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 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 <u>not</u> 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. <u>Certification Requirements:</u>

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:

<u>Signature on File</u>
Katherine Staats, M.D.
EMS Medical Director