

Canada's Health Crisis:

Profiling Opioid Addiction in Alberta & British Columbia

Report for the Stanford Network on Addiction Policy (SNAP) by:

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Background

This project was commissioned by Professor Keith Humphreys of Stanford University and was funded through the Stanford Network on Addiction Policy (SNAP).

Purpose of Study

The purpose of this report is to investigate the current state of the opioid addiction crisis in Canada. The report gives specific attention to Alberta and British Columbia, the two provinces in Canada with the highest rates of opioid-related overdose deaths. The report seeks to identify drivers of the crisis and key features of the provincial policies, along with the makeup of the addicted populations and overdose victims.

Methodology

This report utilized publicly available data at both the federal and provincial level applying both quantitative and qualitative research methods. All data was retrieved between September 2022 and February 2023. Access to certain datasets was refused in the absence of an ethics approval.

Executive Summary

Canada's drug addiction crisis has been mounting for two decades, and shares many of the same features as the well documented experience of the United States. In both countries, the COVID-19 pandemic exacerbated the health harms, with rates of drug mortality in areas like British Columbia (BC) in 2022 as high as the worst affected parts of the USA.

There is more political attention on the issue compared to a decade ago, but a situation that warranted a declaration of a public health emergency in BC in 2016 has not improved since then – in fact the crisis has escalated. As of December 31, 2022, the rate of illicit drug toxicity deaths in BC has more than doubled since the emergency was first declared in 2016.

This report explores what is behind this dramatic deterioration and focuses on the characteristics of the crisis in British Columbia and Alberta – two neighbouring provinces in Western Canada that are home to a disproportionate share of the harm caused by opioid addiction today.

Key Findings

Canada's addiction crisis in context

- **The scale of drug-related harms in Canada are significant, dramatically outpacing comparator jurisdictions in places like Europe.** The death rate in Canada's worst affected province – British Columbia – has risen from 5.8 per 100,000 in 2000 to 44.2 per 100,000 in 2021. In Canada, the number of accidental apparent opioid toxicity deaths (AAOTDs) per 100,000 was 20.2 per 100,000 in 2021. For comparison, in 2019, England and Wales had a drug-related mortality rate of 7.7 per 100,000.
- **BC's AAOTD rate in 2021 was more than double the national average, and Alberta was not far behind at 36 per 100,000.** Ontario had the most total AAOTDs (2,772) but had a lower death rate of 19.4 per 100,000.
- **Between them, BC and Alberta accounted for a quarter of Canada's population but almost half (49%) of drug deaths (3,804).** To put this another way, 1 in every 7 Canadians live in BC and 1 in every 9 live in Alberta, but 1 in

every 4 AAOTD in 2021 was a British Columbian and 1 in every 5 was an Albertan. The share of AAOTDs held by Alberta and BC has actually decreased slightly from 54% in 2016.

- **In Canada overall, in 2020 and 2021, opioids caused nearly half as many deaths (13,815) as COVID-19 over the same period (29,985), and were responsible for five times the number of lost life years.** The COVID-19 pandemic caused approximately 90,000 lost years of life in 2020 and 2021. Over that same period, premature deaths from opioids caused nearly 450,000 lost years of life. The crisis has gotten so severe that it halted the increase in Canadian life expectancy between 2016 and 2017, the first time that Canadian life expectancy has decreased in over four decades.
- **Opioid addiction is now at a scale that makes it a general public health concern.** Alcohol and tobacco kill more Canadians than illicit drugs, however those who overdose on opioids are usually far younger than those who die of alcohol or tobacco. Because the chronic health impacts of alcohol or tobacco consumption manifest over decades of use, opioids are responsible for more life years lost than tobacco, and nearly as many life years lost as alcohol, despite not having the same level of general use in the population.

Opioid addiction in Canada

There are many dimensions to opioid-related-harms, but this report focuses on deaths, hospitalizations, lost life years, and drug-related crime. Key findings regarding opioid-related harms include:

- **Although illicit drug use often begins in adolescence or young adulthood, the people most impacted by AAOTDs in Canada are those aged between 30 and 49.** In 2021, middle-aged Canadians aged 30-49 represented 27% of the population and over half (52%) of all AAOTDs. Two other cohorts – 20-29-year-olds and 50-59-year-olds – together represent 26% of the population and 38% of AAOTDs.
- **The impact of opioid addiction is not evenly spread, and the concentration is significant.** Geographically, the harms are concentrated in Alberta and BC, and there is a disproportionate impact according to age and sex. Over half of those suffering from opioid harms in Canada are 30-59-year-old men, though in BC the most impacted group is 50-59-year-old-men.
- **Indigenous people in Canada are also over-represented in terms of opioid harms.** In Alberta, First Nations individuals were dying at a rate nearly 7 times that of non-first nations in the first six months of 2020. In BC, between January and June 2021, 14% of overdose deaths were among First Nations peoples despite them representing only

3.3% of the population. First Nations people had an illicit drug-related death rate 4.8 times greater than other BC residents in 2021.

- **Low income and lack of employment were also key drivers of opioid harms.** The BC Coroners Service found that only 35% of those who suffered illicit drug toxicity deaths between August 2017 and July 2021 were employed at the time of their death. Data for BC shows income levels were also correlated with opioid-related mortality and hospitalization, with those in the lowest quintile being 3.8 times more likely to suffer opioid-related mortality and 4.3 times more likely to be hospitalized for opioid-related reasons.
- **Drug addiction often compounds other health issues, with poor mental health a common aggravating factor.** In BC, between August 2017 and July 2021, 62% of people who died of illicit drugs were experiencing mental health issues. Those who die have often been in contact with the health system. Decedents had a higher number of health visits, and 30% had had a previous paramedic attended non-fatal illicit drug related event.

Key drivers of drug deaths

Fentanyl is a synthetic opioid that can be up to 50 times stronger than heroin and 100 times stronger than morphine, but it was not a feature of the drug market even 10 years ago. Fentanyl and its analogues have played an important role in the opioid crisis because they are significantly cheaper to produce per dose and much harder to detect illicit supply routes. This makes them more widespread in illicit drug markets and harder for law enforcement to trace and detect, and it is also more likely that a dose will be too potent and cause people who use these drugs to overdose:

- **The single factor that best explained the distribution of drug harms in Canada, based on published data, was the prevalence of fentanyl.** Though the populations of drug users were highest in Alberta and BC, the difference was not substantial enough to explain why these provinces have approximately double the rate of deaths than Canada as a whole, and eight times the AAOTD rate compared to jurisdictions such as Quebec and Newfoundland.
- **Fentanyl was detected much more frequently in samples seized by law enforcement in Western Canada than in Eastern Canada.** Based on data from Health Canada's Drug Analysis Service (DAS), this indicates a preponderance for more toxic drug supply in these provinces, and marked correlations in other parts of Canada.
- In Alberta, in 2021, fentanyl was detected in 81% of all accidental drug poisoning deaths. In BC between 2019 and 2022, fentanyl was detected in 85% of all illicit overdose deaths. Further, fentanyl detection in BC has risen in tandem with the death rate.

- **Increased harms are not the result of an increase in the user base for illicit drugs.** When considered alongside survey data on self-reported drug use, it appears the increase in opioid-related harms in Canada is being driven by the increased toxicity of the supply, rather than an increase in the number of drug users in the general population.

Other possible drivers of the higher rates of drug harm in Alberta and BC not considered in detail for this report include access to treatment and rates of attrition in recovery services; inward migration of drug users; income and socio-economic inequality; distribution of ethnicities within provinces; housing access and stability; and prescribing and dispensing practice.

