

Medical Procedure**Date: 02/01/2021****Bag Valve Mask Management****Policy #7010****I. Purpose:**

- A. To establish guidelines, and the standard procedure for bag valve mask use and management in the pre-hospital setting.

II. Authority:

- A. Health and Safety Code, Section 1797.220, 1798. Title 22, Section 100170.

III. Policy:

- A. The use of bag valve mask (BVM) requires annual maintenance and testing completion.
- B. This policy is to be used when identifying need for breathing or ventilation support, with a current or impending issue.
- C. Documentation should include:
 1. Indication for use of BVM
 2. Complications
 3. Response to treatment

IV. Procedure

- A. Oropharyngeal Airway (OPA) or Nasopharyngeal Airway (NPA) can be used as a first line BLS method to secure a patient's airway. See policy #7000 Airway Management for OPA and NPA insertion recommendations.
- B. Continuous Capnography - Continuous capnography will be used for all airway, respiratory and ventilatory procedures in Imperial County. The target range will be between 35-45 mmHg, in patients with a pulse, while providing adequate ventilation.
- C. Bag-Valve Mask: A bag valve mask should be sized to the patient, able to achieve a seal over the patient's mouth and nose. The mask should not extend over the eyes of the patient.
- D. Opening the airway:
 1. Trauma suspected – jaw thrust should be employed to open the airway
 2. No trauma suspected or provided in the patient or dispatch history – head tilt, chin lift
- E. Ideally, two providers will provide ventilations by BVM.
 1. Provider one will maintain a two handed E-C seal over the patient's mouth and nose
 2. Provider two will provide respirations, using a one-handed, three-finger technique

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on the bag (for adults and pediatrics)

3. If only one provider is available for BVM, a one-handed E-C seal should be employed for breaths, with a one-handed, three-finger technique for the bag compression
- A. Bag Valve Mask (BVM) Ventilations will be delivered in the range of:
1. For **rescue breathing in adults** - 10-12 respirations per minute (every 5 to 6 seconds) achieving chest rise, using up to 500 ml (attached to oxygen), regardless of established airway adjunct.
 2. For **rescue breathing in pediatrics** – 20-30 respirations per minute (every 2 to 3 seconds) achieving chest rise, attached to oxygen, regardless of established airway adjunct.
 3. Do not hyperventilate
 4. For cardiac arrest follow established ratios:
 - a. Adult without an advanced airway: 30:2 (30 compressions to 2 breaths)
 - b. Pediatric without an advanced airway: 30:2 for single rescuer
 - a. 15:2 for two rescuers
 - c. Adult with an advanced airway: Continuous compressions between 100-120 bpm and 1 breath every 6 seconds (10 breaths per minute)
- F. All BLS airways will be monitored for patency by capnography, if equipped (ALS providers).
- G. If an infectious source for respiratory distress is suspected, use an inline viral filter for the BVM.
- V. **Certification Requirements:**
- A. Maintain knowledge of the indications, contraindications, technique, and possible complications of the procedure.
 - B. Assessment of this knowledge may be accomplished via quality assurance mechanisms, classroom demonstrations, skills stations, or other mechanisms as deemed appropriate by the Imperial EMS System.
 - C. Assessment should include direct observation at least once per certification cycle.

APPROVED:

Medical Procedure

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Signature on File

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