

## Airway/Ventilation Management

E M R	<ul style="list-style-type: none"> <li>• Assure an open airway.</li> <li>• Utilize head tilt/chin lift or if suspected cervical spine injury perform modified jaw thrust.</li> <li>• Expose chest and visualize for chest rise and movement.</li> <li>• If the chest is not rising and air exchange cannot be heard or felt:             <ul style="list-style-type: none"> <li>• Deliver two positive pressure ventilations. If resistance continues follow AHA guidelines for obstructed airway rescue.</li> <li>• If spontaneous respirations return; administer oxygen via non-rebreather mask at 15 LPM or assist ventilations via bag valve mask with supplemental oxygen at 15 LPM and a rate of 12 breaths per minute.</li> <li>• If no spontaneous respirations return, but the patient has a pulse; ventilate patient at rate of 12 breaths per minute with supplemental oxygen at 15 LPM.</li> </ul> </li> <li>• If patient remains breathless and a pulse is not present; initiate <b>Cardiac Arrest Protocol 2120</b>.</li> <li>• Continue airway management according to <b>Basic Airway Procedure 9001</b>.</li> <li>• Provide report when transferring care.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Asthma/COPD

E M R	<ul style="list-style-type: none"> <li>• Perform protocol <b>Routine Patient Care 1105</b>.</li> <li>• Administer <b>Albuterol</b> if patient's lung sounds are diminished or wheezing. May repeat every 20 minutes as needed.             <ul style="list-style-type: none"> <li>• <b>2.5mg/3mL</b></li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.             <ul style="list-style-type: none"> <li>• Administer <b>Albuterol 2.5 mg/3 mL</b> mixed with <b>Ipratropium 0.5 mg/3 mL</b>. Repeat as necessary every 20 minutes.</li> </ul> </li> <li>• If the patient is suffering from status asthmaticus and does not improve with albuterol, administer <b>Epinephrine 1 mg/mL 0.3 mg IM</b>.             <ul style="list-style-type: none"> <li>• If the patient is &gt;40 years old, has an irregular heart rate, has a heart rate &gt; 150 bpm, history of heart disease, or has hypertension; consult <b>MEDICAL CONTROL</b>.</li> </ul> </li> <li>• For moderate to severe respiratory distress initiate CPAP; adjust PEEP to 5-10 cmH<sub>2</sub>O. If SBP is &lt; 90 mmHg adjust to PEEP of 5 and discontinue if hypotension persists.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Midazolam 0.5 mg slow IV or IM</b> for anxious patients unable to tolerate CPAP.</li> <li>• Administer <b>Methylprednisolone</b> <ul style="list-style-type: none"> <li>• <b>125 mg IV</b>.</li> <li>• If patient is still deteriorating, contact <b>Medical Control</b> for consideration of <b>Ketamine</b>.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## CHF/Pulmonary Edema

E M R	<ul style="list-style-type: none"> <li>• Perform protocol <b>Routine Patient Care 1105.</b></li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Nitroglycerin</b> <ul style="list-style-type: none"> <li>• <b>0.4mg SL.</b> May repeat every 3-5 minutes to a max dose of 3 tablets. Ensure SBP &gt; 100 mmHg prior to administration.</li> </ul> </li> <li>• For moderate to severe respiratory distress initiate CPAP; adjust PEEP to 5-10 cmH<sub>2</sub>O. If SBP is &lt; 90 mmHg adjust to PEEP of 5 and discontinue if hypotension persists.</li> <li>• Be prepared to support ventilations with BVM.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Administer <b>Furosemide</b> <ul style="list-style-type: none"> <li>• <b>40 mg IV or double daily patient dose, Max dose 80 mg.</b></li> </ul> </li> <li>• Continue airway management and perform advanced airway procedures, if indicated.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Midazolam 0.5 mg slow IV or IM</b> for anxious patients unable to tolerate CPAP.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

