



## EMS System for Metropolitan Oklahoma City and Tulsa 2024 Medical Control Board Treatment Protocols



Approved 11/08/23, Effective 1/15/24, replaces all prior versions

### 16EE – MIDAZOLAM (VERSED®)

#### PARAMEDIC

**Class:** Sedative; Anticonvulsant; Amnestic; Muscle Relaxant, Anxiolytic (Benzodiazepine)

**Actions/Pharmacodynamics:** Short - acting benzodiazepine with central nervous system depressant, anticonvulsant, anterograde amnestic, muscle relaxant, and anxiolytic effects. Like the other benzodiazepines, it has no effect on pain.

**Indications:** Medication Assisted Intubation (Pre & Post Intubation Sedation) (2G)  
Post Cardiac Arrest Treatment (Hypothermia Induced Shivering Control) (4J)  
Transcutaneous Pacing (Sedation) (5E)  
Synchronized Cardioversion (Sedation) (5G)  
Seizure (6D)  
Dystonic Reactions (6F)  
Chemical Restraint (7C)  
Poisonings - General Management (8A)  
    Suspected stimulant toxicity = severe agitation, HTN, tachycardia, diaphoresis  
Head/Neck/Spine Injury (10A)  
Heat Illness (11A)

**Contraindications:** Patients with intolerance to benzodiazepines, acute narrow - angle glaucoma, shock, or coma. Caution with use in patients with COPD, chronic hepatic or renal failure, CHF, acute alcohol intoxication, and the elderly due to increased risk of respiratory depression.

**Pharmacokinetics:** Onset is 3-5 minutes, IVP/IOP; 6-14 minutes IN; up to 15 minutes IM (though clinically evident much faster); peak effects in 20-60 minutes. Duration is 2 hours IVP/IOP/IN; 1-6 hours IM; half - life is 1-4 hours.

**Side Effects:** Retrograde amnesia, headache, euphoria, drowsiness, weakness, excessive sedation, confusion, dizziness, blurred vision, diplopia, nystagmus, respiratory arrest, tachypnea, hypotension, nausea, vomiting.

**Dosage:**       **Medication Assisted Intubation (Pre & Post Intubation Sedation) - Adult (2G)**  
0.1 mg/kg to max 5 mg IVP/IOP, may repeat once if systolic BP > 100 mmHg

**Post Cardiac Arrest Treatment (Hypothermia Induced Shivering Control) -  
  Adult & Pediatric (4J)**  
0.1 mg/kg to max 5 mg IVP/IOP

**Transcutaneous Pacing (Sedation) - Adult (5E)**  
2 - 5 mg IVP based upon weight and hemodynamics (0.1 mg/kg to max 5 mg)



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### PROTOCOL 16EE: Midazolam (Versed®), cont.

#### Dosage, cont.:

##### **Synchronized Cardioversion (Sedation) - Adult (5G)**

0.1 mg/kg to max 5 mg IVP/IOP/INP

##### **Seizure - Adult (6D)**

##### **Heat Illness - Adult (11A)**

0.1 mg/kg to max 5 mg IM/IVP/IN/IOP for active seizure.  
May repeat once in 5 minutes if still seizing.

##### **Seizure - Pediatric (6D)**

##### **Head/Neck/Spine Injury - Pediatric (10A)**

##### **Heat Illness - Pediatric (11A)**

0.1 mg/kg to max 5 mg IM/IVP/IN/IOP for active seizure  
May repeat once in 5 minutes if still seizing.

##### **Dystonic Reactions - Adult (6F)**

2.5 mg IVP/IM/IN

##### **Dystonic Reactions - Pediatric (6F)**

0.1 mg/kg to max 2.5 mg IM/IVP/IN

##### **Chemical Restraint - Adult (7C)**

0.1 mg/kg to max 5 mg IM/IVP/IN/IOP.  
May repeat once.

##### **Chemical Restraint - Pediatric (7C)**

0.1 mg/kg to max 5 mg IM/IVP/IN/IOP

##### **Poisoning - General Management (Suspected Stimulant Toxic) - Adult (8A)**

0.1 mg/kg to max 5 mg IVP/IN/IM

##### **Poisoning - General Management (Suspected Stimulant Toxic) - Pediatric (8A)**

**\*\*OLMC Order Only**

##### **Head/Neck/Spine Injury - Adult (10A)**

5 mg IM/IVP/IN/IOP for active seizure.  
May repeat once in 5 minutes if still seizing.

**How Supplied:** 5 mg/1 mL in vials, ampules, or pre-filled syringes.  
(Always check concentration and dose per container at time of patient medication administration)