



988170 Nebraska Medical Center • Omaha, NE 68198-8170 • 1-800-222-1222 • www.NebraskaPoison.com

Serving Nebraska, Idaho, Wyoming, American Samoa, and Federated States of Micronesia

To: ALL HEALTH CARE PROVIDERS including Physicians and Nurses  
From: Ron Kirschner, MD Medical Director, Nebraska Regional Poison Center  
Subject: Beta Blocker Medications  
Date: January 13, 2022

---

**Actions:** Compete(s) with adrenergic agonists at beta-adrenergic receptors in heart, vascular and bronchial smooth muscle, and other organs.

**Clinical effects:** Bradycardia, hypotension, decreased contractility, AV block are most common effects. More lipid soluble agents such as propranolol can cause CNS depression or seizures in overdose. Propranolol also has sodium channel blocking properties and can cause QRS widening in overdose. Hypoglycemia is occasionally seen in children.

1. **Activated Charcoal (AC):** 1 gram/kg if ingestion within 1-2 h  
Consider Whole Bowel Irrigation (WBI) if large amount of slow-release product ingested.  
(Patient must be alert enough to protect airway with bowel sounds present for AC or WBI).
2. **Serial 12-Lead ECGs** and cardiac monitoring
3. **Serial Glucose** levels in diabetics and patients with altered mental status (q 2-3 h if altered MS)
4. **Asymptomatic patients:** Monitor Vital Signs. **Observation Time:** observe at least 6 hours (8 hours for sustained release product and 12 hours if sotalol)
5. **Bradycardia:** Atropine (may be ineffective). Refer to standard ACLS/PALS guidelines for dosing, or call the Poison Center.
6. **Hypotension:** If hypotension does not respond to fluid boluses, calcium salts may be helpful, but benefits are often transient. If patient does not respond, vasopressors should be started.

Our certified nurse specialists in poison information and physician toxicologists  
are available 24 hours a day to answer your questions