

## **DIMERCAPROL**

**CLASS:** Antidote

**INDICATIONS:** Antidote to gold, arsenic (except arsine), or acute mercury poisoning (except nonalkyl mercury); adjunct to edetate CALCIUM disodium in acute lead poisoning

### **AVAILABLE DOSAGE FROM THE HOSPITAL:**

DIMERCAPROL 50MG/ML INJ

### **TRADE NAMES:**

### **DOSAGE:**

- **Dosing: Adult**

**Note:** Premedication with a histamine H1 antagonist (eg, diphenhydramine) is recommended.

**Arsenic or gold poisoning (acute, mild):** Deep I.M.: 2.5 mg/kg every 6 hours for 2 days, then every 12 hours for 1 day, followed by once daily for 10 days

**Arsenic or gold poisoning (acute, severe):** Deep I.M.: 3 mg/kg every 4 hours for 2 days, then every 6 hours for 1 day, followed every 12 hours for 10 days

**Mercury poisoning (acute):** Deep I.M.: 5 mg/kg initially, followed by 2.5 mg/kg 1-2 times/day for 10 days

**Lead poisoning:** Deep I.M.: **Note:** For the treatment of high blood lead levels in children, the CDC recommends chelation treatment when blood lead levels are >45 mcg/dL (CDC, 2002); however, dimercaprol is only recommended for use (in combination with edetate CALCIUM disodium) in children whose blood lead levels are >70 mcg/dL or in children with lead encephalopathy (AAP, 2005; Chandran, 2010). In adults, available guidelines recommend chelation therapy with blood lead levels >50 mcg/dL and significant symptoms; chelation therapy may also be indicated with blood lead levels  $\geq$ 100 mcg/dL and/or symptoms (Kosnett, 2007).

Blood lead levels  $\geq$ 70 mcg/dL, symptomatic lead poisoning, or lead encephalopathy (in conjunction with edetate CALCIUM disodium): 4 mg/kg every 4 hours for 2-7 days; duration of therapy of at least 3 days is recommended by some experts (Chandran, 2010). Note: Begin treatment with edetate CALCIUM disodium with the second dimercaprol dose.

- **Dosing: Geriatric**

Refer to adult dosing.

- **Dosing: Renal Impairment**

No adjustment provided in manufacturer's labeling. Use with extreme caution or discontinue if acute renal insufficiency develops during therapy.

- **Dosing: Hepatic Impairment**

Use is contraindicated in hepatic insufficiency (except in cases of postarsenical jaundice).

**COMMON SIDE EFFECT:**

Frequency not always defined.

Cardiovascular: Chest pain, hypertension (dose related), tachycardia (dose related)

Central nervous system: Anxiety, fever (children ~30%), headache, nervousness

Dermatologic: Abscess

Gastrointestinal: Abdominal pain, burning sensation (lips, mouth, throat), nausea, salivation, throat irritation/pain, vomiting

Genitourinary: Burning sensation (penis)

Hematologic: Leukopenia (polymorphonuclear)

Local: Injection site pain

Neuromuscular & skeletal: Paresthesias (hand), weakness

Ocular: Blepharospasm, conjunctivitis, lacrimation

Renal: Acute renal insufficiency

Respiratory: Rhinorrhea, throat constriction

Miscellaneous: Diaphoresis

**PREGNANCY RISK FACTORS: C**