



- a. Full set of vital signs (pulse, blood pressure, respiratory rate, neurologic status assessment), temperature, and O<sub>2</sub> saturation. Consider temperature and waveform capnography
- b. Air entry (normal vs. diminished, prolonged expiratory phase)
- c. Breath sounds (wheezes, crackles, rales, rhonchi, diminished, clear)
- d. Skin color (pallor, cyanosis, mottling, normal) and temperature (febrile, diaphoretic)
- e. Mental status (alert, tired, lethargic, unresponsive)
- f. Signs of distress include:
  - i. Apprehension, anxiety, combativeness
  - ii. Hypoxia (less than 90% oxygen saturation)
  - iii. Intercostal/subcostal/supraclavicular retractions, accessory muscle use
  - iv. Grunting, stridor, inability to speak full sentences
  - v. Nasal flaring
  - vi. Cyanosis

### **Treatment and Interventions**

1. Airway: See [Airway Management Guideline](#) for additional specifics
  - a. Give supplemental oxygen for dyspnea to a target of 94–98% saturation. Escalate from a nasal cannula as needed to reach this goal
  - b. BVM ventilation should be utilized in children with respiratory failure
  - c. Non-invasive ventilation (NIV) should be administered for severe respiratory distress via BVM, continuous positive airway pressure (CPAP) or bi-level positive airway pressure (BiPAP)
  - d. If indicated, bronchodilators should be administered in line with NIV
2. Monitoring
  - a. Pulse oximetry and EtCO<sub>2</sub> should be routinely used as adjuncts to other forms of monitoring in patients with respiratory complaints
  - b. Continuous cardiac monitoring may be indicated in patients with respiratory distress associated with suspected acute or decompensated congestive heart failure (CHF) or dysrhythmia
  - c. 12-lead EKG may be indicated to assess for dysrhythmia or ischemia, particularly in patients with risk factors for coronary artery disease and/or presentation consistent with CHF
3. IV Access and Fluids – IV access should be placed when IV medication administration is indicated, or when there are clinical concerns of dehydration so that IV fluids can be administered
4. Suspected bronchospasm, asthma, COPD:
  - a. Inhaled Medications
    - i. While albuterol 2.5 mg nebulized is usually sufficient for mild wheezing without clinical distress, albuterol 5 mg nebulized (or 6 puffs metered dose inhaler) should be administered to all patients in respiratory distress with signs of bronchospasm (e.g., known asthmatics, quiet wheezers). Repeat at this dose with unlimited frequency for ongoing respiratory distress
    - ii. Ipratropium 0.5 mg nebulized should be given up to 3 doses in conjunction with albuterol
  - b. Steroids should be administered in the prehospital setting
    - i. PO steroid options for patients not critical enough to require IV placement include: