

Pediatric Respiratory Distress

1. Follow **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 **Foreign Body Airway Obstruction-Treatment Protocol** and/or **Airway Management-Procedure Protocol**.
 - b. Respiratory Failure or Respiratory Arrest, refer to **Pediatric Crashing Patient/Impending Arrest-Treatment Protocol**.
 - c. Consider anaphylaxis. Refer to **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 **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 **Medication Administration-Medication Protocol**.

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

-  3. Consider CPAP if appropriate size available. Follow **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.

Michigan
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PEDIATRIC RESPIRATORY DISTRESS

Initial Date: 10/25/2017
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- 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 $\leq$ 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.

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3. If foreign body is suspected and unable to be removed, contact Medical Control prior to administration of nebulized **racpinephrine/epinephrine**. See **Foreign Body Airway Obstruction-Treatment Protocol**.



4. Consider humidified oxygen.

5. If patient presents with stridor at rest without suspected airway obstruction, administer nebulized **racpinephrine/epinephrine** per MCA selection (Medical Control contact not required):

MCA Selection

☐ **Racpinephrine** 2.25% inhalation solution via nebulizer

Administer by placing 0.5 mL of **Racpinephrine** 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 **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 **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 **Opioid Overdose Treatment and Prevention-Treatment Protocol**.



4. Monitor EKG and refer to **Pediatric Crashing Patient/Impending Arrest-Treatment Protocol** or appropriate cardiac protocol as required.

Medication Protocols

Albuterol, Epinephrine, Methylprednisolone, Prednisone, Racpinephrine