

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, 2025						
Western Zone	Northern Zone	Eastern Zone	Central Zone	IWK	Quarterly Total	Year to Date
15	4	15	10	3	47	47

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

A total of **47 antidotes** were used in **42 different patient cases**. Of these, 0 antidotes were used by community hospitals, 38 in regional facilities and 9 in tertiary hospitals.

- Naloxone continues to be the most used antidote during the 2025 quarter #1 period. It reported as used 19 times in known or suspected opioid toxicity. There was distribution in use over regional and tertiary facilities.
- Hydroxocobalamin was used to manage cyanide toxicity associated with exposure to smoke from a fire a total of 5 times this quarter. This is a significant increase over previous periods.
- Methylene Blue was used once during this period to manage acquired methemoglobinemia. Patients develop acquired methemoglobinemia by a variety of sources such as: topical anesthetics, dapsons and nitrates

### Methylene Blue for Methemoglobinemia

Methemoglobin is an oxidized form of hemoglobin that cannot bind or deliver oxygen to tissues effectively. Methemoglobinemia can be either genetic or acquired. As mentioned above, acquired methemoglobinemia, can be caused by a variety of medications (topical anesthetics, dapsons and nitrates) and may be severe. Patients with Methemoglobinemia often present with cyanosis and shortness of breath. Methemoglobin level can be detected on most blood gas analysis. Methylene Blue is the antidote used for the treatment of symptomatic methemoglobinemia (usually with methemoglobin levels greater than 20%). It is contraindicated in patients with G-6-PD deficiency. Methylene blue is given 1 to 2 mg/kg IV direct undiluted over 5 minutes.

### 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 Physostigmine 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**