Drug crime in Canada

Crime associated with illicit drug markets is a further cause of harm to communities. Compared to twenty years ago, the emphasis in Canada has shifted away from punishing users and sanctioning possession to deter drug use. However, as in the USA, the fentanyl causing overdoses in Canada are supplied by an illegal market where addicted drug users are exploited by organised crime and their international suppliers, who are still subject to serious penalties when they are caught and prosecuted. The current state of this activity is hard to gauge, but our research found:

- **Enforcement against drug crime has reduced in recent years.** For Canada overall, sentencing volumes for drug-related crime have dropped by over 50% in the past decade. Convictions for crime overall in Canada have also dropped, but not to nearly the same extent, indicating a general lessening of criminal justice enforcement against drug offences in Canada during the escalating health crisis of opioid addiction.
- **The majority of reported opioid-related offences occur in BC.** In 2021, BC – comprising approximately 13% of Canada’s population – had nearly half of all police-reported opioid trafficking, production, and distribution (TPD) incidents in Canada (drug offences that do not encompass personal possession). BC’s rate of opioid-related police recorded incidents in 2021 was more than four times the recorded incident rate in Alberta.
- **Despite the high volume of drug violations in BC, criminal charges for these offences are low, and appear disconnected from incident rates.** By contrast, charges for serious drug-related crimes are much higher in Alberta, and increases in charges broadly tracked the trend in incidents, with rising rates after 2012 and reductions more recently.
- **In BC, drug possession incidents have increased significantly in the last decade,** and TPD incidences have also increased after 2016, but charge rates for both categories have remained broadly flat or even fallen over the same period, suggesting a lack of interest by law enforcement in traditional prosecution for these offences.

- **Crime incident data confirms BC is the epicentre of drug-crime in Canada**, reporting 57 opioid-related incidents per 100,000 population, compared to 13 per 100,000 in Alberta. Vancouver also has much higher numbers of drug-related violations than anywhere else, and significantly higher than large cities like Calgary or Edmonton.
- **In BC, drug users caught in possession have not been routinely charged by police in recent years, foreshadowing the formal decriminalisation of drug possession** in BC that came into effect on 31 January 2023. However, this does not seem to reflect a law enforcement focus on upstream interdiction instead. When considering the more serious drug offences involved in supply and profiting from the illicit market, the gap between TPD incidents and charges in BC, however, is significant (80 per 100,000 incidents vs. 22 per 100,000 charges in 2019). In contrast, Alberta charges far more people for TPD relative to the incidents detected (46.6 per 100,000 incidents vs. 38 per 100,000 charges).

Provincial comparison

Drug addiction affects every community but there is also a geographic concentration in western Canada. For more than a decade, Alberta and BC have been Canada's opioid hotspots, but there are some differences in how the crisis has presented in the two provinces.

- **British Columbia has a much longer history with substance harms than Alberta, and volume of harm is much higher in BC, measured according to deaths and hospitalisations.** However, the rise in AAOTDs in Alberta during the pandemic has been steeper relative to its pre-pandemic levels.
- **BC's opioid addiction crisis skews older and more male – for reasons that have not been closely studied.** On age, Alberta is similar to the Canadian average, with 30-49-year-olds representing 30% of the population and 54% of deaths. Those dying in BC, however, tend to be older: 50–59-year-olds represented only 13% of the province's population in 2021, but account for 28% of all AAOTD deaths.
- **The ratio of male to female deaths in Alberta was in line with national averages, but was more acute in BC, where 80% of all AAOTDs in 2021 were men.** This could indicate that the resident base of drug users in BC – which itself may explain the elevated number of deaths there - is being supplemented by inward migration from other provinces.
- **The impact on emergency dispatch caseloads from the addiction crisis is much higher in BC.** Looking at ambulance data, Emergency Medical Service (EMS) responses to suspected opioid-related overdoses are highest in BC (24,152 responses) – three times the volume of such incidents in Alberta (8,215 responses).

Policy Responses in Western Canada

Strategies and municipal initiatives have been launched to address the crisis, beginning with the landmark 'Four Pillars' strategy published by the City of Vancouver in 2000. Major funding commitments have been made by the provincial governments; however, the addiction crisis continues in both provinces, with 2022 being the second-deadliest year ever for drug harms in both jurisdictions.

Both Alberta and BC deploy elements of harm reduction along with recovery. This report found that there was a significant degree of overlap between the policy approaches and services provided by the two provinces, however the policy framing and direction are not the same:

- **Both provinces support harm reduction activity such as Naloxone distribution to emergency services and community providers.** In recent years, there has been a dramatic upswing in naloxone kit distribution in Alberta where in 2022 there was approximately 135,330 kits distributed compared to only 32,140 in 2017, and 6,181 in 2016. In BC, over one million naloxone kits were distributed between 2012 and 2021.
- **Both provinces also fund and permit syringe exchange programs, and supervised consumption sites (SCS) in multiple locations,** with Vancouver being the location for the first such facility that opened in 2003.

However, there are some notable differences between Alberta and British Columbia:

- **The provincial government and health providers in BC have placed a stronger emphasis on harm reduction,** with 'safe supply' for users of illicit drugs, and the recent decriminalization of drug possession, approved by the Federal Government, in order to further reduce stigma and protect drug users from enforcement.
- **Alberta has weighted their response more towards investment in rehabilitation beds and spaces, such as therapeutic communities.** Alberta has also not adopted the models of 'safe supply' – including proposals for automated dispensing – that have been setup in BC. In addition to investments in treatment and new community dispensing of licensed medicines like Sublocade, the province has also committed capital to building new recovery communities.
- **Published data implies that there is more residential recovery bed provision in Alberta than BC today,** but comparisons are hampered by a lack of consistent recording. It is currently not possible to compare the two provinces on the politically salient issue of treatment and recovery outcomes based on the available data.

- **The most apparent difference in policy between the provinces is BC's recent decriminalisation of substance possession.** Alberta, while, bolstering funding and support around its recovery model, is maintaining current approaches to law enforcement around illicit drugs.
- **Enforcement appears to be a more integral part of the response in Alberta,** although the province has also seen a reduction in its incident caseload. The ratio of serious drug incidents to charges was nearly 1:1 in Alberta, compared to BC where the ratio of incidents to charges was about 4:1.

There is a lack of policy innovation in BC on the issue of drug addiction, although a growing political interest in finding sustainable solutions. Alberta's nascent 'Recovery-oriented System of Care' model has new investment and political leadership but has not yet had time to fully deliver results, with recovery communities still being constructed.

As the implementation of these neighbouring strategies advances, ongoing scrutiny of their impacts and effectiveness is required to inform policymakers across Canada and other jurisdictions. Close engagement between policymakers and service leads in both provinces will be important to allow sharing of learnings, especially in those areas where provincial practices begin to diverge.

Headline conclusions

Despite the urgency of this crisis, and the many years to make the necessary investments, some basic information architecture is still not in place to support policymakers or to guide those practitioners on the ground working to help users suffering from drug addiction. This means that the impact of many policies in Canada to reduce harms and to aid recovery cannot be properly evaluated.

Canada's experience could provide lessons to other countries like the USA, but only if governments at all levels commit to a consistent suite of reporting measures that accurately describes the progress being made, and one that counts more than caseloads, inputs, or a series of 'harm' metrics.

Given the significant public funds that continue to be spent, it is time for provincial and federal policymakers to urgently agree upon what success looks like and how it will be measured. In the absence of robust metrics around treatment and pathways for recovery, the 'harm' metrics around deaths and hospitalisation become the only marker of policy progress.

Of the two provinces studied for this report, Alberta is currently experiencing a reduction in key addiction-related harms; however, it is based on two quarters of data, and would need to be sustained through 2023 to represent an established trend. Our research indicates that Canada overall, and BC in particular, is not yet showing the progress that the public and those impacted by drug addiction deserve.

Widespread public concern about this challenge is likely to continue and as death rates remain high, more transparency, innovation and new policy responses are therefore needed. The current political attention on how two provinces are choosing to respond to the opioid addiction crisis provides a window of opportunity to embrace new solutions with focused political leadership in order to finally see Canada's harmful trends around opioid addiction reversed.

