

**Classification**

Sedative, benzodiazepine

**LA County Prehospital Indications**

Behavioral / Psychiatric Crisis / Severe Agitation: patients requiring restraints for patient and provider safety  
Cardiac Dysrhythmia: sedation prior to and/or during synchronized cardioversion or transcutaneous pacing  
Sedation and amnestic agent for patients receiving manual/mechanical ventilation if already intubated  
Seizure – Active

**Other Common Indications (Not authorized for EMS administration in LA County)**

None

**Adult Dose**

Behavioral / Psychiatric Crisis

**5mg (1mL) IM/IN/IV**, repeat x1 in 5 min prn, maximum total dose prior to Base contact 10mg

Cardiac Dysrhythmia - sedation prior to synchronized cardioversion / transcutaneous pacing

**5mg (1mL) slow IV/IO push/IM/IN**, may repeat x1 in 5 min prn, maximum total dose prior to Base contact 10mg

Seizure - Active

**10mg (2mL) IM/IN**, contact Base for additional dosing, **or**

**5mg (1mL) IV/IO**, repeat x1 in 2 min prn if existing vascular access, maximum total dose prior to Base contact 10 mg

Severe agitation with ALOC

**5mg (1mL) IM/IN/IV**, repeat x1 in 5 min prn, **or**

**10mg (2mL) IM/IN** single dose considering size of patient and level of risk, maximum total dose prior to Base Contact 10mg

For all indications, with Base Contact may repeat as above up to a maximum total dose of 20mg

**Pediatric Dose**

Behavioral / Psychiatric Crisis / Severe Agitation

**0.1mg/kg (5mg/mL) IV** or **0.2mg/kg (5mg/mL) IM/IN**, dose per [MCG 1309](#), repeat x1 in 5 min, maximum single dose 5mg, maximum total dose prior to Base contact 10mg (Severe agitation with ALOC who pose an IMMEDIATE RISK, may administer prior to Base Contact. Behavioral/ Psychiatric Crisis require a Base order prior to midazolam administration.)

Cardiac Dysrhythmia - sedation prior to synchronized cardioversion / transcutaneous pacing

**0.1mg/kg (5mg/mL) IV/IO** or **0.2mg/kg (5mg/mL) IM/IN**, dose per [MCG 1309](#), repeat dosing every 5 min prn per Base order, maximum single dose 5mg

Seizure - Active

**0-11 months (Gray, Pink)**

**0.2mg/kg (5mg/mL) IM/IN**, dose per [MCG 1309](#)

Repeat x1 in 2 min prn, up to 2 doses prior to Base contact

**12-16 months (Red if age unknown)**

1.25 mg or 0.25mL IM/IN repeat x1 in 2 min prn

Repeat x1 in 2 min prn, up to 2 doses prior to Base contact

**17 months – 5 years (Purple, Yellow, White if age unknown)**

2.5 mg or 0.5mL IM/IN repeat x1 in 2 min prn

Repeat x1 in 2 min prn, up to 2 doses prior to Base contact

**6-11 Years (Blue, Orange, Green if age unknown)**

5mg or 1mL IM/IN repeat x1 in 2 min prn

Repeat x1 in 2 min prn, up to 2 doses prior to Base contact

**≥12 years (Longer than the length-based tape if age unknown)**

10 mg or 2mL IM/IN repeat x1 in 2 min prn,  
Single dose prior to Base contact

For patients with severe growth restriction (e.g., genetic disorder, severe malnutrition), administer weight-based dose per color code.

May repeat **Midazolam** as above, maximum total of 3 doses or 20 milligrams, whichever is less

**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**

Respiratory depression  
Shock / Poor perfusion (see prehospital considerations)

**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
- Caution in patients with suspected intoxication as midazolam can increase the risk for respiratory depression
- For patients with severe agitation and violent behavior, IM/IN administration is recommended over IV for the initial dose for the safety of EMS personnel.
- If available, waveform EtCO<sub>2</sub> monitoring should be instituted after administration.
- For patients who are poorly perfusing and require sedation for safety (e.g., prevent inadvertent extubation) or require a painful procedure (e.g., transcutaneous pacing), one should use judgment in consultation with Base.