Pediatric Respiratory Arrest/Respiratory Failure

History
- Sudden onset of shortness of breath/coughing
- Past medical history
- Sudden loss of speech
- Syncope
- COPD/Asthma
- CHF
- Cardiac disease
- Lung disease

Signs and Symptoms
- Sudden onset of coughing, wheezing or gagging
- Stridor
- Inability to talk in complete sentences
- Panic
- Pointing to throat
- Syncope
- Cyanosis

Differential
- Foreign body aspiration
- Seizure
- Epiglottitis
- Syncope
- Hypoxia
- Asthma/COPD
- CHF exacerbation
- Anaphylaxis
- Massive pulmonary embolus

Is airway/breathing adequate?

Yes → If SpO₂ ≥ 92%
Routine Medical Care

No

Airway patent?

Yes

Basic airway maneuvers
- Open airway with chin lift/jaw thrust
- Nasal or oral airway
- BVM

SpO₂ monitoring
Supplemental oxygen to maintain SpO₂ ≥ 92%
Spinal motion restriction if indicated

No

Airway Obstruction/Choking

Complete obstruction?

Yes

BVM with supplemental oxygen to maintain SpO₂ ≥ 92%
Continuous EtCO₂ ≥ monitoring

No

BVM effective?

Yes

Continue BVM

No

Reassess and adjust airway if necessary

For cause known, exit to appropriate protocol

Notify receiving facility. Consider Base Hospital for medical direction
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For patients requiring positive-pressure ventilation and/or hypoxia despite 100% oxygen

**Pearls**

- Effective use of a BVM is best achieved with two (2) providers.
- Continuous capnometry (EtCO\(_2\)) is **mandatory** with BVM. Document results.
- For the purposes of this protocol, a secure airway is achieved when the patient is receiving appropriate oxygenation and ventilation.
- An appropriate ventilatory rate is one that maintains an EtCO\(_2\) of 35 to 45.
- The airway should be reassessed with each patient move. Document findings and EtCO\(_2\) readings for each.
- Maintain spinal motion restriction for patients with suspected spinal injury.
- In deteriorating patients with head trauma, may adjust ventilation rate to maintain an EtCO\(_2\) of 30-35.