

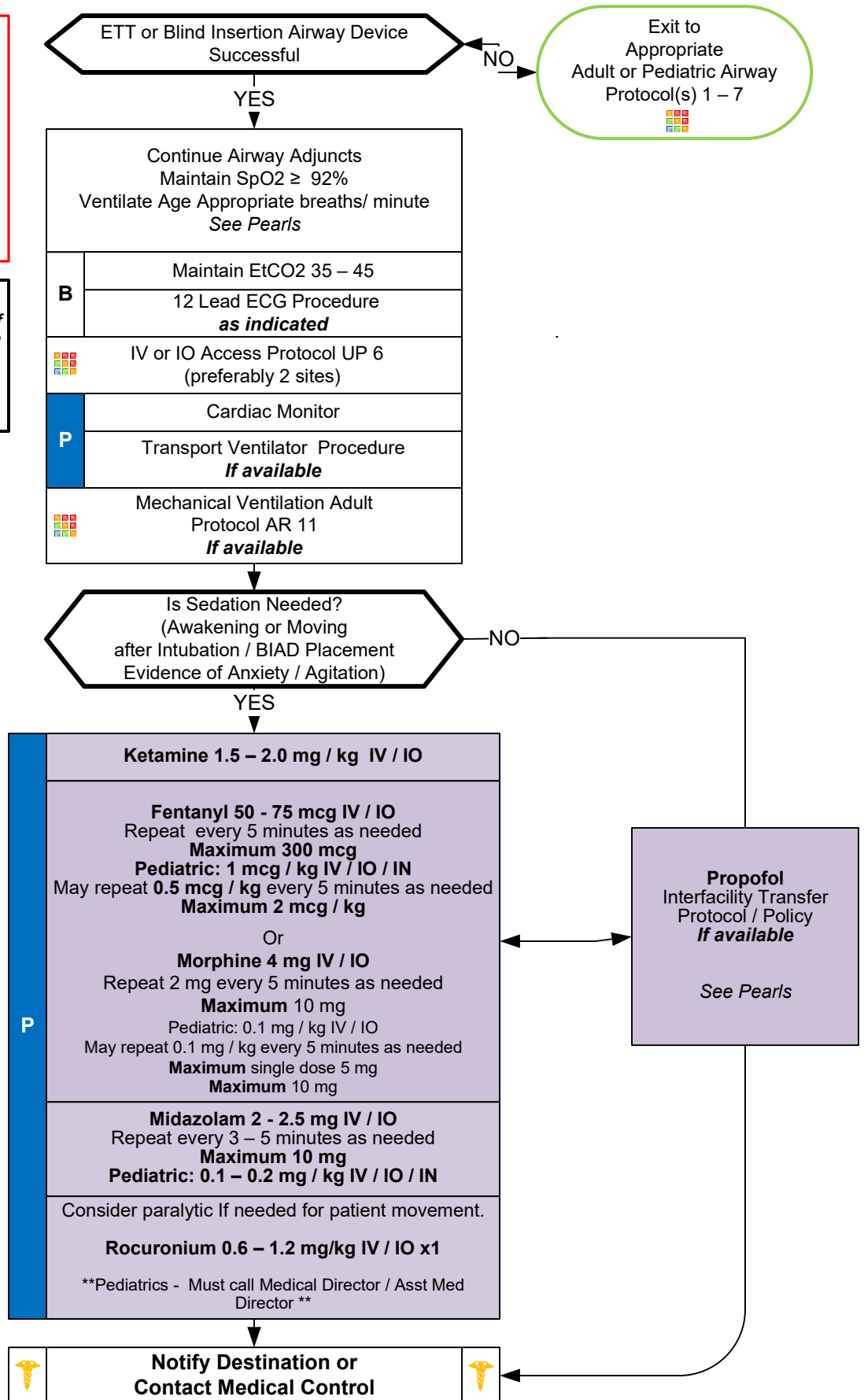


Post-intubation/ BIAD Management

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, 3, 5, and 6 should be utilized together (even if agency is not using Drug Assisted Airway Protocol) as they contain useful information for airway management.





Post-intubation/ BIAD Management

Alternative Medications – Service Specific

Dilaudid 1 mg IV / IO

Repeat **0.5 mg** every 5 minutes as needed

Maximum 4 mg

Pediatric: 0.02 mg / kg IV / IO

May repeat **0.01 mg / kg** every 5 minutes as needed

Maximum single dose 1 mg

Maximum Total Dose 4 mg

Pearls

- **Recommended Exam: Mental Status, HEENT, Heart, Lungs, Neuro**
- **Patients requiring advanced airways and ventilation commonly experience pain and anxiety.**
- **Unrelieved pain can lead to increased catecholamine release, ischemia, immunosuppression, and prolonged hospitalization.**
- **Ventilated patients cannot communicate pain/ anxiety and providers are poor at recognizing pain/ anxiety.**
- **Vital signs such as tachycardia and/ or hypertension can provide clues to inadequate sedation, however they are not always reliable indicators of a patient's lack of adequate sedation.**
- **Sedation strategy:**
 - Pain is the primary reason patients experience agitation and must be addressed first.
 - Opioids and/ or Ketamine are the first line agents, alone or in combination.
 - Benzodiazepines may be utilized if patient is not responding to adequate opioid and/ or Ketamine doses.
 - Paralysis is considered a last resort, only when patients are not responding to opioids, Ketamine, or benzodiazepines.
 - Patients that have received paralytics may be experiencing pain with no obvious signs or symptoms.
 - Consider sedation early after giving paralytics, especially in patients receiving Rocuronium.
- **Ventilation rate:**
 - Guidelines: 30 for Neonates, 25 for Toddlers, 20 for School Age, and for Adolescents the normal Adult rate of 10 – 12 per minute.
 - Maintain EtCO₂ between 35 - 45 and avoid hyperventilation.
- Ventilator/ Ventilation strategies will need to be tailored to individual patient presentations. Medical director can indicate different strategies above.
- **Propofol:**
 - Use restricted to agencies approved by the OEMS State Medical Director.
 - Agencies must submit a use policy and education plan to the OEMS.
 - Infusion must be supplied and initiated by a medical facility and may be used only during interfacility transfer.
 - Paramedic may titrate infusion to maintain appropriate sedation but cannot initiate or bolus the medication.
- In general, ventilation with BVM should cause chest rise. With mechanical ventilation a reasonable tidal volume should be about 6 - 8 mL/kg and peak pressures should be < 30 cmH₂O. Plateau Pressures should be < 30 cmH₂O.
- Head of bed should be maintained at least 10 – 20 degrees of elevation when possible, to decrease aspiration risk.
- With abrupt clinical deterioration, if mechanically ventilated, disconnect from ventilator to assess lung compliance.
- **DOPE: Displaced tracheostomy tube/ ETT, Obstructed tracheostomy tube/ ETT, Pneumothorax and Equipment failure.**