

## DIAZEPAM:

**Class:** Benzodiazepine

**Indications:** Management of anxiety disorders, ethanol withdrawal symptoms; skeletal muscle relaxant; treatment of convulsive disorders; preoperative or preprocedural sedation and amnesia, Panic disorders; short-term treatment of spasticity in children with cerebral palsy; sedation for mechanically-ventilated patients in the intensive care unit

Rectal gel: Management of selected, refractory epilepsy patients on stable regimens of antiepileptic drugs requiring intermittent use of diazepam to control episodes of increased seizure activity

**Available dosage form in the hospital:** TAB (10 MG, 5MG, 2MG), RECTAL TUBE (5 MG, 10MG), 10MG AMP

**Trade Names:**

**Dosage:**

**-Acute ethanol withdrawal:** *Oral:* 10 mg 3-4 times during first 24 hours, then decrease to 5 mg 3-4 times/day as needed

**-Anticonvulsant (acute treatment):** *Rectal gel:* 0.2 mg/kg. **Note:** Dosage should be rounded upward to the next available dose, 2.5, 5, 7.5, 10, 12.5, 15, 17.5, and 20 mg/dose; dose may be repeated in 4-12 hours if needed; do not use for more than 5 episodes per month or more than one episode every 5 days.

**-Anxiety (symptoms/disorders):** *Oral, I.M., I.V.:* 2-10 mg 2-4 times/day if needed

**-Muscle spasm:** *I.V., I.M.:* Initial: 5-10 mg; then 5-10 mg in 3-4 hours, if necessary. Larger doses may be required if associated with tetanus.

**-Sedation in the ICU patient:** *I.V.:* Loading dose: 5-10 mg; Maintenance dose: 0.03-0.1 mg/kg every 30 minutes to 6 hours (Barr, 2013)

**-Skeletal muscle relaxant (adjunct therapy):** *Oral:* 2-10 mg 3-4 times/day

**-Status epilepticus:**

*-I.V.:* 5-10 mg every 5-10 minutes given over  $\leq 5$  mg/minute (maximum dose: 30 mg)

*-Rectal gel:* Premonitory/Out-of-hospital treatment: 10 mg once; may repeat once if necessary (Kälviäinen, 2007)

**-Rapid tranquilization of agitated patient** (administer every 30-60 minutes): *Oral:* 5-10 mg; average total dose for tranquilization: 20-60 mg

### Geriatric

**Oral absorption is more reliable than I.M.** Elderly and/or debilitated patients:

-Oral: 2-2.5 mg 1-2 times/day initially; increase gradually as needed and tolerated.

-Rectal gel: Due to the increased half-life in elderly and debilitated patients, consider reducing dose.

### Renal Impairment:

No dose adjustment recommended; decrease dose if administered for prolonged periods.

-I.V.: Risk of propylene glycol toxicity; monitor closely if using for prolonged periods or at high doses.

-Hemodialysis: Not dialyzable (0% to 5%); supplemental dose is not necessary.

### Hepatic Impairment:

Decrease maintenance dose by 50%; half-life significantly prolonged.

**Common side effect:**

Cardiovascular: Hypotension, vasodilatation

Central nervous system: Amnesia, ataxia, confusion, depression, drowsiness, fatigue, headache, slurred speech, paradoxical reactions (eg, aggressiveness, agitation, anxiety, delusions, hallucinations, inappropriate behavior, increased muscle spasms, insomnia, irritability, psychoses, rage, restlessness, sleep disturbances, stimulation), vertigo

Dermatologic: Rash

Endocrine & metabolic: Libido changes

Gastrointestinal: Constipation, diarrhea, nausea, salivation changes (dry mouth or hypersalivation)

Genitourinary: Incontinence, urinary retention

Hepatic: Jaundice

Local: Phlebitis, pain with injection

Neuromuscular & skeletal: Dysarthria, tremor, weakness

Ocular: Blurred vision, diplopia

Respiratory: Apnea, asthma, respiratory rate decreased

**Pregnancy Risk Factor: D**