

# BVM Ventilation

## Procedure

Douglas County KS EMS System

November 2022

**Approved Provider:** EMR, EMT, AEMT, Paramedic

**Reference Protocols:** [Breathing Difficulty](#), [CAPE](#), [CHF](#)

### **Indications**

- Patients who need assistance with ventilations
  - Hypoxia without response to supplemental o<sub>2</sub>
  - Hypercapnia such as COPD or resp acidosis
  - Apnea
  - AMS with inability to protect airway
- RR < 8/min or > 40/min
- Any patient exhibiting signs and symptoms of respiratory distress in whom other measures have failed

### **Contraindications**

- None

### **Procedure (Fig. 1)**

- Select and assemble equipment
- Attach to oxygen supply set at 25lpm
- Ensure full inflation of reservoir bag
- Apply and maintain face to mask seal
- Pointed end of mask over bridge of patient's nose
- Base of mask should rest between patient's lower lip and chin
- Use E-C technique (see Fig. 1)
- Place thumb and index finger form a C around the mask
- Place 2 or 3 fingers under the mandible and bring the chin into the mask to obtain a seal
- Ventilations should be slow and rhythmic with sufficient volume to observe chest rise
- Rate should be 1 breath every 6 seconds (ETCO<sub>2</sub> maintained 35-45)

### **Airway Stack** *(Remove ResQPod when not in cardiac arrest or after ROSC)*

- Airway Device (ET, Igel, Mask)
- ResQPod
- ETCO<sub>2</sub> filter line set
- Accuvent sensor
- Viral filter
- BVM

### **Precautions**

- Rapid forceful ventilations may force air into the esophagus and induce vomiting
- Over inflation of the lungs may result in lung trauma such as pneumothorax

### **Documentation**

- Indications for procedure
- Response to procedure

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### Notes

- As soon as possible an appropriate airway adjunct (OPA or NPA) should be placed
- When possible, Two-Person BVM should be used

***Fig. 1***



1-hand technique for BVM



2-hand technique for BVM