



# CHARLOTTESVILLE-ALBEMARLE RESCUE SQUAD

## Clinical Review and Training

### Laryngeal Mask Airway Guideline

#### Indication

**Skill Level: B, E, I, P**

The Laryngeal Mask Airway (LMA) is an airway device designed for emergency or difficult intubation in the apneic or unresponsive patient without a gag reflex.

#### Contraindications

- Intact gag reflex
- Esophageal disease
- Caustic substance ingestion

#### WARNING

*This airway may not prevent regurgitation or aspiration of stomach contents.*

#### Preparation

1. Auscultate lung sounds and assess for chest rise and fall.

#### Procedure (Insertion)

1. Prepare, position, and oxygenate patient with 100% oxygen.
2. Choose LMA size per manufacturer's recommendations.
  - a. Size 1: 0-5 kg
  - b. Size 1.5: 5-10 kg
  - c. Size 2: 10-20 kg
3. Check the cuffs for proper inflation and deflation.
4. Apply a water-based lubricant to the back of the mask; avoid placing lubricant in or near the ventilation opening.
5. Position the head into "sniffing position" unless contraindicated by c-spine precautions or patient position.
6. Hold the LMA at the connector with dominant hand. With non-dominant hand, hold mouth open and apply chin lift.
7. Place the tip of the LMA against the inner surface of the patient's upper teeth.
8. Without excessive force, advance tube against the patient's hard palate to flatten it out
9. Using your index finger, keep pressing upwards as you advance the mask into the pharynx and then guide the mask downward into position. Make sure that the tip remains flattened and avoids the tongue.
10. Inflate the cuff per the manufacturer's recommendations until a seal is obtained.
11. Connect the LMA to an Ambu bag and ventilate.
12. Assess breath sounds and look for chest rise and fall.
13. **Apply colorimeter or end-tidal carbon dioxide monitor and pulse oximetry.**
14. If necessary adjust cuff inflation pressure to maintain seal.
15. Ventilate the patient with the BVM supplied with 100% oxygen.
  - a. **During CPR:** Deliver 8 to 10 breaths per minute. Deliver each breath over about 1 second while chest compressions are delivered at a rate of 100 per minute. Do not attempt to synchronize the compressions with ventilations.
  - b. **Patients with a perfusing rhythm:** Deliver approximately 10-12 breaths per minute (1 breath every 5-6 seconds). Deliver each



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breath over 1 second.

16. Secure the tube with a commercial device while providing ventilations.
17. Document procedure on PPCR and complete and submit CARS Airway Form for QA review.

#### Procedure (Removal)

1. Once it is in the correct position, the LMA airway is well tolerated until the return of protective reflexes.
2. Ensure suctioning equipment is ready.
3. Deflate the cuff completely. Turn the patient onto side.
4. Remove the LMA airway carefully, suctioning as needed.
5. Insert an oropharyngeal or nasopharyngeal airway as needed.
6. Continue ventilations with a BVM and oxygen at 10- 15 LPM as needed.

**CARS Training Video** <https://www.youtube.com/watch?v=tWwC06FtWEI>