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Foreword

The United States and Canada continue to experience high rates of opioid-related mortality and other harms associated with opioid and drug misuse. As neighbouring jurisdictions, these two countries have faced similar challenges in respect of over-prescribing of opioids, and the problematic impact of new illicit substances in the community, such as fentanyl.

Canada's opioid addiction crisis has been mounting for two decades, and the COVID-19 pandemic has exacerbated the health harms, with rates of drug mortality in areas like Greater Vancouver in 2022 as high as the worst affected parts of the USA. Despite very different healthcare models, both countries have endured a level of adverse population impact from drug addiction that has not been experienced in other developed nations.

Two decades ago, the City of Vancouver in British Columbia set out their four-pillar strategy (harm reduction, prevention, treatment and enforcement) to address drug addiction and associated challenges, and the province has attempted to be a leader in how it innovates to respond to the evolving crisis ever since. It was outside the scope of this project to evaluate the efficacy of interventions over that period, but nonetheless a clear conclusion is that the collective impact of drug harms has significantly increased since that comprehensive strategy was announced.

More recently, opioid addiction was declared a 'public health emergency' in BC in 2016, and although the nature of the problem remains essentially unchanged, interventions since that time to address the challenge have not reduced the societal impact in communities. Judged only by one key metric, the scale of the harms to individuals in BC has actually grown significantly – with the number of deaths doubling by 2022 compared to when the emergency was first declared.

Drug policy failure doesn't just harm people who use drugs. The collateral consequences are myriad, and include crime, family violence and divorce, community disorder, degraded public spaces, lost business investment, and depressed tax revenue. As such, the wider public is entitled to challenge public health and safety approaches that policymakers have adopted if they appear to be limited in impact, or potentially exacerbating the problem.

A generalised commitment to 'harm reduction' predominates in Canada, and as such, key metrics are viewed more narrowly as a collection of statistics referring to negative outcomes and harms experienced by individuals who use drugs. This makes the wider societal impact of drug addiction and the harm reduction policies adopted in response to it, much harder to track.

For example, the evidence base in criminology is clear that addiction drives much offending behaviour, and that a minority of offenders are responsible for a disproportionate amount of crime, but rarely does research attempt to quantify the public impact and cost of elevated crime levels associated with drug-addicted offenders or the continuation of addiction in these populations.

A narrow focus on 'harm' to the individual user also provides no framework for measuring success in line with what the relatives or friends of those suffering from drug addiction might want as an outcome for their own loved one – that is, to escape addiction and to desist from behaviour that may lead to premature death.

There is an emerging perception in the media and public debate that the strategies adopted in Canada to address the problem have not yielded sustained improvements across a range of key metrics. The result has been an increase in public concern and political attention on the issue, and there is a renewed debate about the merits of different policy responses in Canada.

In recent months, the salience of this issue has increased, with both BC and Alberta seeking to justify and promote their respective approaches and their record to date. There is however an ongoing lack of good data on key outcomes and even a consensus on what success would look like in this policy arena.

There is a general acceptance that the harms inflicted by drug misuse, combined with mental health and homelessness, are 'wicked' problems requiring complex and multi-layered responses. In this respect, drug addiction and its consequences are re-emerging as a key test of the effectiveness of evidence-based urban policymaking in cities across North America. What can the situation in two of Canada's worst affected provinces teach us?

The concentration of this crisis in Western Canada is clear, with BC and Alberta comprising half (49%) of all opioid-overdose deaths in 2022. Below the provincial level, there is a further geographic concentration in major urban areas, even if victims of opioid overdoses can be found in small towns and rural communities all across Canada. There is also a strong perception that BC's crisis is highly concentrated not just in one city (Vancouver), but in one neighbourhood of that one city centre – the Downtown Eastside.

In Canada more generally, attention of politicians has tended to be dominated by a range of policy and legislative responses focused on drug users – rather than drug markets or suppliers – that are intended to reduce infectious disease acquisition, accidental deaths and overdoses. In addition, there has been new steps taken in recent months to further

reduce 'stigma', including the enactment of decriminalisation of drug possession in British Columbia. This is the first time that anywhere in Canada has adopted an approach pioneered in just a few other jurisdictions, most famously by Portugal.

This research project, commissioned in Fall 2022, is designed to give an overview of the current drug addiction crisis in Canada, with a special focus on two neighbouring provinces – British Columbia and Alberta – and to describe its key features. The goal of the project was to outline the scale and nature of the drug harms affecting these two provinces, to outline the policy approaches adopted by both provincial governments, and to explore the most likely drivers of the high death and hospitalisation rates.

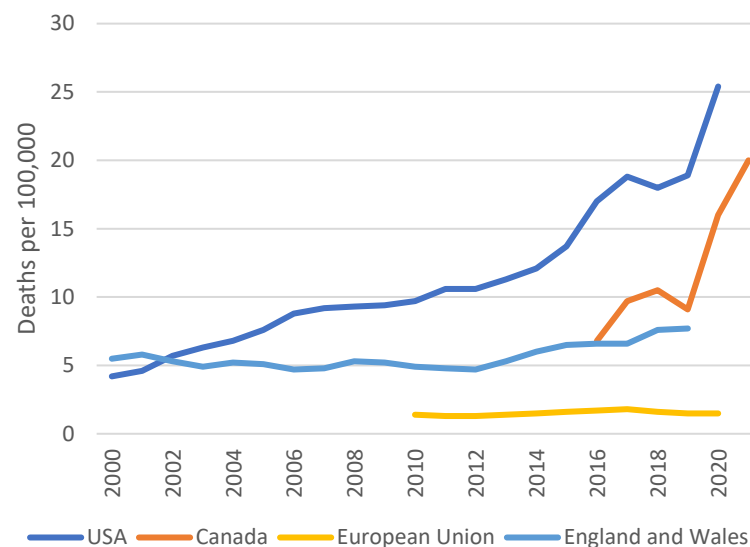
It was outside the scope of this report to evaluate the efficacy of different policy responses adopted by each province, or to make recommendations for how policymakers in both places might respond. Our recommendations – outlined in the Conclusion – are restricted to those that arise from the research undertaken and relate to how the response to the challenge might be understood and evaluated more effectively in future.

In terms of years of productive life lost, the sheer scale of the drug addiction challenge makes it the most critical health crisis for Canada. It demands a sober, non-ideological assessment of what policy responses are working, which interventions are worth trialing, and how we should judge success when it comes to public policy around drug addiction. This report provides a summary of where we begin in pursuing answers to those critical questions.

Introduction

Canada is in the midst of an opioid overdose crisis. Though there is not reliable country-wide data on overdose harms dating back further than 2016, British Columbia's death rate due to illicit drugs rose from 5.8 per 100,000 in 2000 to 44.2 per 100,000 in 2021.¹ This is comparable to some of the worst affected states in the US. In Canada, the number of accidental apparent opioid toxicity deaths (AAOTDs) per 100,000 was 20.2 per 100,000 in 2021.² For comparison, in 2019, England and Wales had a drug-related mortality rate of 7.7 per 100,000,³ and in 2020 the European Union had a drug-induced mortality rate of 1.5 per 100,000.⁴

Opioid Overdose Deaths* in Canada compared to select jurisdictions



* All countries other than Canada measure total drug-related mortality

Fig. 1. Data sourced from the BC Centers for Disease Control (2023), Office of National Statistics (2020), Government of Canada (2022) and European Monitoring Centre for Drugs and Drug Addiction (2022).

¹ *Illicit Drug Toxicity Deaths in BC: January 1, 2012—December 31, 2022.* (2022). British Columbia Coroners Service.

² *Opioid- and stimulant-related harms.* (2022). Government of Canada.

³ *Deaths related to drug poisoning in England and Wales.* (2020). Office for National Statistics.

