

CORRECTIONAL SERVICE CANADA

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Impacts of an Overdose Prevention Service on Reducing Harm

The implementation of an Overdose Prevention Service (OPS) at five sites between 2019 and 2025 was associated with a reduction in the number, rate, and adverse health impact of overdoses in CSC.

Why we did this study

In June 2019 CSC received a class exemption from Health Canada¹ and began an Overdose Prevention Service (OPS), a crucial piece of the harm reduction program suite addressing substance use as a health issue². The OPS allows participants to consume illicit drugs using sterile equipment under the observation of a nurse to prevent fatal and non-fatal overdoses. This research includes five OPS sites across Canada and to date, CSC is the only correctional jurisdiction in the world to have such a program³. This evaluation informs policy and program design in responding to the substance use needs of people who are incarcerated (PWA).

What we did

Using data for overdoses⁴ routinely collected and reported by CSC, the cumulative number and rate at the five sites in the 24-month period prior to OPS launch at each site was compared to the post-launch period right censored to March 31, 2025. The Incidence Rate Difference (IRD) and Ratio (IRR) were calculated and tested for significance. Medical intervention, naloxone, incidents requiring outside hospitalization, and the substances involved in the incidents were cross tabulated pre- and post-launch.

What we found

There were 80 overdose incidents observed in the 24-month pre-launch period and 48 overdose incidents in the post-launch period, a decline of 40% (see Table 1⁵).

Table 1 – Overdose Number and Rate pre / post OPS launch

Pre- OPS launch		Post- OPS launch	
n	Rate ^a	n	Rate ^b
80	1.72	48	0.92

^a Overdoses per 100 person-years; ^b Based on 4656 person-years of observation pre-OPS launch and ^c 5203 person-years post-OPS launch.

The overdose incidence rate was 1.72/100 person-years prior to OPS launch and 0.92/100 person-years post, a decrease of 46%. The Incident Rate Difference (IRD) was 0.80 (95%CI: 0.73 – 0.86) and the Incidence Rate Ratio (IRR) was 0.54 (95%CI: 0.38 – 0.77).

¹ See [Subsection 56\(1\) class exemption in relation to urgent public health need sites in the provinces and territories - Canada.ca](#)

² See [Overdose Prevention Service - Canada.ca](#)

³ Drumheller June 2019; Springhill, July 2023; Collins Bay (Med) November 2023; Drummond March 2024; Warkworth July 2024

Post-OPS launch, the proportion of overdose incidents receiving medical intervention increased. However, while the proportion involving opioids decreased those receiving naloxone and requiring hospitalization remained stable (see Table 2).

Table 2 – Overdose Characteristics pre- and post- OPS launch

Overdose Characteristic	Pre- OPS*	Post- OPS*
Received medical intervention	44 (55%)	38 (79%)
Received naloxone	69 (86%)	35 (73%)
Required outside hospitalization	59 (74%)	37 (77%)
Involved opioids	45 (56%)	14 (29%)
Involved fentanyl	37 (46%)	6 (13%)
Involved stimulants	17 (21%)	10 (21%)

* Percent frequencies are column percentages.

What it means

In the national context of ongoing overdose deaths and a toxic drug supply, the number and rate of overdoses in CSC dropped significantly post OPS program launch. These ecological findings may reflect a site-level effect as the OPS launch itself provides an opportunity for PWA and staff to focus on issues related to substance use, harm reduction, and recovery in an open and safe context. Combined with program evaluation finding the OPS acceptable and feasible⁶, these findings support OPS as an effective harm reduction option in a correctional environment.

For more information

Please e-mail the Research Branch at research@csc-scc.gc.ca.

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⁴ Overdose is defined as an incident where the consumption of illicit drugs (excluding "brew") requiring medical intervention (CPR, sternum rubs, oxygen, activated charcoal), naloxone, or resulting in death.

⁵ This includes 4 fatal overdoses pre and 3 fatal overdoses post OPS implementation.

⁶ Leonard (2025); Evaluation of Canada's Needle Exchange Program and Overdose Prevention Service Final Report. Unpublished

