Airway, Drug Assisted
(*OPTIONAL*)

Indications for Drug Assisted Airway
Failure to protect the airway
and/or
Unable to oxygenate
and/or
Unable to ventilate
and/or
Impending airway compromise

Capnography Monitoring
- **End-tidal (EtCO2) monitoring is mandatory following placement of an endotracheal tube.**
- **EtCO2 monitoring is mandatory following placement of a BIAD once available on scene.**

Protocols AR 1, 2, and 3 should be utilized together (even if agency is not using Drug Assisted Airway Protocol) as they contain useful information for airway management.

	Preoxygenate 100% O2
A	IV / IO Procedure (preferably 2 sites)
P	Assemble Airway Equipment Suction equipment Alternative Airway Device

Hypoxic Or Hypotensive Or Dangerously Combative?

YES →

P	**Airway Management** **Ketamine 2 mg/kg IV / IO** **Airway Management + Dangerously Combative** **Ketamine 300 – 400 mg IM** **Ketamine 2 mg/kg IV / IO**
	Correct Hypoxia and / or Hypotension
	Adult Airway Adult Failed Airway Protocol(s) AR 1, 2 ***as indicated***
	Hypotension / Shock Protocol AM 5 ***as indicated***

NO ↓

P	**Etomidate 0.3 mg/kg IV / IO** **Or** **Ketamine 2 mg/kg IV / IO** **May repeat x 1**
P	**Succinylcholine 2 mg/kg IV / IO** ***Or*** **Rocuronium 1 mg/kg IV / IO** **(if Succinylcholine contraindicated)** **May repeat x 1**
	Intubate trachea
	Placement Verified **Continuous Capnography**

Hypoxia corrected
Hypotension corrected
Dangerously Combative condition corrected
Patient still requires intubation?

YES → (back to Etomidate / Ketamine)

NO ↓

	Consider Restraints Physical Procedure
P	Consider Gastric Tube Insertion Procedure

Awakening or Moving after intubation

NO → Exit to Appropriate Protocol(s)

YES ↓

Exit to Post-intubation / BIAD Management Protocol AR 8

Procedure will remove patient's protective airway reflexes and ability to breath.

You must be sure of your ability to intubate before beginning this procedure.

Must have two (2) Paramedics on scene

Red Text
are the key performance indicators used to evaluate protocol compliance.

An Airway Evaluation Form must be completed on every patient who receives Rapid Sequence Intubation.

Airway Respiratory Protocol Section

Airway, Drug Assisted
(*OPTIONAL*)

Protocol not allowed by county Medical Director.

Pearls

- Agencies must maintain a separate Performance Improvement Program specific to Drug Assisted Airway.
- This procedure requires at least 2 Paramedics. See Pearls section of protocols AR 1 and 2.
- For the purposes of this protocol a secure airway is when the patient is receiving appropriate oxygenation and ventilation.
- If an effective airway is being maintained by BVM with continuous pulse oximetry values of ≥ 90%, it is acceptable to continue with basic airway measures.
- Ventilation rate should be 8-10 per minute to maintain a EtCO2 of 35-45. Avoid hyperventilation.
- Hypoxia and/or Hypotension:
  - Places patient at increased risk of cardiac arrest when a sedative and paralytic medication are administered.
  - Resuscitation and correction of hypoxia and/or hypotension are paramount prior to use of these combined agents.
  - Ketamine administration allows time for appropriate resuscitation to while managing the airway.
- This protocol is only for use in patients who are outside a Pediatric Medication/Skill Resuscitation System Product.
  - Ketamine may be used during airway management of patients who FIT within a Pediatric Medication/Skill Resuscitation System Product with a DIRECT ONLINE MEDICAL ORDER, by the system MEDICAL DIRECTOR, ASSISTANT MEDICAL DIRECTOR, or EMS Fellow ONLY.
- KETAMINE:
  - Ketamine may be used with and without a paralytic agent in conjunction with either an OPA, NPA, BIAD or endotracheal tube.
  - Ketamine may be used during the resuscitation of hypoxia or hypotension in conjunction with airway management. Once hypoxia and hypotension are corrected, use of a sedative and paralytic can proceed if indicated.
  - Ketamine may be used in the dangerously combative patient requiring airway management IM. IV / IO should be established as soon as possible.
  - Ketamine may be used for sedation once a BIAD or ETT are established and confirmed.
- Capnography Monitoring (EtCO2):
  - Continuous Waveform or Quantitative Capnography and Pulse Oximetry are required for intubation verification and ongoing patient monitoring (Not validated and may prove impossible in the neonatal population- verification by two (2) other means is recommended in this population.)
  - Capnography verification and monitoring is required for BIAD verification and monitoring once available on scene.
- Intubation attempt defined as laryngoscope blade passing the teeth or endotracheal tube passed into the nostril.
- If First intubation attempt fails, make an adjustment and try again: (Consider change of provider in addition to equipment)
- Paramedics / AEMT should consider using a BIAD if oral-tracheal intubation is unsuccessful.
- Drug Assisted Airway is not recommended in an urban setting (short transport) when able to maintain oxygen saturation ≥ 90 %.