



To: Physicians, Nurses, and Other Health Care Providers in the Federated States of Micronesia
From: Ron Kirschner, MD
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Subject: Beta Blocker medications
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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 trained staff of nurse specialists in poison information and physician toxicologists is available 24 hours a day to answer your questions. In the Federated States of Micronesia, health care professionals and the public can reach the Poison Center by calling 288, wait for an automated operator, then 888-222-4516.