg/kg IV/IO/IM |
| | **MAX DOSE: 50mg** | **MAX DOSE: 50mg** |
| **RACEMIC EPINEPHRINE** | Not for adults | • 0.5cc diluted with 3cc administered over 5-15 minutes via nebulizer<br>Single dose only |
| **CPAP** | Start with 5 cmH2O and adjust to effectiveness up to 10cmH20 | |

# Breathing Difficulty

Patients present with shortness of breath due to multiple medical conditions (anemia, aspiration, asthma, allergic reaction, bronchospasm, COPD, CHF, trauma, etc.)
This protocol is most applicable to patients with wheezing or decreased air entry thought to be asthma or COPD.

Patients with known asthma or COPD who complain of chest pain or shortness of breath should be treated empirically with beta-agonists (albuterol) even if wheezing is absent.
If CPAP is needed, continue inhaled meds.
Patients with COPD who are NOT in distress, require saturations of 90%.

## Procedures/ Interventions:

- Administer oxygen and assist ventilation as required
- Secure airway if necessary
- Administer nebulized albuterol and atrovent (Ipratropium Bromide)
- Consider NIPPV if patient condition does not improve (see BiPap/CPAP protocol)
    - Administer nebulized medication with NIPPV
    - CPAP- Initial dose 0-2cm/H20 increase until effective (max 10)
- Establish IV access and consider up to 500mL NS depending up patient exam and clinical scenario
- In asthmatics, consider magnesium sulfate if patient is refractory to initial therapy.
- In cases of severe respiratory distress and shock, consider IM epinephrine
- ☎ Consider epinephrine drip if patient is refractory to IM epinephrine

## Considerations:

Considerations for crews on scene prior to ambulance arrival.

1. Obtain history
   Asthma, COPD, CHF, Allergies, medications and if they are compliant, duration, have they ever been intubated before due to breathing problems
2. Apply oxygen (Nasal Cannula, Non-rebreather, BVM)
3. Obtain vitals, listen to lung sounds (SAMPLE)
5. Coach and keep the patient calm
6. Give full report to arriving paramedic of all information gathered, treatments rendered, and whether the patient would like to be transported or not