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

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

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

Must have two (2) Paramedics 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 Hypotension Or Dangerously Combative? — YES →

P	**Airway Management** **Ketamine 1.5 - 2 mg/kg IV / IO** **Airway Management + Dangerously Combative** **Ketamine 300 – 400 mg IM** **Ketamine 1.5 - 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 1.5 - 2 mg/kg IV / IO** **May repeat x 1**
	Succinylcholine 1.5 mg / kg IV/ IO ***Or*** **Rocuronium 1 mg kg IV / IO** **(if Succinylcholine contraindicated)** **May repeat x 1**
	Intubate trachea
	Placement Verified **Continuous Capnography**

	Consider Restraints Physical Procedure
P	Consider Gastric Tube Insertion Procedure

Awakening or Moving after intubation — NO →

YES ↓

Exit to Post-intubation / BIAD Management Protocol AR 8

	Notify Destination or Contact Medical Control

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*)

In addition to NCOEMS requirements that 2 paramedics be on scene, McDowell County EMS policy requires a paramedic with DAI privileges to be on scene and at the side of the patient during this procedure. DAI privileges are granted by the EMS System Administrator and EMS Medical Director.

Prior to beginning DAI it is mandatory that rescue airway (King or iGel) and a Bougie be placed on the patient's chest to make it readily available if needed. A backup blade of choice must also be made readily available.

Nasal cannula at 15 lpm must be on the patient during intubation procedure.

Hypotension must be corrected greater than 90 systolic prior to administering paralytics.

EKG with ETCO2 strip must be printing starting with medication administration until ETT is secured.

- **Pearls**
- **Agencies must maintain a separate Performance Improvement Program specific to Drug Assisted Airway.**
- **See Pearls section of protocols AR 1 and 2.**
- **This procedure requires at least 2 Paramedics. Divide the workload – ventilate, suction, cricoid pressure, drugs, intubation.**
- **Patients with hypoxia and/or hypotension are at risk of cardiac arrest when a sedative and paralytic medication are administered. Hypoxia and hypotension require resuscitation and correction prior to use of these combined agents. Ketamine allows time for appropriate resuscitation to occur during airway management.**
- **<u>This protocol is only for use in patients who are longer than the Broselow-Luten Tape.</u>**
- **Ketamine may be used during airway management of patients who FIT on the Broselow-Luten Tape with a DIRECT, ONLINE MEDICAL ORDER, by the system MEDICAL DIRECTOR OR ASSISTANT MEDICAL DIRECTOR ONLY.**
- **<u>KETAMINE:</u>**
  - **Ketamine may be used with and without a paralytic agent in conjunction with either a OP, NP, 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 NOT be used for purposes of sedation only – it must be used only during airway management procedures.**
- **Continuous Waveform Capnography and Pulse Oximetry are required for intubation verification and ongoing patient monitoring, though this is not validated and may prove impossible in the neonatal population (verification by two (2) other means is recommended in this population.)**
- **Before administering any paralytic drug, screen for contraindications with a thorough neurologic exam.**
- **<u>If First intubation attempt fails, make an adjustment and try again: (Consider change of provider in addition to equipment)</u>**
- **Different laryngoscope blade**
- **Different ETT size**
- **Change head positioning**
- **Change cricoid pressure; No longer routinely recommended and may worsen your view.**
- **Align external auditory canal with sternal notch / proper positioning.**
- **Consider applying BURP maneuver (Back [posterior], Up, and to patient's Right)**
- Paramedics / AEMT should consider using a BIAD if oral-tracheal intubation is unsuccessful.
- During intubation attempts use External Laryngeal Manipulation to improve view of glottis.
- Protect the patient from self-extubation when the drugs wear off. Longer acting paralytics may be needed post-intubation.
- Drug Assisted Airway is not recommended in an urban setting (short transport) when able to maintain oxygen saturation ≥ 90 %.
- Consider Naso or orogastric tube placement in all intubated patients to limit aspiration and decompress stomach if needed.
- **DOPE: D**isplaced tracheostomy tube / ETT, **O**bstructed tracheostomy tube / ETT, **P**neumothorax and **E**quipment failure.