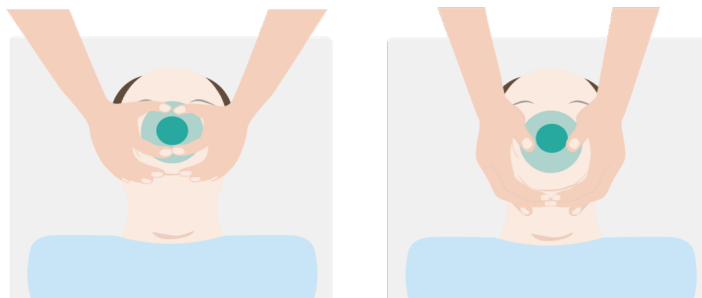


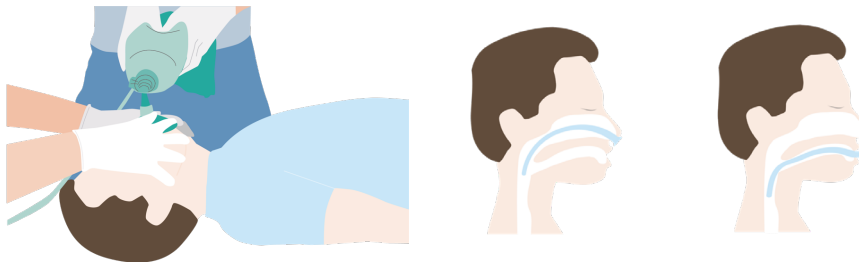
Airway and ventilation

PERFORMING ASSISTED VENTILATION

If inadequate ventilation is present, it can be assisted with mechanical ventilation or a bag-valve-mask setup. Noninvasive positive pressure ventilation requires the maintenance of a mask seal. This can be best accomplished with a two-handed technique.



This should incorporate a jaw thrust or chin lift to maintain airway patency, and oral or nasal airways may facilitate this as well.



Some factors that can contribute to difficulty maintaining a mask seal can be remembered with the mnemonic B-O-N-E-S

Beard
Obesity
No teeth
Elderly
Snorling

Rescue ventilation should be performed with a rate and tidal volume appropriate for the patient's size and condition. In general, the volume of a bag-valve-mask is much larger than the desired tidal volume, so the bag should not be compressed completely. Most bag-valve-mask devices have a volume of about 1500 mL, while many patients require a tidal volume closer to 500 mL. Excessive tidal volume or pressure are likely to result in gastric insufflation, increasing the risk for aspiration.

There are conflicting recommendations about how to ventilate a patient during cardiac arrest. If an advanced airway is in place (i.e. endotracheal intubation), then compressions should not be interrupted for ventilation, and compressions should be performed at a rate of about 6–10 breaths per minute, depending on the clinical scenario. If a bag-valve-mask is being used, some sources recommend uninterrupted compressions with the intent of optimizing circulation. However, other sources suggest that a pause for ventilation with a 30:2 compression:ventilation ratio should be performed.