

# Nova Scotia Antidote Program

2020 Quarterly Report #2  
April 1, 2020 to June 30, 2020

The Nova Scotia Antidote Program is pleased to present another Quarterly Report, which provides information on changes and trends in antidote therapy and reports ongoing Provincial Antidote usage.

Antidote usage April 1 to June 30, 2020						
Western Zone	Northern Zone	Eastern Zone	Central Zone	IWK	Quarterly Total	Year to Date
7	10	8	14	0	39	79

### Highlights of antidote use during the past 3 months

A total of **39 antidotes** were used in **33 different patient cases**. Of these, 8 antidotes were used by community hospitals, 27 in regional facilities and 4 in tertiary hospitals.

- Antidotes accessed in community hospitals: flumazenil, naloxone, calcium chloride, fomepizole and glucagon
  - Two out of eight of these patients were transferred to a regional hospital for further care.
- DigiFab was reported to be used in two cases of chronic digoxin toxicity and one case of acute overdose.
- Naloxone was reported as used for 15 patients with known or suspected opioid toxicity.
  - Two of these patients required a naloxone infusion, along with bolus doses
- Sodium Bicarbonate was used as an antidote in eight patients.
  - Two patients with ASA toxicity, one patient with rhabdomyolysis and 5 patients with a wide QRS.

### Glucagon for Beta-Blocker Toxicity

Glucagon is recommended as **adjunctive treatment only** for beta-blocker toxicity. Intravenous fluids, vasopressors, and high-dose insulin with dextrose are considered first line treatments. Glucagon is **not recommended** for calcium channel blocker toxicity.

Regional Antidote Kits contain 40 x 1mg glucagon kits. Community Kits contain 10 x 1 mg kits. Cost is \$50/1mg. If an infusion of glucagon was started at 10mg/hour, a regional hospital would run out of their antidote supply in 4 hours, at a cost of \$500/hr.

Considering the recommended place in therapy (adjunctive treatment only for beta-blocker toxicity) and the cost, the Provincial Antidote Committee believes that current stocking recommendations are appropriate.

Reference: St-Onge M. et al. Critical Care Medicine. 2017. Volume 45:3; e306–e315

### Digoxin Immune Fab

In a patient with chronic digoxin toxicity, 1-2 vials of DigiFab is usually sufficient to control symptoms. Larger amounts can be needed for a patient with an acute ingestion.

Regional Antidote Kits contain 5 vials of DigiFab. Community Kits contain 3 vials. If your hospital has a patient with acute digoxin toxicity in cardiac arrest: treat with the DigiFab available, and get more stock from a neighbouring hospital, or transfer the patient if necessary. The goal of the Antidote Program is to ensure that all EDs in NS have immediate access to time-sensitive antidotes, regardless of hospital size and geographic location. There is a network of antidotes over the entire province. It is crucial that hospital pharmacies / EDs have mechanisms in place for the sharing of antidotes in the event that larger doses of antidotes are required for a specific case.

### You can reach the Poison Centre 24 hrs a day at 1-800-565-8161

Please contact the Poison Centre for any patient with toxicity due to beta-blockers, calcium channel blockers or digoxin. We can assist in the management of the patient and help with appropriate use of antidotes.