Pediatric Respiratory Distress

1. Follow **1.1 General Pre-hospital Care-Treatment Protocol.**
2. Pediatric patients (≤ 14 years) utilize MI MEDIC cards for appropriate medication dosage. When unavailable, utilize pediatric dosing listed within protocol.
3. Assess the patient's airway.
   a. If unable to ventilate patient after airway repositioning, refer to **1.10 Foreign Body Airway Obstruction-Treatment Protocol** and/or **7.9 Airway Management-Procedure Protocol.**
   b. Respiratory Failure or Respiratory Arrest, refer to **4.9 Pediatric Crashing Patient/Impending Arrest-Treatment Protocol.**
   c. Consider anaphylaxis. Refer to **1.6 Allergic Reaction/Anaphylaxis-Treatment Protocol.**
4. Allow the patient a position of comfort that also maintains an open airway.
5. Titrate SpO2 to 94%. Have a parent assist with oxygen via blow-by or mask support if needed.
6. Airway should be managed by least invasive method possible.
7. Suction secretions if needed.
8. Consider CPAP if appropriate size available. Follow **7.5 CPAP-Procedure Protocol.**
9. Do not delay transport for interventions.
10. Attempt vascular access only if necessary for patient treatment.

Suspected Bronchospasm (Wheezing):

1. Assist the patient in using their own **albuterol** Inhaler, if available, prescribed to the patient, and not expired.
2. Administer **albuterol 2.5 mg/3ml** NS nebulized (Per MCA selection may be EMT skill) per **9.1 Medication Administration-Medication Protocol.**

Nebulized **albuterol** administration per MCA selection
☒ EMT

   A. For patients ≥ 2 years old **ipratropium** 500 mcg/2.5 mL **NS** shall be given with the albuterol for the first dose.
3. Consider CPAP if appropriate size available. Follow **7.5 CPAP- Procedure Protocol.**
4. In cases of respiratory failure administer **epinephrine auto-injector.**

MCA Approval of **epinephrine** auto-injector IM
☒ MFR

MCAs will be responsible for maintaining a roster of the agencies choosing to participate and will submit roster to MDHHS.

a. If child appears to weigh less than 10 kg (approximately 20 lbs.), contact medical control prior to administering **epinephrine**, if possible.
b. If child weighs between 10-30 kg (approximately 20-60 lbs.), administer **pediatric epinephrine auto-injector** IM.
c. If child weighs greater than 30 kg (approximately 60 lbs.), administer **epinephrine auto-injector** IM.

5. In cases of respiratory failure, administer **epinephrine** 1 mg/ml IM (per MCA selection, may be BLS or MFR skill).

NOTE: BLS not carrying epinephrine auto-injector MUST participate in draw up epinephrine.

MCA Approval of draw up **epinephrine.**
☒ MFR
☒ BLS
Personnel must complete MCA approved training prior to participating in draw up **epinephrine.**

MCAs will be responsible for maintaining a roster of the agencies choosing to participate and will submit roster to MDHHS.

a. If child appears to weigh less than 10 kg (approximately 20 lbs.), contact medical control prior to **epinephrine** if possible.
b. If child weighs between 10-30 kg (approximately 60 lbs.), administer **epinephrine** (concentration of 1mg/1mL) 0.15 mg (0.15mL) IM
c. If child weighs 30 kg or greater; administer **epinephrine** (concentration of 1mg/1mL) 0.3 mg (0.3 mL) IM

6. If available per MCA selection, administer **prednisone** 50 mg PO to children > 6 years of age.

Additional Medication Option:

☒ **Prednisone** 50 mg tablet PO
(Children > 6 y/o)

a. If **prednisone** is not available, patient is ≤ 6 years of age, or patient is unable to receive medication PO, administer **methylprednisolone** 2 mg/kg IV/IO/IM.

Stridor/Suspected Croup:

1. Croup is most common in children 6 months to 6 years of age.
2. Commonly associated with recent upper airway infection or fever.

3. If foreign body is suspected and unable to be removed, contact Medical Control prior to administration of nebulized **racepinephrine/epinephrine.** See **1.10 Foreign Body Airway Obstruction-Treatment Protocol.**
4. Consider humidified oxygen.
5. If patient presents with stridor at rest without suspected airway obstruction, administer nebulized **racepinephrine/epinephrine** per MCA selection (Medical Control contact not required):

MCA Selection
☒ **Racepinephrine** 2.25% inhalation solution via nebulizer Administer by placing 0.5 mL of **Racepinephrine** 2.25% inhalation solution in nebulizer and dilute with 3 mL of normal saline.
☐ **Epinephrine** 5 mg (1mg/1ml) nebulized

6. Do not delay transport.

Respiratory Failure or Arrest:

1. Ventilate the patient using an appropriately sized BVM with supplemental oxygen.
   a. Chest rise is the best indicator of successful ventilation.
   b. Ventilate at a rate appropriate for the patient:
      i. Infant: 30 breaths per minute
      ii. Child: 20 breaths per minute
   c. Utilize capnography per **7.24 End Tidal Carbon Dioxide Monitoring-Procedure Protocol** to maintain end tidal CO2 35-45 mmHg.
2. BVM is the preferred method of ventilation for patients under 8 years old.
   a. When unable to ventilate with BVM and basic airway adjuncts, consider advanced airway. See **7.9 Airway Management-Procedure Protocol.**
3. If opioid overdose is suspected, administer **naloxone** according to MI-MEDIC cards. If MI-MEDIC is unavailable, administer **naloxone** per **1.9 Opioid Overdose Treatment and Prevention-Treatment Protocol**.
4. Monitor EKG and refer to **4.9 Pediatric Crashing Patient/Impending Arrest-Treatment Protocol** or appropriate cardiac protocol as required.