⁴ *Frequently asked questions (FAQ): Drug overdose deaths in Europe.* (2022). European Monitoring Centre for Drugs and Drug Addiction.

The only G7 country that has a similar rate of overdose deaths is the United which had 25.4 drug overdose deaths per 100,000 in 2020 (age-adjusted rate).⁵

In 2020 and 2021, there were 13,815 deaths attributed to accidental opioid poisoning in Canada.⁶ This is almost half the death toll that COVID-19 had over the same period (29,985).⁷ Considering the relative ages of those killed, however, the opioid crisis has caused a far greater loss in years of life. COVID-19 caused approximately 90,000 lost years of life in 2020 and 2021.⁸ Over that same period, opioids caused nearly 450,000 lost years of life (see appendix A).⁹

Life-years lost - COVID-19 vs. Accidental Opioid-Related Overdoses

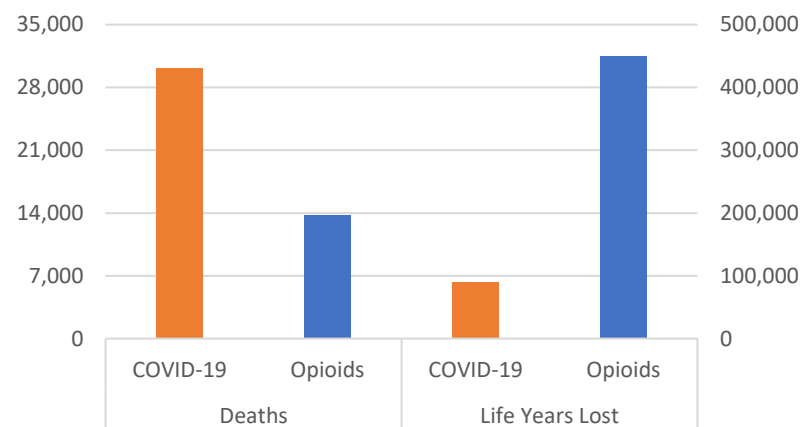


Fig. 2. Data sourced from Government of Canada (2022) and Public Health Agency of Canada (2022).

The crisis has gotten so severe that it halted the increase in Canadian life expectancy between 2016 and 2017, the first time that Canadian life expectancy has decreased in over four decades.¹⁰

⁵ CDC Wonder. (2023). CDC Centers for Disease Control and Prevention.

⁶ Opioid- and stimulant-related harms. (2022). Government of Canada.

⁷ COVID-19 daily epidemiology update. (2020). Public Health Agency of Canada.

⁸ COVID-19 daily epidemiology update. (2020). Public Health Agency of Canada.

⁹ Opioid- and stimulant-related harms. (2022). Government of Canada.

¹⁰ Changes in life expectancy by selected causes of death, 2017. (2019).

Addressing opioid addiction in BC and Alberta

Though opioid overdose deaths have been increasing across the country, they have been most concentrated in BC, Alberta, and Ontario. BC's AAOTD rate in 2021 was more than double the national average, and Alberta was not far behind at 36 per 100,000. Ontario had the most total AAOTDs (2,772) but had a lower death rate of 19.4 per 100,000. Between them, BC and Alberta accounted for only 25% of the population but 49% of AATODs (3,804). To put this another way, 1 in every 7 Canadians live in BC and 1 in every 9 live in Alberta, but 1 in every 4 AAOTD in 2021 was a British Columbian and 1 in every 5 is an Albertan. The share of AAOTDs held by Alberta and BC has actually decreased slightly from 54% in 2016.¹¹

In response to the crisis, both BC and Alberta have made new investments in addiction services. BC's 2021 budget earmarked \$0.5 billion for mental health and addiction services over the next three years¹² and its 2023 budget marked over a billion¹³, while Alberta's 2022 budget included \$1 billion for addiction and mental health care with an additional \$60 million over three years to build a recovery-oriented system of care.¹⁴

¹¹ *Opioid- and stimulant-related harms*. (2022). Government of Canada.

¹² Grochowski, S. (2021). *B.C. announces historic half-billion-dollar funding for overdose crisis, mental health*. Maple Ridge - Pitt Meadows News.

Alberta and BC's Share of Canada's AAOTDs, 2016 and 2021

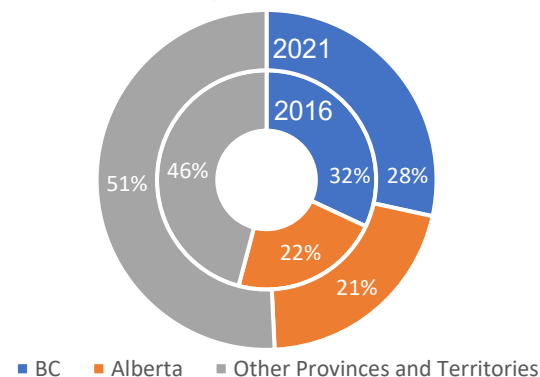


Fig. 3. Data sourced from Government of Canada (2022).

In recent months, certain policy differences between Alberta and BC have become politically salient in Canada. This report found there to be similarities between the two provinces' strategies, but also significant differences.

Both provinces support harm reduction activity such as Naloxone distribution to emergency services and community providers, syringe exchange programs, and licenced overdose prevention provision (SCS) in multiple locations to provide drug users with a safer, regulated environment to consume. Each province has also shifted away from police enforcement against drug possession

¹³ More than \$1B announced for mental health, addictions support in 2023. (2023). CBC.

¹⁴ *Toward an Alberta model of wellness*. (2022). Government of Alberta.

and towards diversion to treatment and education for drug users.

BC's approach places a stronger emphasis on stigma reduction and decriminalization, with a greater policy focus on harm reduction, conceptualised as overdose prevention and access to safer supply (i.e., prescribed medical alternatives to toxic illegal drugs) including through automated dispensing. In addition, BC has with federal consent – as of 31 January 2023 – removed criminal penalties for possession of illicit drugs.¹⁵ Alberta, in contrast is pursuing a 'recovery-oriented system of care'¹⁶ and has emphasized the importance of community support, treatment pathways, and more regulation over and higher standards for SCS.¹⁷ There also appears to be a generally higher rate of enforcement against drug trafficking, production, and distribution in Alberta, although arrest rates for possession have dropped in both provinces in the last decade.

Alberta and BC are relatively similar geographically and culturally, are approximately equal in population, and the factors driving their respective opioid crises seem comparable. This makes them interesting neighbours for a jurisdictional comparison; however, the difference in policy approach is still developing. In time, the outcomes achieved in AB and BC will provide an important

¹⁵ Judd, A., & Zussman, R. (2022, May 31). *B.C. becomes first province to remove criminal penalties for possession of some hard drugs*. Global News.

dimension to the political debate over the right response to the problem Canada-wide. For now, it is too soon to analyse the relative progress of each province as it attempts to address opioid harms; nevertheless, this report will draw attention to some key differences that should be monitored going forward.

¹⁶ *Toward an Alberta model of wellness*. (2022). Government of Alberta.

¹⁷ *Impact: A Socio-Economic Review of Supervised Consumption Sites in Alberta*. (2020). Government of Alberta.

CHAPTER 1: Defining the Problem

In considering the current state of Canada's opioid crisis, for this chapter we summarise the role of opioids in society, and how they may cause harms, either in isolation, or in conjunction with other addictive substances.

Opioids: their function and role

Opioids are a group of analgesic (pain relieving) drugs commonly used in clinical practice. In addition to providing pain relief, opioids trigger the release of endorphins, reducing an individual's perception of pain and creating feelings of pleasure. Importantly, opioids also slow multiple biological functions, including breathing, which is why they can be fatal.

