



EMS System for Metropolitan Oklahoma City and Tulsa 2024 Medical Control Board Treatment Protocols



Approved 11/08/23, Effective 1/15/24, replaces all prior versions

2D - BAG VALVE MASK (BVM) MANAGEMENT ADULT & PEDIATRIC

EMERGENCY MEDICAL RESPONDER
EMT
EMT-INTERMEDIATE 85
ADVANCED EMT
PARAMEDIC

Indications:

1. Respiratory arrest.
2. Inadequate oxygenation/ventilation not improved by non-positive pressure methods or immediately obvious that will not improve by non-positive pressure methods.

Contraindications:

1. Acute dyspnea of lesser severity able to be managed without BVM management
2. Active or suspected impending emesis

Technique:

Utilize the following mnemonic to guide correct BVM management:

- C** Hold mask by **c-clamp** (now referred to as EC-clamp) formed by one, preferably both hands
- O** Use an **oropharyngeal and/or nasopharyngeal airway(s)**
- P** **Place in a sniffing position** to open the airway (**unless spinal injury suspected)
- E** **Elevate the jaw** to additionally open the airway
- S** **Seal the mask** over the mouth and nose without excessive downward force

- S** Use **Sellick maneuver** if indicated (**BURP** = backward, upward, rightward pressure) on the cricoid cartilage to partially occlude the esophagus in the unconscious patient. Do not utilize if ventilations are effective and without onset of gastric distention. Be ready for emesis when releasing Sellick maneuver.
- O** Use 100% **oxygen** concentration (FiO₂ = 1.0) to start and titrate down as indicated
- S** **Squeeze the bag slowly and smoothly** (over 1 second ventilation periods) delivering adequate ventilation volume (approx. 6-8 mL of air/kg if respiratory/cardiac arrest or shock; 8-10 mL of air/kg up to 1000 mL if non-shock hemodynamics) and provide adequate exhalation time.



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PROTOCOL 2D: Bag Valve Mask (BVM) Management – Adult & Pediatric, cont.

BVM technique that promotes optimal oxygenation/ventilation takes two, sometimes three EMS professionals to achieve.

Utilization of the above technique will promote improved oxygenation/ventilation, while reducing potential for gastric insufflation, vomiting, and aspiration. For gastric insufflation in adults compromising BVM ventilations, utilize a nasogastric/orogastric tube per Protocol 9L – Nasogastric/Orogastric Tube.

Utilize the flowchart below to guide BVM management ventilation rates. Use of an adjustable rate metronome can promote delivery at the indicated rate(s).

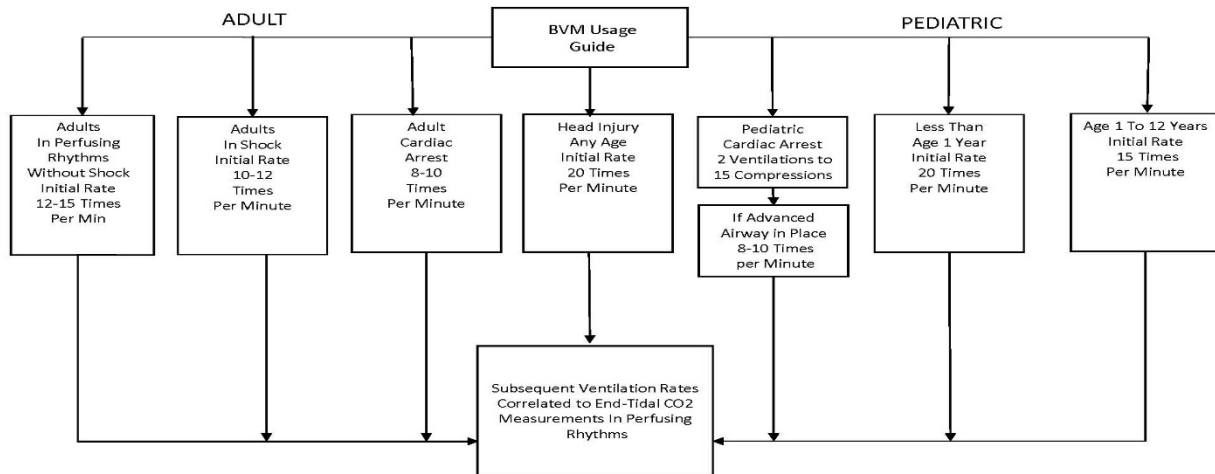


Figure 1

One handed EC-clamp. (Figure 1)

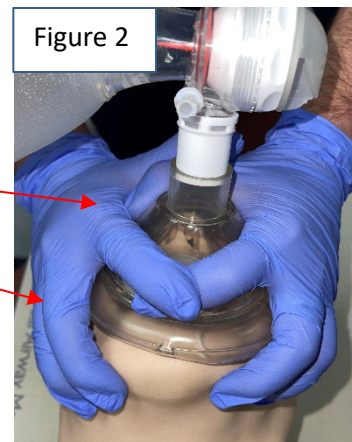


Figure 2

c-clamp

e-clamp

Two handed EC-clamp. (Figure 2)