

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 Jan 1 to Mar 31, 2018						
Western Zone 1	Northern Zone 2	Eastern Zone 3	Central Zone 4	IWK	Quarterly Total	Year to Date
3	5	5	23	1	37	37

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

A total of **37 antidotes** were used in **30 different patient cases**. Of these, 4 antidotes were used by community hospitals, 23 in regional facilities and 10 in tertiary hospitals.

- Antidotes used in community hospital EDs: fomepizole, high dose insulin, and naloxone.
- Flumazenil was reported as used in 3 patients. It is important to remember that the use of flumazenil as a reversal agent for intentional benzodiazepine overdose is not routinely recommended due to risk of refractory seizures.
- Use of Naloxone was reported for 13 patients. *To ensure we are tracking opioid overdose and naloxone use, please report cases where naloxone is used to the Poison Centre at 1-800-565-8161*

### NEW IWK Poison Centre Recommendations for using DigiFab

There is a growing body of evidence that suggests that less DigiFab is needed to treat digoxin toxicity than previous empiric dosing recommended. The following recommendations acknowledge that it may not be necessary to bind the total body digoxin load to control toxicity. The administration of less than the calculated dose of digoxin immune Fab may still be sufficient.

New **EMPIRIC DOSING** (Unknown digoxin level and severe toxicity):

**CHRONIC TOXICITY:** Administer one vial at a time over 30 minutes by IV infusion. Repeat if needed.

**ACUTE TOXICITY: *Cardiac arrest imminent or present:*** 10 vials by direct IV, repeat 5 - 10 vials as needed for ongoing toxicity, after 3 - 5 min. If full amount not available, give closest amount available.

***With hemodynamic compromise:*** Give 2-4 vials over 30 minutes by IV infusion. Repeat if needed for ongoing toxicity.

**Antidote Stocking:** 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.

Key References: Chan. Clin Tox 2016, 54:6, 488-494 and Chhabra. Am J Ther. 2016. 23(6):e1597-e1601.