

## PR23: Awake Intubation

### Applicable To

- ACP and higher

### Introduction

Awake intubation is a tracheal intubation technique that uses topical anesthesia to blunt airway reflexes, coupled with small doses of intravenous anesthetic for sedation. Patients undergoing an awake intubation are not necessarily fully "awake"; the technique refers to the limited use of sedation or induction to achieve optimal intubating conditions.

### Indications

Paramedics should consider the use of awake intubation as a primary intubation technique when doubt exists as to the ability to successfully intubate a patient while protecting the patient's intrinsic respiratory drive and gas exchange physiology. These scenarios can be broken into two broad categories:

1. Patients with predicted difficult airway anatomy. These are based either on normal variations, or pathological changes in airway structures.
2. Predicted difficult physiology. Hemodynamic instability (or an inability to obtain hemodynamic stability) may not allow for the use of induction agents at full dose. Patients may also have a physiological need for high minute ventilation, and may not tolerate even brief interruptions to their respiratory activity.

### Contraindications

Awake intubation is relatively contraindicated in patients who require emergent airway management, as it can be a time-consuming procedure. Patients who are actively or passively uncooperative may not benefit from an awake approach, and where possible should be managed using other techniques.

### Procedure

Awake intubation is a relatively complex procedure. This procedure summarizes the steps required for awake intubation, but paramedics should not rely solely on this information for education and training in this technique.

1. Provide appropriate supplemental oxygen during application of topical anesthesia. Ensure appropriate monitoring is attached to the patient, and that all vascular access devices are flowing properly.
2. Explain the rationale for the procedure to the patient. Provide information on what can be expected during the procedure; patient cooperation during the topicalization phase of the procedure results in improved intubating conditions.
3. Have the patient stick their tongue out, and begin applying topical anesthesia to airway structures. The soft palate, posterior pharynx and tonsillar pillars should be anesthetized using a "spray as you go" approach. Consider the judicious use of sedation during this phase, respecting physiological limitations.
  1. When using direct laryngoscopy, additional local anesthetic can be applied to distal structures as they are exposed by the blade.
4. Using precision laryngoscopy techniques, slowly advance the blade of the laryngoscope until it is in position.
5. Intubate the patient.
6. Confirm tube placement using traditional techniques.
7. Administer additional sedation as required for patient comfort based upon clinical condition and hemodynamic status.

### Resources

[Awake airway management and flexible endoscopic intubation](#), by J. Adam Law, Ian Morris, and George Kovacs.

## References

Morris IR, Law JA. How to do awake tracheal intubations -- oral and nasal. In: Kovacs G, Law JA, editors. *Airway management in emergencies*. 2nd ed. Shelton: People's Medical Publishing House USA; c2011. p. 181-208.