Opioids are used in both legal and illegal contexts. Legal opioid use is restricted to medical contexts in Canada, as it is in most countries, and a range of licensed medical products contain opioids. Individuals may also use opioids illegally for purposes of managing physical or psychological pain or for the pleasurable affects of the drug itself. People can also combine their use of

prescription opioids with other addictive substances or opioids sourced from the illicit market.

Though certain opioids are primarily used in an illegal context (e.g., heroin), for many types there is no chemical difference between the substance being used in legal and illegal contexts (e.g., fentanyl). Sometimes drugs may even be sourced from the same production facilities.¹⁸

Some types of opioids are more potent than others. Fentanyl is a synthetic opioid that can be up to 50 times stronger than heroin and 100 times stronger than morphine.¹⁹ Fentanyl and its analogues have played an important role in the opioid crisis because they are significantly cheaper to produce per dose. This makes them more widespread in illicit drug markets, but it is also more likely that a dose will be too potent and cause people who use these drugs to overdose.

There are drugs in Canada that kill more people per year than opioids. Purely in terms of deaths, the two most lethal substances in the country are alcohol and tobacco.²⁰

¹⁸ Felbab-Brown, V. (2020). *Fentanyl and Geopolitics*. Brookings Institution.

¹⁹ *Fentanyl Facts*. (2022, February 23). Centers for Disease Control and Prevention.

²⁰ *Canadian Substance Use Costs and Harms*. (2020). Canadian Centre on Substance Use and Addiction.

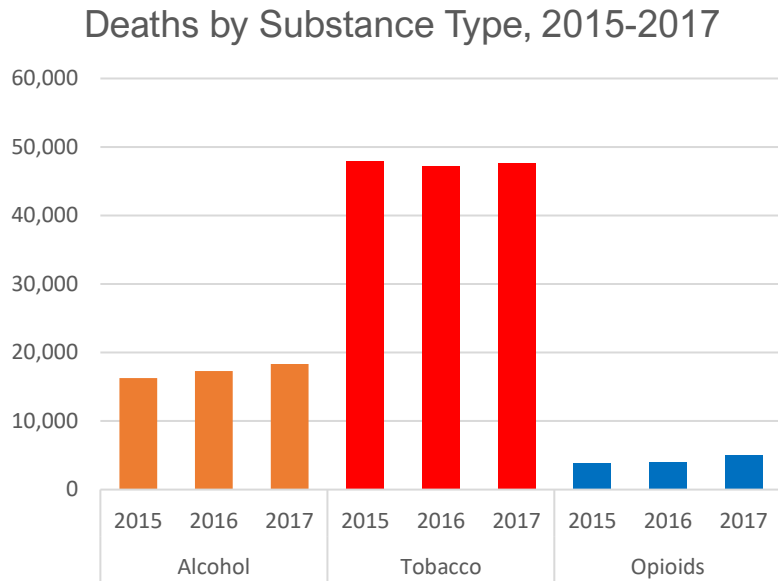
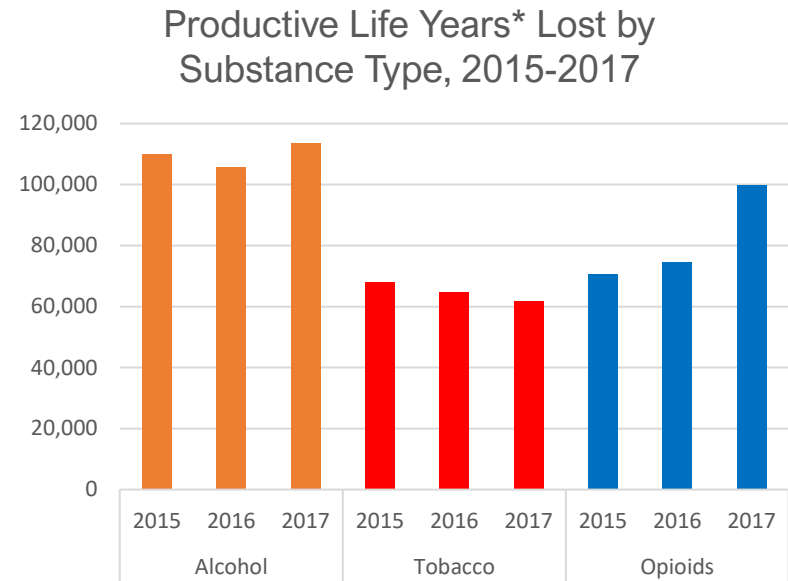


Fig. 4. Data sourced from Canadian Centre on Substance Use and Addiction (2020).

Nonetheless, those who overdose on opioids are usually far younger than those who die of alcohol or tobacco, because the chronic health impacts of alcohol or tobacco consumption manifest over decades of use. Opioids are responsible for more life years lost than tobacco, and nearly as many life years lost as alcohol, despite not having the same level of general use in the population.²¹

²¹ *Canadian Substance Use Costs and Harms*. (2020). Canadian Centre on Substance Use and Addiction.



* Productive Life Years lost defined as years lost before the age of 65

Fig. 5. Data sourced from Canadian Centre on Substance Use and Addiction (2020).

Benefits and Harms

Like many other drugs in modern society, opioids can be both beneficial and harmful. They are a valuable tool for the management of acute and chronic pain, and have clear clinical efficacy and well-established prescribing guidelines for use. At the same time, opioids are an addictive substance, and rapid expansion of prescribing by the medical profession occurred before some of the

risks of addiction were properly understood. When someone takes opioids, their body can become dependent, making it more challenging to desist, or to reduce their use of the drug over time. Taking too strong a dose can have immediate, negative health consequences, up to and including death.

The policy debate about addiction is complicated by the nature of the behaviour. Unlike most other illnesses or adverse health conditions (e.g., cancer), opioid addiction makes users complicit in their own injury, and unlike most diseases, subjects do derive some enjoyment from the use of opioids, which acts as a strong incentive to continue using.²²

The debate over how to address drug addiction of all kinds is a legitimate matter of public policy because of the harms suffered by users, but also because of the wider societal impact of the behaviour. Opioid use may not only be harmful to the person themselves – impacting their employability, housing, and relationships with dependents – but can also cause harm to those around them. Friends and family may struggle to help users manage their addiction, addicts may resort to theft or fraud to sustain their addiction, children may suffer neglect or separation, and the broader public may suffer from the crime and disorder impact of drug addicted populations, including degradation of the public realm and drug paraphernalia

proliferating in parks or other public spaces. These broader societal impacts can be exacerbated if drug using populations are concentrated in certain urban neighbourhoods where their behaviour is highly visible and especially when combined with open drug markets and street dealing of illicit drugs.

Risk and Context

Risk of harm from opioids is highly dependent on why and how opioids are acquired. The safest context for mitigating the risks associated with opioids is when they are used for medical purposes for in-hospital treatment. The patient does not have unsupervised access to opioids, the opioids are unlikely to be diverted to an unintended recipient, and the treatment is closely monitored and is usually time-limited.

²² Humphreys, K. (2022). *Testimony to the Oregon Senate Committee on Judiciary and Ballot Measure 100 Implementation*.

