

Deferoxamine

Deferoxamine is a chelating agent for iron.

Consult with Toxicologist on-call for use and specific dosing.

Indications:

- Indicated in those with a serum iron concentration greater than 90 $\mu\text{mol/L}$ (500 $\mu\text{L/dL}$) or in those with lower or unknown serum iron levels if evidence of systemic toxicity including shock, acidosis, GI hemorrhage, or coma.

Dosing: (as per Micromedex and Toxinz)

- Maximum infusion rate 15mg/kg/hr IV up to maximum dose 80 mg/kg (or 6 g) until signs and symptoms of iron toxicity improve.
- Rarely, infusion rate may be titrated up to 40mg/kg/hr in severe poisoning. This should only be considered in consultation with the on-call Toxicologist.
- IM dosing not recommended.
- For mixing and administration recommendations see the Canadian Antidote Guide: <https://www.ciuss-capitalenationale.gouv.qc.ca/en/antidotes/deferioxamine>

Other dosing considerations:

- Duration of infusion is typically between 6-12hrs, and should not exceed 24 hrs.
- The maximum dose of 80 mg/kg or 6g/24 hrs (as recommended in product monograph) may be exceeded as needed. Decisions to prolong treatment should be made in consultation with the on-call Toxicologist.
- End point of treatment is improvement in clinical signs and symptoms of iron toxicity.
- Persistent or worsening symptoms requires further consultation with Toxicologist.
- Hemodialysis may be required as adjunctive therapy to remove ferrioxamine complex if severe renal impairment.

Potential adverse effects:

- High dose deferoxamine has been associated with hypotension and may improve with reducing the rate of infusion.
- Prolonged high dose deferoxamine (>24 hours) has been associated with Acute Lung Injury (ARDS).
- Administration of deferoxamine may promote infection with *Yersinia enterocolitica*