Nova Scotia Antidote Program

2025 Quarterly Report #2
Apr 1, 2025 to Jun 30, 2025

ATLANTIC CANADA POISON CENTRE

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, 2025						
Western Zone	Northern Zone	Eastern Zone	Central Zone	IWK	Quarterly Total	Year to Date
9	6	15	27	1	58	105

Highlights of antidote use during the past 3 months

A total of **58 antidotes** were used in 51 **different patient cases**. Of these, 7 antidotes were used by community hospitals, 35 in regional facilities and 16 in tertiary hospitals.

- Naloxone was the most used antidote during the 2025 quarter #2 period. It was used 28 times in known or suspected opioid toxicity. There was distribution in use over all hospital types. These are only cases that were reported to the Poison Centre. Actual hospital use is presumed to be higher.
- Fomepizole was used 7 times to treat massive acetaminophen overdoses or toxic alcohols. A significant increase over previous quarters.
- Pyridoxine was used twice as a co-factor to manage ethylene glycol toxicity. Pyridoxine administration helps optimize elimination of the toxic metabolites of ethylene glycol.
- High dose Insulin was used twice to manage beta-blocker toxicity.

Sodium Bicarbonate for chlorine induced inhalational injury

Chlorine gas and aerosolized chlorine powder are some of the most common single-irritant inhalation exposures. The largest number of exposures are caused by home mixtures of hypochlorite (bleach) with other cleaners. A second common cause in the summer is by inhalation of swimming pool chlorine shock powder. Once inhaled, chlorine forms hydrochloric acid on contact with moist mucous membranes causing direct corrosive injury to the tissues. Toxicity from these exposures can cause severe acute respiratory symptoms including dyspnea, bronchospasm, throat irritation and in rare cases pulmonary edema. Management of these cases is primarily supportive with oxygen and bronchodilators used as needed. Nebulized Sodium Bicarbonate is also commonly used despite limited clinical data. Mix 4 mL of a 4.2% sodium bicarbonate solution by nebulizer. One dose is often adequate; repeat doses may be necessary in more severe cases.

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 Digoxin Immune Fab in chronic digoxin toxicity and recommend appropriate dosing.
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

Contact Shawn Smith, Provincial Antidote Co-ordinator, at 902-470-8132 or Shawn.Smith@iwk.nshealth.ca with any inquiries.