Risk contexts for opioid use

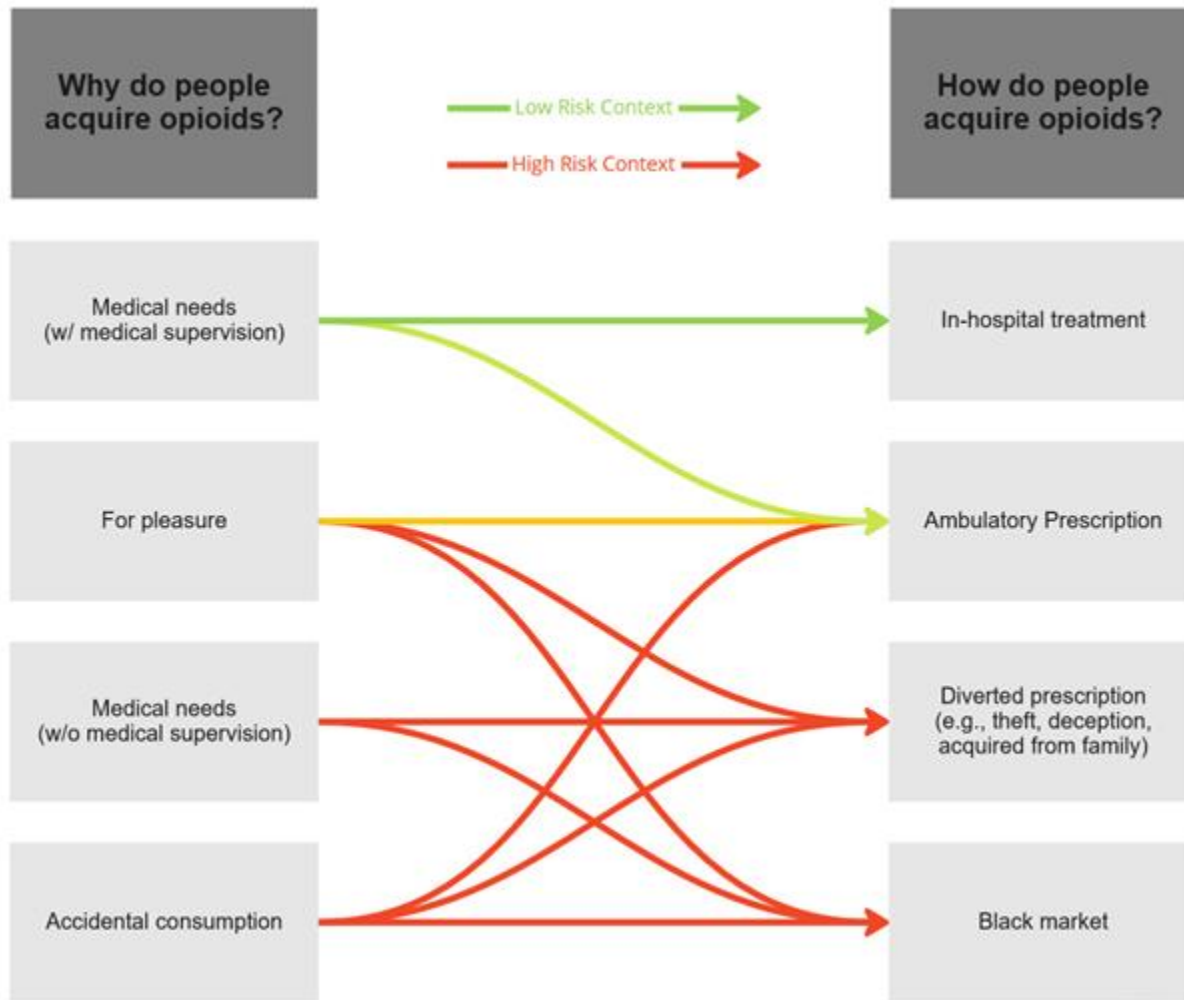


Fig. 6. Risk is an interaction between Why and How.

Despite being one of the largest consumers of opioids in the world, Germany has relatively low overdose rates, and this has been attributed to the fact that opioids are primarily prescribed in-hospital and in other 24-hour care settings.²³

Opioids prescribed by medical practitioners are also relatively low risk. The majority of people who are prescribed opioids use them for their intended purpose, and benefit from the resulting pain relief; however, the opioid crisis in the USA and Canada had its origins in the over-prescribing of regulated opioid treatments. The lower the threshold for opioid prescriptions, the greater the risk for the recipient and those around them.

It is significantly riskier to use opioids for pleasure, even if the opioids being used are prescription opioids. Like many other substances (alcohol, cannabis, nicotine), opioid use carries a number of potential health implications, such as addiction, liver damage, and overdoses. The risk of using opioids for pleasure goes up considerably if the opioids are diverted from an intended recipient or otherwise acquired via the illicit market or other unregulated source, where dosage and purity are not controlled or guaranteed. Self-medicating, either with diverted prescriptions or illegally sourced substances, is risky for these same reasons.

²³ Felbab-Brown, K. H., Jonathan P. Caulkins, and Vanda. (2020). *What the US and Canada can learn from other countries to combat the opioid crisis* [Brookings].

CHAPTER 2: History of Canada's Health Crisis

Overview

Canada's opioid addiction crisis can be traced back two decades, and divides into four successive waves, each representing a significant transition or evolution with an escalation of harms each time. The opioid crisis in the United States has followed a similar trajectory, and has been included in the below table for comparison. Note that these phases are a useful heuristic, rather than definitive and discrete categories.

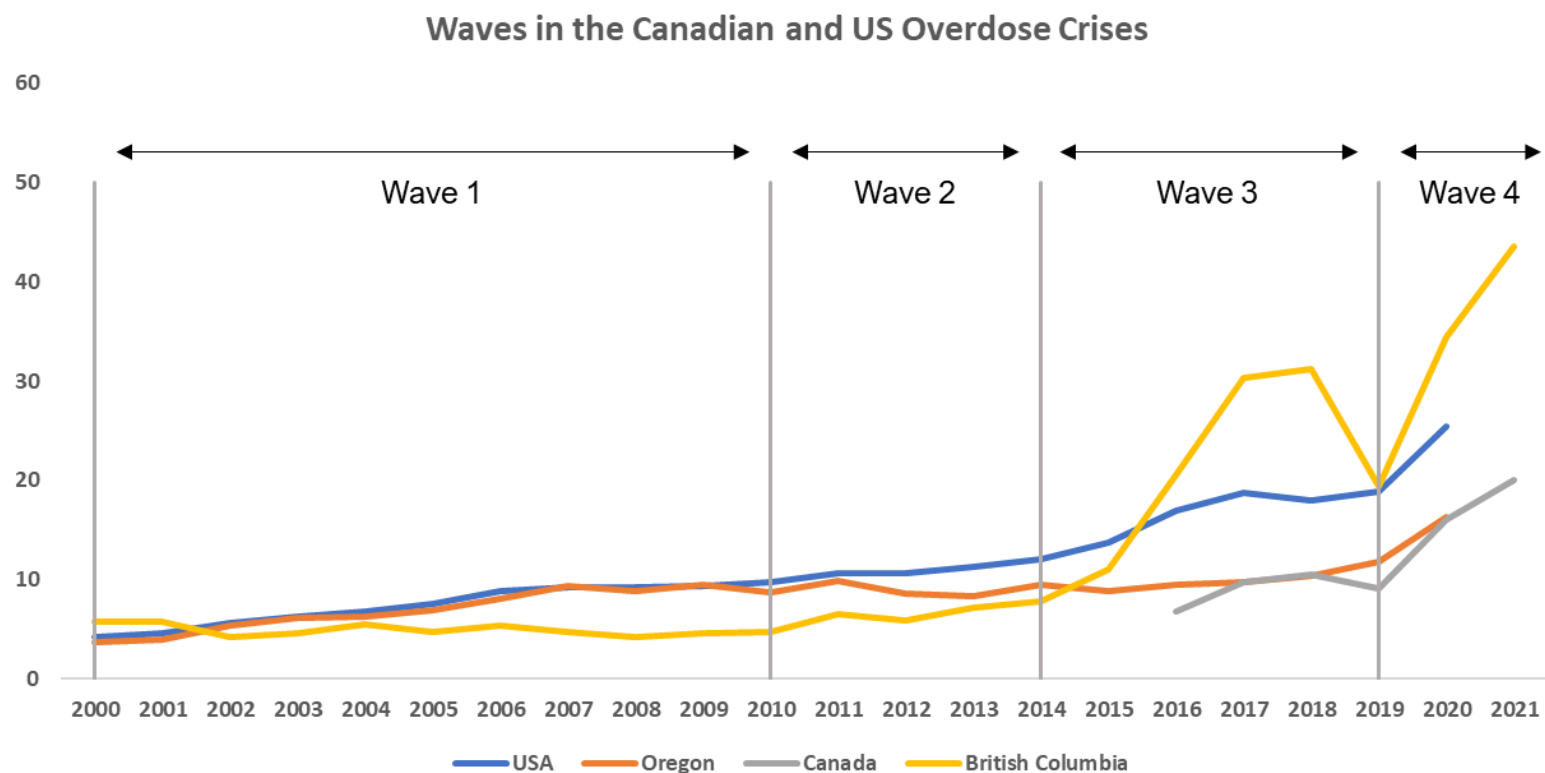


Fig. 7. Data sourced from CDC Centers for Disease Control (2023), Government of Canada (2022), and BC Coroners Service (2022).

