Respiratory Arrest/Respiratory Failure
For patients requiring positive-pressure ventilation and/or hypoxia despite 100% oxygen.

**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

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The maximum allowed attempts for an advanced airway placement is three (3) per patient.

If attempts fail, reassess and approach with a different technique.

Use King airway only when unable to intubate or ventilate the patient with BVM.

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**Is airway/breathing adequate?**

- Yes: If \( \text{SpO}_2 \geq 92\% \) **Exit to Routine Medical Care**
- No

**Airway patent?**

- Yes
  - Basic airway maneuvers
    - Open airway with chin lift/jaw thrust
    - Nasal or oral airway
    - BVM
  - \( \text{SpO}_2 \) monitoring
  - Supplemental oxygen to maintain \( \text{SpO}_2 \geq 92\% \)
  - Spinal motion restriction *if indicated*

- No

**Complete obstruction?**

- Yes
  - BVM with supplemental oxygen to maintain \( \text{SpO}_2 \geq 92\% \)
  - Continuous \( \text{EtCO}_2 \) monitoring

- No

**BVM effective?**

- Yes
  - Continue BVM

- No
  - Reassess and adjust airway if necessary
    - Advanced airway with video laryngoscopy
    - Advanced airway with direct laryngoscopy

**For cause known, exit to appropriate protocol**

- Notify receiving facility.
  - Consider Base Hospital for medical direction
Pearls

- Effective use of a BVM is best achieved with two (2) providers. Use adult BVM until cardiac arrest.
- Continuous capnometry (EtCO\(_2\)) is mandatory with all intubations and BVM. Document results.
- If an effective airway is being maintained with a BVM and a basic airway adjunct with continuous pulse oximetry values of ≥ 90% or values expected based on pathophysiologic condition with otherwise reassuring vital sign (e.g., pulse oximetry of 85% with otherwise normal vital signs in a post-drowning patient), it is acceptable to continue with basic airway measures rather than placing an advanced airway.
- For the purposes of this treatment protocol (TP), a secure airway is achieved when the patient is receiving appropriate oxygenation and ventilation.
- An intubation attempt is defined as passing the laryngoscope blade or advanced airway past the teeth with the intent to intubate.
- An appropriate ventilatory rate is one that maintains an EtCO\(_2\) of 35 to 55.
- 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, increase ventilation rate to maintain an EtCO\(_2\) of 30-35.
- It is important to secure the advanced airway well and consider c-collar use (in the absence of trauma) to better maintain advanced airway placement. Manual stabilization of advanced airway should be used during all patient moves/transfers.