Medical Control Guideline: DRUG REFERENCE – MIDAZOLAM

Classification
Sedative, benzodiazepine

Prehospital Indications
- Agitated Delirium: patients requiring restraints for patient and provider safety
- Behavioral / Psychiatric Crisis: patients requiring restraints for patient and provider safety
- Cardiac Dysrhythmia: sedation prior to and/or during synchronized cardioversion or transcutaneous pacing
- Seizure - Active

Other Common Indications
Sedation and amnestic agent in patients undergoing mechanical ventilation or painful procedures

Adult Dose
- Agitated Delirium / Behavioral / Psychiatric Crisis
  - **5mg (1mL) IM/IN/IV**, repeat x1 in 5 min prn, maximum total dose prior to Base contact 10mg for Agitated Delirium (Psychiatric Crisis requires Base order for any)
- Cardiac Dysrhythmia - sedation prior to synchronized cardioversion / transcutaneous pacing
  - **2mg (0.4mL) slow IV/IO push/IM/IN**, may repeat every 5 min, maximum total dose prior to Base contact 6mg
- Seizure - Active
  - **5mg (1mL) IM/IN/IV**, repeat x1 in 2 min prn, maximum total dose prior to Base contact 10mg

Pediatric Dose
- Agitated Delirium / Behavioral / Psychiatric Crisis
  - **0.1mg/kg (5mg/mL) IM/IN/IV**, dose per **MCG 1309**, repeat dosing every 5 min prn per Base order
- Cardiac Dysrhythmia - sedation prior to synchronized cardioversion / transcutaneous pacing
  - **0.1mg/kg (5mg/mL) IM/IN/IV/IO**, dose per **MCG 1309**, repeat x1 in 2 min prn, maximum 2 doses prior to Base contact
- Seizure - Active
  - **0.1mg/kg (5mg/mL) IM/IN/IV/IO**, dose per **MCG 1309**, repeat x1 in 2 min prn, maximum 2 doses, max single dose 5mg

Mechanism of Action
Binds to receptors at several sites within the CNS, potentiates GABA receptor system which produces anxiolytic, anticonvulsant, muscle relaxant, and amnesic effects.

Pharmacokinetics
- Onset 3-5 min IV, 15-20 min IM, 6-14 min IN
- Duration 1-6 hours IV/IM

Contraindications
- Acute alcohol intoxication with altered mental status
- Respiratory depression
- Shock / Poor perfusion

Interactions
Risk of respiratory or central nervous system depression, increases when used with diphenhydramine, fentanyl, morphine, or other opiate or sedative medications

Adverse Effects
- Hypotension
- Respiratory depression / arrest

Prehospital Considerations
- Closely monitor respiratory and cardiac function after administration
- For patients with agitated delirium and violent behavior, IM/IN administration is recommended over IV
for the initial dose for the safety of EMS personnel.

- If available, waveform EtCO₂ monitoring should be instituted after administration.