Wave 1 (1980s – 2010)

The reason that Canada and the USA have such significant levels of opioid harms compared to other countries has its origins in their relatively high consumption of prescription opioids. Though consumption has decreased in recent years, Canada was once the second-largest consumer of opioids in the world.²⁴ Currently, Canada is the fourth largest per-capita consumer of controlled opioids, behind only Germany, Iceland, and the USA.²⁵

This disproportionate consumption of opioids began as far back as the 1980s, when opioid manufacturers began campaigning for the increased utilization of opioids in healthcare.²⁶ Since the 1980s, the volume of opioids sold to hospitals and to pharmacies for prescription increased by more than 3,000%.²⁷ As controlled opioid consumption increased, so did the misuse of opioids. Patients either used prescriptions for non-medical purposes, or prescriptions were diverted from their intended

²⁴ Lisa, B., & Jessica, H. (2018). *Evidence synthesis - The opioid crisis in Canada: A national perspective*. Health Promotion and Chronic Disease Prevention in Canada : Research, Policy and Practice, 38(6), 224–233.

²⁵ Richards, G. C., Aronson, J. K., Mahtani, K. R., & Heneghan, C. (2022). *Global, regional, and national consumption of controlled opioids: A cross-sectional study of 214 countries and non-metropolitan territories*. British Journal of Pain, 16(1), 34–40.

recipients. This was the first wave of the opioid crisis in Canada and the USA.

It was during this period, in 2001, that Vancouver implemented its four-pillar drug strategy of Prevention, Treatment, Enforcement, and Harm Reduction, which guided the approach in the early stages of what would later become a much more serious public health crisis.²⁸

Wave 2 (2010 – 2014)

The first wave resulted in a large base of opioid users in the general population, even if the majority were not suffering from addiction or abusing other substances. The second wave was characterized by the rise of unregulated opioids from the illicit market, as dealers responded to the demand for cheap and potent opioids such as heroin and began to expand distribution.

This trend may have been encouraged by measures taken by health authorities in Canada and the USA to limit the supply of medical opioids and tackle over-prescribing by some clinicians in an effort to reduce the number of

²⁶ Meldrum, M. L. (2016). *The Ongoing Opioid Prescription Epidemic: Historical Context*. American Journal of Public Health, 106(8), 1365–1366.

²⁷ Lisa, B., & Jessica, H. (2018). *Evidence synthesis - The opioid crisis in Canada: A national perspective*. Health Promotion and Chronic Disease Prevention in Canada : Research, Policy and Practice, 38(6), 224–233.

²⁸ *Framework for Action: A Four Pillar Approach to Vancouver's Drug Problems*. (2001). City of Vancouver.

people becoming addicted. According to one source, medical opioid consumption in Canada declined by 36.8% between 2009 and 2019.²⁹ Though this drop in medical opioid consumption may have reduced the number of people suffering addiction for the first time, it may also have pushed existing dependent users to seek out riskier alternatives. This likely consequence was acknowledged at the time and became part of the policy response to over-prescribing.

Wave 3 (2014-2019)

The second wave began transitioning into the third wave as the toxicity of the drugs in the illegal market began to increase, with deaths rising accordingly. In BC, in 2012, fentanyl – at that time, the most potent opioid in circulation – was detected in about 5% of all illicit drug toxicity deaths. BC Coroners’ Service data shows the rapid increase in subsequent years, with a sustained rise in fentanyl detection among deaths over the past decade).³⁰

When considered in tandem with the rise of deaths in BC (see below) it is difficult to dispute that the increased availability of fentanyl has resulted in a significant increase in fentanyl consumption and fentanyl-related

²⁹ Jayawardana, S., Forman, R., Johnston-Webber, C., Campbell, A., Berterame, S., Joncheere, C. de, Aitken, M., & Mossialos, E. (2021). *Global consumption of prescription opioid analgesics between 2009-2019: A country-level observational study*. *EClinicalMedicine*, 42.

deaths. More evidence regarding the role of fentanyl is reviewed in section 4.

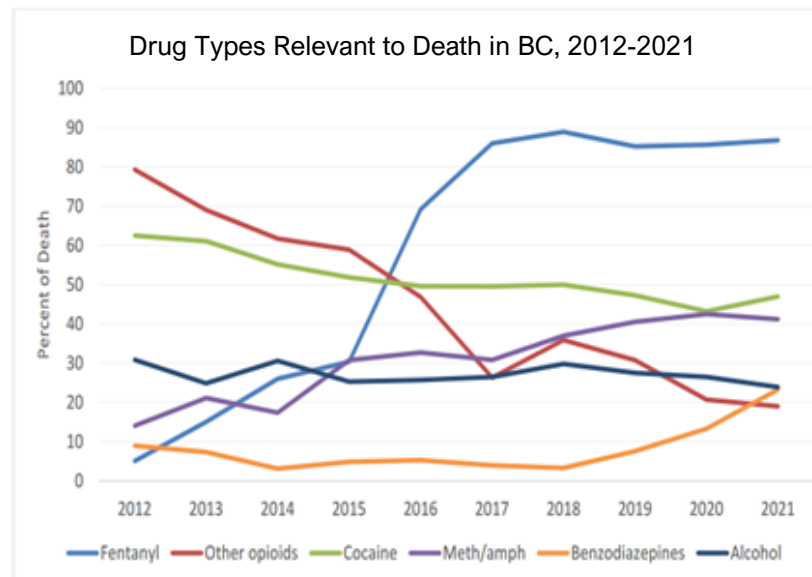


Fig. 8. Drug Types Relevant to Death, 2012-2021. From *Illicit Drug Toxicity Deaths in BC: January 1, 2012—October 31, 2022*. (2022). British Columbia Coroners Service.

It is unclear why deaths dropped between 2018 and 2019. One possibility is that use declined because supply was restricted due to regulatory changes in China that banned the production and sale of some types of fentanyl without a license.³¹ However, the decline in deaths would soon reverse.

³⁰ *Illicit Drug Toxicity Deaths in BC: January 1, 2012—October 31, 2022*. (2022). British Columbia Coroners Service.

³¹ Felbab-Brown, V. (2020). *Fentanyl and Geopolitics*. Brookings Institution.

It was in 2016 that the provincial government in BC declared a state of medical emergency regarding drug toxicity deaths, and greater political attention on the issue and government funding began.³²

Illicit Drug Toxicity Deaths by Year in BC									
2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
270	334	369	529	994	1495	1562	987	1774	2306

Wave 4 (2020 – Present)

With the onset of the COVID-19 pandemic, the number of AAOTDs in Canada began to increase again, reaching their highest levels ever in 2021. The rise in AAOTDs would have been caused by a confluence of factors, but three of what are likely the most prominent drivers are listed below.

First, social distancing and isolation would facilitate a riskier environment for drug use. As will be discussed in section 4, most AAOTDs happen while someone is alone in a private residence.

