

Nova Scotia Antidote Program

2023 Quarterly Report #2 Apr 1, 2023 to Jun 30, 2023

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 Apr 1 to Jun 30, 2023 | | | | | | |
|--------------------------------------|----------|---------|---------|-----|-----------|--------------|
| Western | Northern | Eastern | Central | IWK | Quarterly | Year to Date |
| Zone | Zone | Zone | Zone | | Total | |
| 13 | 9 | 18 | 22 | 1 | 63 | 122 |

Highlights of antidote use during the past 3 months

A total of **63** antidotes were used in **50** different patient cases. Of these, 11 antidotes were used by community hospitals, 41 in regional facilities and 11 in tertiary hospitals.

- <u>Naloxone</u> was the most used antidote during the 2023 quarter #2 period. It was used 25 times in known or suspected opioid toxicity. There was distribution in use over all hospital types.
- <u>Flumazenil</u> was used 3 times as a benzodiazepine reversal agent. Although this antidote has some specific instances where it can be useful, the risk often outweighs the benefit. Flumazenil may precipitate seizures and withdrawal reactions due to long-term benzodiazepine therapy or in mixed drug overdoses.
- There were four uses of <u>Glucagon</u>, used both for beta blocker toxicity and drug-induced hypoglycemia.

Glucagon for Beta Blocker Toxicity

The Atlantic Canada Poison Centre recommends use of <u>Glucagon</u> as adjunctive treatment only for beta blocker toxicity. The recommended stock for <u>Glucagon</u> is set at 10mg per site, enough to provide 2 x 5mg doses, and time to secure more from a neighboring site if needed. Currently, there is a significant supply issue and cost increase in the Canadian market with IV <u>Glucagon</u>.

Given these challenges, it is especially prudent to remember that high-dose <u>Insulin</u> with dextrose, vasopressors, <u>Calcium</u>, and good supportive care are the standard measures used to manage beta blocker toxicity.

It is important to contact the Poison Centre for several reasons.

- 1. We can help with the management of patients with **acute or chronic drug toxicity** and with appropriate use of antidotes and other treatments. For example we can help with assessing the need for <u>Physostigmine</u> for agitation and delirium due to anticholinergic toxicity.
- 2. As part of the Provincial Antidote Program, we are required to track the use of all antidotes.
- 3. Data from the Atlantic Canada Poison Centre is used to monitor and track exposures, including poisonings, overdoses, accidental exposures, adverse events etc. across Nova Scotia.

Contact the Poison Centre – 1-800-565-8161