



First Nations Health Authority
Health through wellness

The impact of prescribed opioid and stimulant safer supply on population health in BC

What is this study about?

This study is the first to investigate the impact of receiving prescribed safer supply on risk of:

- i) Death (by any cause and overdose) and
- ii) Acute care visits¹ using health records of everyone in BC with a substance use disorder.

We specifically looked at the impact of opioid prescribed safer supply for those with opioid use disorder (OUD)² and stimulant safer supply for those with stimulant use disorder (StUD)³

Why conduct this study?

In 2016, British Columbia declared a public health emergency due to an increasingly toxic, unregulated (“street”) drug supply, with fentanyl as the leading contributor to overdose deaths in BC and across Turtle Island.

At the beginning of the pandemic in March 2020, there was a sharp increase in overdose deaths. As a result, the BC Government approved the [Risk Mitigation Guidance](#) (RMG) to support doctors in prescribing alternatives to the toxic drug supply (known as “prescribed safer supply”) and help people isolate and adhere to the COVID-19 public health orders.

BC has since expanded prescribed safer supply beyond the pandemic and is the first area in the world to have a [prescribed safer supply policy](#) to reduce overdose risk and separate people from the toxic street supply.


¹Acute care visits: emergency room visits and hospital stays

² OUD: Opioid Use Disorder; a chronic health condition characterized by dependence on opioid drugs, such as heroin and fentanyl

³ StUD = stimulant use disorder; a chronic health condition of dependence on stimulant drugs like meth, cocaine, crack

KEY FINDINGS

- We identified all BC residents who received prescriptions for opioid and stimulant prescribed safer supply (PSS)
- We found that opioid-PSS significantly reduced risk of death (by any cause and by overdose) among people with opioid use disorder
- The longer people received opioid-PSS, the less likely they were to die
- Prescribed safer supply is a promising intervention to reduce reliance on the unregulated (‘street’) toxic supply and may be an opportunity to support people on their healing journeys



To date, there is limited evidence describing the outcomes of prescribed safer supply and no evidence at the population level. The objective of this study was to determine what effect opioid and stimulant prescribed safer supply had on death by any cause, death by overdose, and acute care visits.

How was the study done?

We used health records and databases to identify all BC residents with opioid use disorder (OUD) and stimulant use disorder (StUD). We also identified all opioid and stimulant PSS prescriptions filled by community pharmacies between March 27, 2020 and August 31, 2021. We looked at the rates of death by any cause, death by overdose, and acute care visits for everyone in the study.

To answer the research question, we looked at risk of death, overdose, and acute care visits among people with OUD and StUD who received PSS, compared to people with OUD and StUD but who did not receive PSS.

Study population:

A total of 5,882 people with OUD or StUD received PSS. 40% were female, and 11.7% lived in rural communities. The vast majority (91.1%) received opioid-PSS, with 18% receiving stimulant-PSS, and 535 (9.1%) receiving both opioid and stimulant PSS. (Note - the total percentage is greater than 100% because some people received both stimulant and opioid PSS.)

What did the study find?

- People who received opioid-PSS for 1 or more days had 61% lower rates of death from any cause the following week.
- People who received opioid-PSS for 1 or more days had 55% lower rates of death from overdose the following week.
- People who received 4 or more days of opioid-PSS had 91% lower rates of death from any cause and 89% lower rates of death from overdose the next week. **The more prescribed safer supply people received, the less likely they were to die.**
- People who received 1 or more days of stimulant-PSS were significantly less likely to use acute care the week following.
- We did not find a significant impact of opioid-PSS on acute care visits.
- We did not find a significant impact of stimulant-PSS on death by any cause or death by overdose.

What do these findings mean?

- People who have access to prescribed safer supply may rely less on the toxic street supply, which reduces the risk of death.
- The protective effects of receiving PSS could also be because of increased interactions with doctors and health care, which can provide care for many health conditions that cause death.
- We found a dose-response relationship between receiving opioid-PSS and rates of dying. The longer a person was receiving PSS, the less likely they were to die.

- However, only 7.6% of people with OUD in BC were able to access opioid-PSS. There is an opportunity to expand access and availability of PSS to reduce reliance on the street supply with the goal of reducing toxic drug deaths in BC.
- PSS and harm reduction interventions meet people where they are at and provide an opportunity to support them on their healing journeys.
- Addressing the toxic drug supply requires many interventions and services including prevention, education, treatment, healing, and other harm reduction interventions. See how the FNHA is responding to the toxic drug crisis for First Nations with our [Framework to Action](#).
- While we did not specifically look at First Nations status or Indigeneity, in the context of colonization, systemic racism, and intergenerational trauma, First Nations Peoples are disproportionately impacted by the crisis. In 2020, First Nations residents died from toxic drugs at 5.3 times the rate of other BC residents. For more information on how the toxic drug crisis is impacting First Nations communities in BC, please refer to [the FNHA's website](#).

What are the study limitations?

- OUD and StUD were not diagnosed by a clinician, but rather identified through repeated health records and healthcare visits for substance-related issues.
- We accessed pharmacy records to identify who received opioid and stimulant PSS; however, we cannot confirm if medications were consumed or taken by the person prescribed the medication.

Resources on FNHA.ca

- To learn more about safer supply and the experiences of safer supply clients, visit [FNHA Safer Supply FAQ](#)
- [Listen to the voices of people](#) with lived and living experience to learn about their substance use and wellness journeys.
- Start the conversation: check out the FNHA's [Courageous Conversations on Substance Use Toolkit](#).
- Browse [FNHA's Indigenous harm reduction webpage](#) to explore videos and resources on First Nations perspectives on harm reduction, connecting back to culture, and taking care of each other.
- Learn more about how the [toxic drug crisis is affecting First Nations communities](#).
- [Eliminating Stigma Around Substance Use Will Help Save Lives](#)
- [Mental health and cultural supports](#)
- [FNHA's Framework for Action: Responding to the Toxic Drug Crisis for First Nations](#)

Partner resources

- [Link to Centre for Advancing Health Outcomes research bulletin](#)
- [Link to BC Centre for Disease Control knowledge user update](#)

Slaunwhite A, Min JE, Palis H, Urbanoski K, Pauly B, Barker B, Crabtree A, Bach P, Krebs E, Dale L, Meilleur L. Effect of Risk Mitigation Guidance opioid and stimulant dispensations on mortality and acute care visits during dual public health emergencies: retrospective cohort study. *bmj*. 2024 Jan 11;384. doi:[doi:10.1136/bmj-2023-076336](https://doi.org/10.1136/bmj-2023-076336)