



# Portage County EMS Patient Care Guidelines



## Respiratory Distress

### Note:

- This protocol may apply to the following conditions:
  - Congestive heart failure (CHF)
  - Asthma/COPD/ Reactive Airway Disease
  - Allergy/anaphylaxis
  - Pulmonary infections
  - Spontaneous pneumothorax
  - Upper airway obstruction
  - Anxiety and hyperventilation syndrome
  - Acute coronary syndromes (ACS)

<b>Priorities</b>	<b>Assessment Findings</b>
Chief Complaint	"Difficulty breathing", "Shortness of breath"
LOPQRST	Assess location, onset, duration, progression, subjective severity, possible triggering events, and response to treatments before EMS arrival.
AS/PN	Chest pain (what kind?), fever/chills, productive (of what?) cough
AMPL	Check for possible exposure to known allergens. Check past history, medications and compliance for clues to cause of present illness.
Initial Exam	Check ABCs and correct immediately life-threatening problems.
Detailed Focused Exam	<b>Vital Signs:</b> BP, HR, RR, Temp, SpO <sub>2</sub> , ETCO <sub>2</sub> <b>General Appearance:</b> Tripod positioning; Purse-lipped breathing. Severity of distress[1]? <b>Neck:</b> JVD? <b>Skin:</b> Cool, moist and pale? Warm, dry and flushed? Urticaria? Cyanosis? <b>Respiratory Effort:</b> Using accessory muscles, signs of fatigue; two-word sentences? <b>Lung Sounds:</b> Wheezes, rales, rhonchi or stridor? <b>Heart Sounds:</b> Rate, regularity. <b>Lower Extremities:</b> Pitting edema of the ankles? <b>Neuro:</b> ALOC, lethargy, somnolence?
Data	SpO <sub>2</sub> , on room air or home O <sub>2</sub> Blood glucose, if DKA is suspected or if there is ALOC EKG, Capnography
Goals of Therapy	Improve oxygenation and ventilation, reduce the work of breathing, and treat underlying conditions.
Monitoring	SpO <sub>2</sub> Cardiac rhythm monitoring. Heart Rate and Blood Pressure frequently. Capnography

### EMERGENCY MEDICAL RESPONDER

- Routine Medical Care
- Allow/assist the patient to assume a position of comfort (usually upright).
- Administer oxygen 2 – 4 LPM per nasal cannula if SpO<sub>2</sub> < 94%. Increase flow and consider non-rebreather mask to keep SpO<sub>2</sub> > 94%
- Assisted ventilation: Consider assisting breathing with gentle synchronous ventilations with bag-valve mask (BVM); Support ventilation with BVM if apnea or hypopnea occurs.
- Airway adjuncts:

- If there is altered level of consciousness and loss of gag reflex, insert an oropharyngeal or nasopharyngeal airway
- Consider a non-visualized airway in unconscious patients without a gag reflex
- Assist with patient-prescribed medications or initiate the following therapies:
  - **Epinephrine** (Epi-pen) is indicated for severe anaphylaxis (*Refer to Allergy and Anaphylaxis Guidelines*).
- Nebulizer therapy:
  - **Albuterol** is indicated for asthma and COPD (*Refer to Asthma/COPD Guidelines*).

Give a status report to the ambulance crew by radio ASAP.

### EMERGENCY MEDICAL TECHNICIAN

- Assist with patient-prescribed medications or initiate the following therapies:
  - **Nitroglycerin** is indicated for acute coronary syndromes and CHF (*See Acute Coronary Syndrome and STEMI Destination and Congestive Heart Failure Guidelines*).
  - **Albuterol** and **ipratropium bromide** are indicated for asthma and COPD (*Refer to Asthma/COPD Guidelines*).
  - **Aspirin** is indicated for acute coronary syndromes (*See Acute Coronary Syndrome and STEMI Destination Guidelines*).
- Consider CPAP (See CPAP Procedure) for a patient that:
  - Is awake and able to follow commands
  - Is over 12 years old and is able to fit the CPAP mask
  - Has the ability to maintain an open airway
  - Exhibits two or more of the following:
    - Respiratory rate greater than 25 breaths per minute
    - SpO<sub>2</sub> of less than 94% at any time
    - Use of accessory muscles during respirations

Give a status report to the ambulance crew by radio ASAP.

### ADVANCED EMERGENCY MEDICAL TECHNICIAN

- IV normal saline @ KVO
- Initiate a 500 ml fluid bolus, if hypotension or dehydration is present.

*Contact Medical Control for the following:*

- Additional fluid orders are needed

### INTERMEDIATE

- Airway adjuncts:
  - If there is altered level of consciousness and loss of gag reflex, insert an oropharyngeal or nasopharyngeal airway or consider endotracheal intubation
  - In respiratory arrest or cardiopulmonary arrest, insert an endotracheal tube
- If a spontaneous tension pneumothorax is suspected, perform a needle decompression on the affected side.

## PARAMEDIC

- If the patient becomes anxious from the CPAP mask, consider **midazolam** 1 – 2 mg IV/IO/IN once.
- Consider Rapid Sequence Intubation/ Rapid Sequence Airway (See RSI/RSA procedure)[3].

*Contact Medical Control for the following:*

- Nature and severity of the problem
- Treatment or procedures proposed or performed
- Results of treatment
- Changes in patient status

## FOOTNOTES:

[1] Severity of Respiratory Distress:

- Mild = RR<20 + minimal additional breathing effort + speaking in complete sentences + minimal subjective distress, No ALOC
- Moderate = RR 20 to 25 + moderate additional breathing effort + difficult to complete a sentence + moderate subjective distress + No ALOC
- Severe = RR> 25 + marked additional breathing effort + 2 or 3 word sentences + marked subjective distress + possible ALOC

[2] Lorazepam may be substituted in the event of a midazolam shortage. Lorazepam 1 – 2 mg IV/IO/IN once.

[3] RSI/RSA requires 2 paramedics at the patient's side

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