

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, 2024						
Western Zone	Northern Zone	Eastern Zone	Central Zone	IWK	Quarterly Total	Year to Date
8	7	13	25	2	55	55

## Highlights of antidote use during the past 3 months

A total of **55 antidotes** were used in **49 different patient cases**. Of these, 8 antidotes were used by community hospitals, 31 in regional facilities and 16 in tertiary hospitals.

- Naloxone was the most used antidote during the 2024 quarter #1 period. It was used 23 times in known or suspected opioid toxicity. There was distribution in use over all hospital types.
- Physostigmine was used twice this quarter to treat anticholinergic toxicity. Symptoms may include agitation, hallucinations and delirium. Anticholinergic toxicity most commonly develops locally due to exposure to antihistamines like diphenhydramine.
- There was one use of Lipid Emulsion for non-local anesthetic drug toxicity. The level of evidence supporting use of Lipid Emulsion for this indication is low, but it is still used as rescue therapy in the case of cardiac arrest or severe hemodynamic compromise due to some lipid-soluble and sodium channel blocking drugs.

## Fomepizole for Acetaminophen Toxicity

Fomepizole is an antidote primarily used in cases of suspected or confirmed ethylene glycol or methanol poisoning. More recently, it has been determined Fomepizole may also be beneficial as adjunctive treatment alongside N-Acetylcysteine for massive acetaminophen overdoses. Preliminary evidence suggests that Fomepizole, a potent hepatic CYP2E1 inhibitor, can help to prevent formation of acetaminophen's toxic metabolite; N-acetyl-p-benzoquinone imine (NAPQI). Use of Fomepizole for this indication is reserved for cases exhibiting signs of severe toxicity. For more information regarding when and how to use this antidote, please contact the Poison Centre.

## 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 Hydroxocobalamin for cyanide 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**