

Medication: Midazolam	PDN: 6954.07	Last Updated: August 9 2023	PMD: Andrew Travers*	PDC: Tanya Fraser*	Page 1 of 2
------------------------------	------------------------	---------------------------------------	--------------------------------	------------------------------	-------------

MIDAZOLAM (Versed)

1.0 Classification

- Benzodiazepine

2.0 Mechanism of Actions

- Sedative-hypnotic agent that causes central nervous system (CNS) depression and relaxation of skeletal muscle.
- Fast acting with short duration of effect
- 3 - 4 times as potent as diazepam

3.0 Indications

- Actively seizing patient
- Sympathomimetic toxicity (e.g., cocaine, ecstasy, amphetamines, etc.)
- To aid ETI, pacing and cardioversion.
- As a chemical restraint in violent, agitated patients over 16 years old.
- Procedural sedation/analgesia (benzodiazepine in conjunction with an opioid; with Clinical Support Paramedic consult) for hyperacute severe pain such as with cardioversion or manipulation of a fracture.

4.0 Contraindications

- Known hypersensitivity to benzodiazepines.
- Acute narrow (closed) angle glaucoma.

5.0 Precautions

- Midazolam has more potential than other benzodiazepines to cause respiratory depression.
- Always start with lower doses (especially when administered IV) and increase cautiously to avoid the patient becoming obtunded or hypotensive.

6.0 Route

- May be given IV/IO, IM, IN, or buccal.

7.0 Dosage

Adult

- Active seizing: 5 mg IN or buccal; may repeat once q 5 minutes.
- Sympathomimetic toxicity: 2.5-5 mg IV/IO; repeat q 5 minutes until patient is comfortable.
- To aid ETI/pacing/cardioversion: 1-2 mg IV/IO over 20-30 sec; repeat q 2-3 minutes to a maximum of 10 mg.
- For chemical restraint: 5 mg IM or IN; may repeat once (consult M CCP for dosing strategy for patients 65 and older as a lower dose may be required).
- Procedural sedation/analgesia: Generally same dosing as aiding ETI (require Clinical Support Paramedic consult first).

Pediatric

- For seizures: 0.1 mg/kg IN or IV/IO to a maximum of 10 mg per dose; may repeat once q 5

minutes.

- To aid ETI/pacing/cardioversion: 0.05 mg/kg IV over 20-30 sec; repeat q 2-3 minutes as needed up to a maximum of 5 mg.
- For chemical restraint: 0.2 mg/kg IN to a maximum of 10 mg.
- Procedural sedation/analgesia: Generally same dosing as chemical restraint (CSP consult).

8.0 Supplied

- 10 mg in a 2 mL vial

9.0 May Be Given By

- ACP/CCP

10.0 Adverse Effects

- Respiratory depression
- Hypotension
- Decreased LOC, amnesia

11.0 Special Notes

- The effects of midazolam can be accentuated by CNS depressants such as opioids and alcohol.
- The Clinical Support Paramedic must be contacted prior to giving benzodiazepines in conjunction with opioids to the same patient.
- Call the Atlantic Canada Poison Centre if the patient has ingested a toxic substance.
- Pregnancy category D [potential benefits may warrant use of the drug in pregnant women despite potential risks (e.g., if it is required in a life-threatening situation)].

12.0 References

- Adult Airway Management Clinical Practice Guideline
- Adult Cardiac Arrhythmia Clinical Practice Guideline
- Altered Level of Consciousness Clinical Practice Guideline
- Behavioural Emergencies Clinical Practice Guideline
- Pain Management Clinical Practice Guideline
- Toxicological Emergencies Clinical Practice Guideline
- Compendium of Pharmaceuticals and Specialties (CPS)

*Electronically Signed

Copyright © Emergency Health Services