Bag-Valve Mask (BVM):

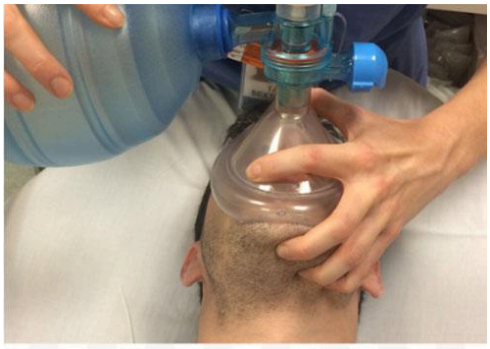
- Successful ventilation with a BVM requires a good seal between the mask and the patient's face and maintaining an open airway.
- If an adequate seal cannot be obtained with the BVM, attempt oxygenation (and ventilation if possible) by other methods.

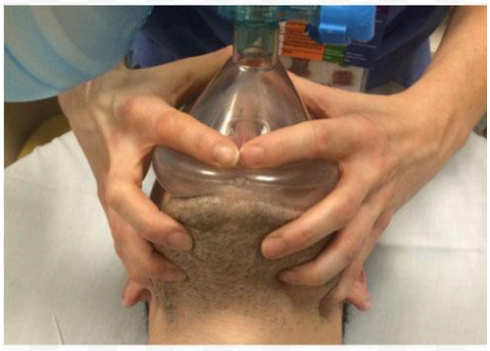
To properly place a BVM:

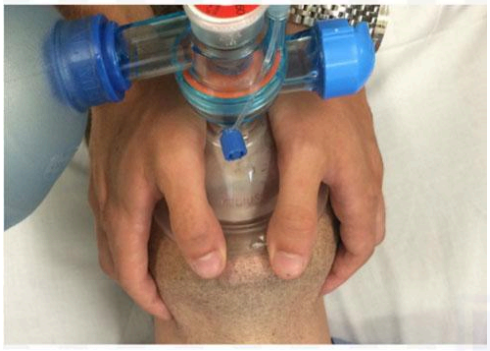
- Choose appropriate size for the patient.
- Place the apex of the mask on the bridge of the nose (between the eyebrows).
- Settle the base of the mask between the lower lip and the prominence of the chin.

<u>Procedure</u> - Ventilation technique:

- Hold the mask firmly in position by placing the heel of the hand on top of the mask, extending the fingers and thumb forward forming a “C”, and grasping the lower jaw with the middle two or three fingers.
- Squeeze the bag to ventilate.
- If necessary, a second EMT may be needed to secure seal and assist with bagging.
- Each ventilation should take one second and achieve modest chest rise.

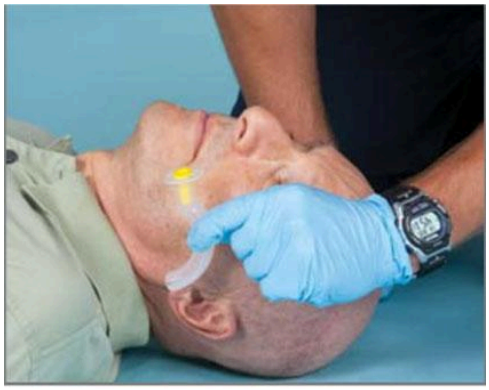


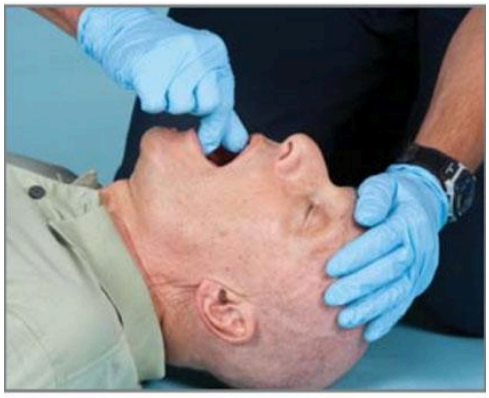


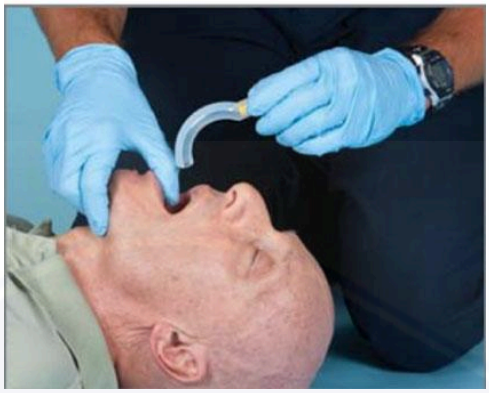


Oropharyngeal Airway (OPA)

- An OPA is placed in the patient's oropharynx, lifting the tongue away from the back of the throat preventing it from occluding the airway.
- The OP airway is used <u>only on unconscious patients</u>, and generally those without respirations.
    - Do not use an OPA if a patient gags when inserted. A a gag reflex may cause retching, vomiting, or spasm of the vocal cords.
- An OPA is not necessary if ventilation via BVM is easily accomplished.
- *Sizing (top right)*: Choose correct size by measuring from the corner of the mouth to the ear lobe <u>or</u> from the chin to the angle of the jaw.







