Contra Costa County Emergency Medical Services

Pediatic Airway

**Basic maneuvers first**
- Open airway chin lift/jaw thrust
- Nasal or oral airway
- Bag-valve mask (BVM)

Spinal motion restriction *if indicated*

**Airway foreign body obstruction procedure**

Complete obstruction?
- Yes
  - **Abdominal thrusts (conscious)**
  - **Chest compression (unconscious)**
- No
  - **Direct laryngoscopy**

**Transport to closest receiving facility**

The maximum allowed attempts for an advanced airway placement is two (2).
- If an attempt fails, reassess and approach with a different technique.

**Assess respiratory rate, effort, oxygenation**
- Is airway/breathing adequate?
- Yes
- No

**Spinal motion restriction if indicated**

**Airway patent?**
- Yes
- No

**Breathing/oxygenation support required?**
- Yes
- No

**Monitor/reassess supplemental oxygen if indicated**

**Exit to appropriate TG**

**Supplement oxygen via BVM**

**Monitor continuous EtCO₂**

**BVM effective?**
- Yes
- No

**Supplement oxygen**
- Goal oxygen saturation ≥ 94%
- Exit to appropriate TG

**Exit to appropriate TG**

**Note:** For patients > 40kg, intubate with ETT as appropriate or place i-Gel, refer to weight-based guide.

**Consider sedation if i-Gel or ETT in place**

**Midazolam IV/IM/IO**

**Notify receiving facility. Contact Base Hospital for medical direction, as needed.**
**Pediatric Airway**

**Pearls**

- Placement of an advanced airway is not a priority during the first five minutes of resuscitation unless ventilation is unable to be maintained with basic maneuvers.
- Endotracheal intubation is only approved for patients over 40kg.
- Capnometry is mandatory with all methods of airway management. Document results.
- Continuous capnometry (EtCO₂) is mandatory for the monitoring of all respiratory patients.
- 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 expected to continue with basic airway measures.
- For the purposes of this TG, a secure airway is achieved when the patient is receiving appropriate oxygenation and ventilation.
- An intubation attempt is defined as inserting the laryngoscope blade with the intent to intubate or inserting advanced airway past the teeth.
- An appropriate ventilatory rate is one that maintains an EtCO₂ of 35 or greater. Avoid hyperventilation.
- Patients with perfusing pulses should be managed with a BLS airway unless unable to successfully ventilate.
- Contraindications for i_Gel:
  - Presence of gag reflex
  - Caustic ingestion
  - Laryngectomy with stoma (alternatively place ET in stoma)
  - Known esophageal disease
- Effective use of a BVM requires two (2) people.
- Airway is a more important intervention in pediatric arrests. This should be accomplished quickly with a BVM and appropriately sized mask. Patient survival is often dependent on proper ventilation and oxygenation.
- Maintain spinal immobilization for patients with suspected spinal injury.
- Hyperventilation in deteriorating head trauma should only be done to maintain an EtCO₂ of 30-35.
- It is important to secure the advanced airway well and consider c-collar (in the absence of trauma) to better maintain advanced airway placement. Manual stabilization of advanced airway should be used during all patient moves/transfers.