# PEDIATRIC RESPIRATORY

# 3205

## Respiratory Distress

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Administer <b>Albuterol</b> for wheezing or diminished breath sounds. May repeat every 20 minutes as needed.             <ul style="list-style-type: none"> <li>• <b>2.5mg/3mL</b></li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Administer <b>Albuterol 2.5 mg/3mL</b> mixed with <b>Ipratropium 0.5 mg/3 mL</b> for wheezing or diminished breath sounds. May repeat every 20 minutes as needed.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate IV/IO access. Administer fluid bolus 20mL/kg, may repeat once. Any bolus &gt;40mL/kg, consult <b>Medical Control</b>.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Administer <b>Epinephrine 0.1 mg/mL</b> <ul style="list-style-type: none"> <li>• <b>0.01 mg/kg IM</b> if the patient is suffering from status asthmatics and does not improve with nebulizer treatment. May repeat every 20 minutes.</li> </ul> </li> <li>• Administer <b>Methylprednisolone</b> <ul style="list-style-type: none"> <li>• <b>1-2 mg/kg IV</b>.</li> </ul> </li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

### Critical Thinking Elements

- Signs and Symptoms of epiglottitis:
  - Altered level of consciousness
  - Fever
  - Hoarseness
  - Brassy cough
  - Inspiratory stridor
  - Drooling
  - Tripod positioning
- If epiglottitis is suspected:
  - Keep patient calm
  - Administer supplemental oxygen
  - Transport sitting up.

## Respiratory Arrest

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Open Airway</li> <li>• Suction as needed.</li> <li>• Insert an oropharyngeal or nasopharyngeal airway</li> <li>• Ventilate with 100% oxygen.</li> <li>• If chest rise is inadequate:             <ul style="list-style-type: none"> <li>• Relieve upper airway obstruction</li> <li>• Reposition airway</li> <li>• Follow airway management procedures.</li> </ul> </li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

### Critical Thinking Elements

- Gastric distention is very common in pediatric patients and may cause poor compliance. Ventilating too fast or giving too much tidal volume are the top two reasons for distention. Ensure proper ventilation techniques and an appropriately sized BVM for the pediatric patient.

## Respiratory Distress with Tracheostomy Tube

E M R	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Administer <b>Oxygen 15 LPM</b> via tracheostomy mask.</li> <li>• Assess work of breathing</li> <li>• Assess abnormal airway sounds.</li> <li>• Place patient in position of comfort.</li> <li>• Suction secretions.</li> <li>• Have caregiver change tracheostomy tube if suctioning is not effective.</li> <li>• If airway continues to be obstructed or if ventilator effort is inadequate, ventilate via BVM connected to tracheostomy tube.</li> <li>• If ventilations are still not sufficient, ventilate mask to mouth while covering stoma, the trach balloon must be deflated as well.</li> </ul>
E M T	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>



## Respiratory Distress with Ventilator

EMR	<ul style="list-style-type: none"> <li>• Follow <b>Routine Patient Care 1205</b>.</li> <li>• Open airway</li> <li>• Remove patient from ventilator and support respirations with BVM.</li> <li>• If unable to ventilate, suction.</li> <li>• If still unable to ventilate, follow <b>3215 Respiratory Distress with Tracheostomy Tube</b>.</li> <li>• If able to ventilate, support ABCs and monitor vitals.</li> </ul>
EMT	<ul style="list-style-type: none"> <li>• Continue EMR care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
I	<ul style="list-style-type: none"> <li>• Continue EMT care.</li> <li>• Initiate ALS intercept if indicated.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>
P	<ul style="list-style-type: none"> <li>• Continue ILS care.</li> <li>• Transport as soon as possible.</li> <li>• Contact receiving facility as soon as possible.</li> </ul>

## Respiratory Distress with Ventilator

### Critical Thinking Elements

- Utilize caregivers as medical resources during treatment and transport.
- Consider to allow caregiver to accompany patient during transport.
- Bring ventilator to the hospital or have caregivers bring the ventilator to the hospital.