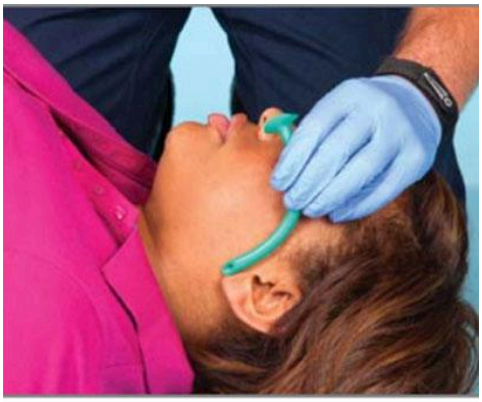
<u>*Procedure*</u> *- OPA Placement*:

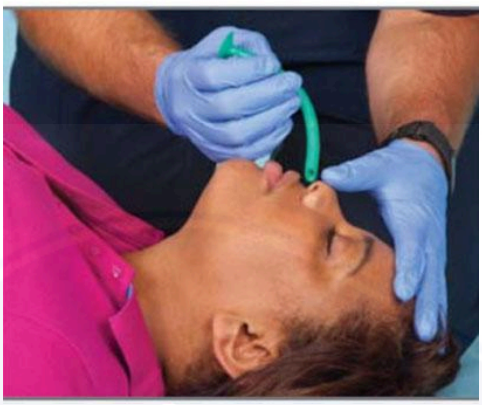
1. Lift/open the lower jaw.
2. Insert the airway along the roof of the mouth (tip sideways).
3. Rotate down when you are halfway in the mouth or approaching the curve on the tongue, and slide the OPA fully into the back of the throat.
    - Infant/child: consider using a tongue depressor if available.

A-PA1 AIRWAY ADJUNCTS		First Responder EMT AEMT Paramedic

Nasopharyngeal Airway (NPA)

- An NPA is placed in the patient's nasopharynx, allowing bypass of airway obstruction by the tongue.
- The NPA <u>can</u> be used on *semi*-conscious patients with an intact gag reflex. They should be avoided in conscious patients as they are very uncomfortable.
- An NPA should be avoiding in patients with suspected basilar skull fracture.
- *Sizing (top right)*: Choose correct size by measuring from tip of the nose to the earlobe. Ensure the diameter is not larger than the nostril.





<u>Procedure</u> - NPA Placement:

1. Lubricate the NPA prior to insertion.
2. Insert with the bevel towards the septum and gently advance the NPA straight in along the floor of the nose (*not upwards*).
3. If resistance is felt, do not force. Try the other nostril if needed.

Suctioning

A-PA1 AIRWAY ADJUNCTS		First Responder EMT AEMT Paramedic

- Indication: Obstruction of the airway by secretions, blood, or any other substance in a patient who cannot relieve the obstruction themselves, or are currently being assisted by an airway adjunct or advanced airway device (i.e. ETT, tracheostomy tube).

Procedure (Endotracheal Suctioning):

1. Preoxygenate the patient.
2. Setup suction device and ensure it is in proper working order
    - Attach catheter to suction device, keeping sterile plastic covering over catheter.
3. *Size*: Using the proximal opening of the airway (mouth, tube opening, stoma, etc.) and the suprasternal notch as endpoints, measure the depth desired for the catheter.
    - Judgment should be used regarding the depth with crico/tracheostomy tubes.
4. If applicable, remove ventilation devices from the airway.
5. With the thumb port of the catheter uncovered (suction off), insert the catheter through the airway device.
6. Once the desired depth (measured above) has been reached, occlude the thumb port and remove the suction catheter slowly.
7. Small volume (< 10 ml) of normal saline lavage may used as needed.
8. Re-attach ventilation device (e.g., bag-valve mask) and ventilate the patient.
9. Document time and result in the patient care report (PCR).

Notes:

- The Yankauer suction tip is preferred for most oropharyngeal suctioning (i.e. not through ETT or tracheostomy).
- If the catheter gets plugged repeatedly, remove the tip and use larger bore tubing.
- Oxygenate the patient well before and after suctioning.
- Suction for no more than 15 seconds at a time. In rare cases, copious vomiting that threatens the airway may require a longer period of suctioning.

QI Review Parameters:

1.