**Airway Management & Intubation Guidelines**

**Designation of Condition:** All patients who are apneic or severely hypoxic and/or bradypneic should be managed with basic airway maneuvers and BVM initially. Those patients 13 years and older who are unresponsive to oxygen and basic airway maneuvers (jaw thrust, foreign body removal, BVM) should be managed with more advanced maneuvers, including an [Exraglottic Airway Device](#) or endotracheal tube placement.

Patients 12 and younger are ONLY to be managed by basic airway maneuvers to include, if needed, [Exraglottic Airway Device](#) placement.

**BVM:** Pay close attention to technique. Remember to bring the jaw and mouth to mask rather than pushing the mask down upon the patients’ mouth and nose—which may occlude the lower airway. Avoid generating high intra-thoracic pressures; ventilate slowly. If possible have an assistant provide cricoid pressure (Sellick’s maneuver) during ventilations to prevent air from entering the stomach. When utilizing Sellick’s maneuver, avoid excessive pressure, so as not to obstruct the trachea.

**NOTE:** During CPR ventilation rates should not exceed 8-10 breaths per minute through advanced airway device (one breath q 6 seconds).

**Exraglottic Airway Device Placement:** In certain situations, an [Exraglottic Airway Device](#) (if available) may be the preferred initial method of airway control over endotracheal intubation in patients 13 years of age and older and/or greater than 40kgs, or used as a salvage device if intubation attempts are unsuccessful. If employed, follow procedures as outlined for Exraglottic Airway Device.

**Trauma Airway Management:**

- Immobilize the cervical spine (axial immobilization). An airway may be maintained by utilizing the trauma jaw thrust or trauma chin lift. An oral or nasal airway may be utilized. Suction as necessary.

- If patient is not breathing adequately or is in respiratory arrest and BVM ineffective, the neck should be stabilized with axial immobilization (in-line) and the airway secured with an [Exraglottic Airway Device](#) (see [Laryngeal Mask Airway Procedure](#)) without extension or flexion of the head.
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**Oral Intubation (Patients 13 and older ONLY):** Before intubation, the patient should be pre-oxygenated with a BVM with high flow oxygen. Cricothyroid pressure (Sellick’s maneuver) is no longer routinely recommended but may be applied to minimize gastric distention during BVM. Release pressure if patient is actively vomiting. During intubation, the use of external laryngeal manipulation is encouraged. In most situations, providers should make no more than 2 intubation attempts before moving to an alternate advanced airway.

- Insert Adult Bougie (if available)
- Usual tube size: 7.0-8.0 mm for oral intubation of adults and 6.0-7.0 mm for nasal intubation of adults

**Confirming tube placement:**

- **ALL ENDOTRACHEAL (NASAL OR ORAL) TUBES WILL BE CONFIRMED BY WAVEFORM CAPNOGRAPHY** (If no capnography is available, DO NOT perform oral intubation)
- Always auscultate both sides of chest and stomach
- Frequent reassessment of ETT during transport and after any move/transfer to confirm placement is mandatory (Waveform capture with printed strip at time of intubation and before any patient transfer/movement)

**Nasal Intubation:** It should be employed only when absolutely necessary, in patients with spontaneous respirations. It is contraindicated in combative patients, in the context of severe facial trauma, and in the presence of a known coagulopathy. It is strongly discouraged in cases of increased intracranial pressure, unless airway control is otherwise unobtainable.

- Nasal intubation should be preceded by nasal phenylephrine 1-2 sprays and xylocaine® jelly 2% if time permits
- Guidable (Endotrol) tube is preferred. In most patients, 6.0-7.0 mm tube size should be chosen
- Choose most patent nostril. If no difference, choose right nare
- The tube should be turned so that the bevel is away from the septum. Once the tip of the tube is past the inferior turbinate, it should be directed caudal to follow the gentle down sloping floor of the nose. Once the nasopharynx is entered, restore tube to normal (sagittal) position
- Advance tube gently but firmly through cords during inspiration. Consider BAMM device to assist with placement.

**Trauma Ariway Management:**

- If patient is not breathing adequately or is in respiratory arrest and BVM ineffective, the neck should be stabilized with axial immobilization (in-line) and the trachea orally intubated without extension or flexion of the head.

- If the attempt at an axial immobilization oral intubation is not successful, consider: Extraglottic Airway Device or Surgical Cricothyrotomy.

- In the unresponsive breathing patient, consider nasotracheal intubation, unless contraindicated

**Post-Intubation Sedation** to maintain ETT patency and maximize ventilation compliance:

- Should this need arise, use the following sedation dosing guidelines:
  - Administer sedation with Diazepam 1-5mg IV/IO/IM or Midazolam 1-5 mg IV/IO/IM/IN both q 3-5 minutes to a max of 10mg
  - Closely monitor blood pressure SaO2, ETCO2