Second, the stress of the pandemic caused increase drug use. Surveys conducted by the Canadian Centre on Substance Use found that drug users, particularly those with a history of substance use disorder, reported

increased stress and substance use with the onset of the COVID-19 pandemic.³³

Third, some health and treatment services were more difficult to access throughout the pandemic. For example, one study found that many users had difficulty accessing their prescriber to access Opioid Agonist Therapy (OAT) medication.³⁴

What Comes Next?

Across Canada, AAOTDs have fallen from their record 2021 high, but not by much. Both BC and Alberta are now making significant investments in tackling the crisis.

In the next section, we will review data on the current state of the crisis in Canada overall, and then the two worst affected provinces of Alberta and British Columbia.

³² Provincial health officer declares public health emergency. (2016). Government of British Columbia.

³³ Mental Health and Substance Use During COVID-19. (2023). Canadian Centre on Substance Use and Addiction.

³⁴ Moallef, S., DeBeck, K., Fairbairn, N., Cui, Z., Brar, R., Wilson, D., Johnson, C., Milloy, M.-J., & Hayashi, K. (2022). *Inability to contact*

opioid agonist therapy prescribers during the COVID-19 pandemic in a Canadian setting: A cross-sectional analysis among people on opioid agonist therapy. *Addiction Science & Clinical Practice*, 17(1), 73.

CHAPTER 3: Data

This project describes the current state of Canada's opioid crisis based on quantitative analysis of official (federal and provincial) data sources. Some municipal data sources also exist, but they are not widespread and are not recorded with standardised definitions or to the same level of assurance.

Deaths, Hospitalizations and EMS

Canada-wide data regarding opioid-related deaths and hospitalization only begins in 2016. British Columbia does publish data regarding illicit drug toxicity deaths going as far back as 1996, but there is not comparable historical data from other provinces (see fig. 7, pg. 26). To facilitate comparisons between Canada-wide and BC data, this report will primarily refer to accidental apparent opioid toxicity deaths (AAOTDs), which excludes suicides. This does not significantly impact the analysis because intentional opioid toxicity deaths represent only a small portion of all opioid toxicity deaths. In 2021, only 3% (268 out of 7993) of all apparent opioid toxicity deaths were identified as non-accidental.³⁵

³⁵ *Opioid- and stimulant-related harms.* (2022). Government of Canada.

³⁶ *Opioid- and stimulant-related harms.* (2022). Government of Canada.

³⁷ *Population and dwelling counts: Canada, provinces and territories.* (2022). Statistics Canada.

The health crisis of drug addiction in Canada is concentrated in BC, Alberta and Ontario. In 2021, there were 7,725 AAOTDs in Canada. 49% of those deaths (3,804)³⁶ occurred in Alberta and BC, despite the two provinces representing only 25% of Canada's population.³⁷ Ontario had the highest number of AAOTDs (2,772), but had a comparably low death rate of 19.4 per 100,000 compared to Alberta's 36.2 and BC's 41.9.³⁸ The Yukon technically had the highest AAOTD rate at 53.2 per 100,000, but due to its low population this represented a total of only 23 deaths.³⁹

³⁸ *Opioid- and stimulant-related harms.* (2022). Government of Canada.

³⁹ *Opioid- and stimulant-related harms.* (2022). Government of Canada.

Canada's AAOTDs per 100,000, 2021

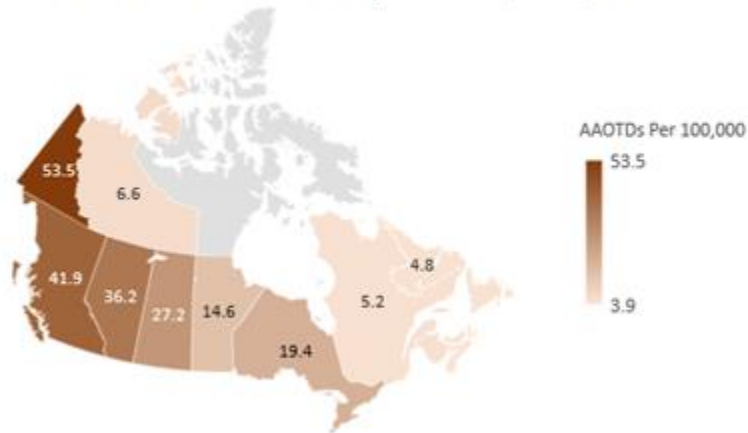


Fig. 9. Data sourced from Government of Canada (2022)

Hospitalization and EMS rates followed a similar trend. Of the 4,433-accidental opioid-related poisoning hospitalizations (AOPHs) in Canada, 2,351 (53%) of them occurred in Alberta and BC.⁴⁰

Looking at ambulance data, the impact on emergency dispatch caseloads from the addiction crisis is much higher in BC. Emergency Medical Service (EMS) responses to suspected opioid-related overdoses are highest in BC (24,152 responses) – three times the volume of such incidents in Alberta (8,215 responses),⁴¹

⁴⁰ *Opioid- and stimulant-related harms.* (2022). Government of Canada.

Canada's AOPHs per 100,000, 2021

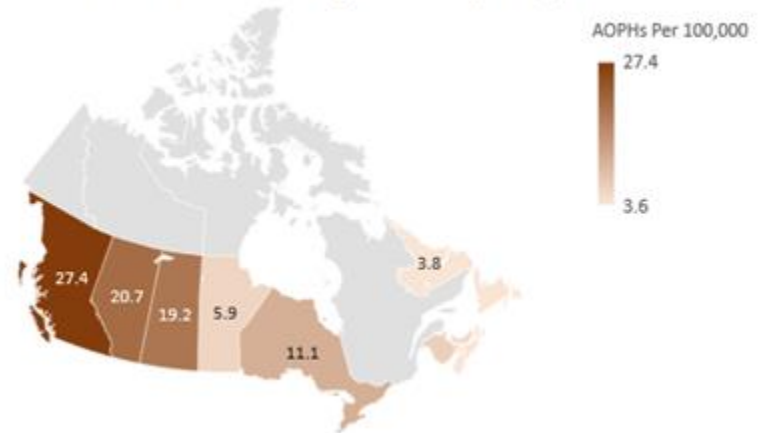


Fig. 10. Data sourced from Government of Canada (2022).

though not all provinces shared EMS data and EMS responses will be highly impacted by provincial infrastructure.

Population of People who Use Illegal Substances in Canada

It is important to assess opioid harms against the estimated population of people who use substances. The best source of data to estimate such figures in Canada is the Canadian Alcohol and Drugs Survey (CADS), a biennial general population survey of alcohol and drug use amongst Canadians 15 and older. The CADS breaks down drug use in several ways. For the purposes of this

⁴¹ *Opioid- and stimulant-related harms.* (2022). Government of Canada.

report, population estimates are based on the ‘illegal drug use, any of 5 drugs’⁴² category for 2013, 2015 and 2017 data, and the ‘any of 6 drugs’⁴³ category for 2019 data (see appendix B for details).

Any of 5 drugs: 2013, 2015, 2017	Cocaine/crack, speed/methamphetamine/crystal meth ecstasy, hallucinogens (excluding salvia), and heroin
Any of 6 drugs: 2019	Cocaine/crack, speed/methamphetamine, ecstasy, hallucinogens, heroin, salvia

Based on the CADS figures, in 2019 16.1% of Canadians (c.5 million people) had used at least one of the 6 select drugs in their lifetime, while 3.5% had used at least one in the past year (c.1 million). Prevalence of use was highest in Alberta and BC, the two provinces who had the highest percentage of past-year users, with 4.8% (170,800) of Albertans and 3.8% (157,300) of British Columbians having used at least one of the drugs in the past year.^{44 45}

Use of at least one of six illegal drugs, 2019			
	Canada	Alberta	BC
Past year	3.5%	4.8%	3.8%
Lifetime	16.1%	18.0%	17.8%

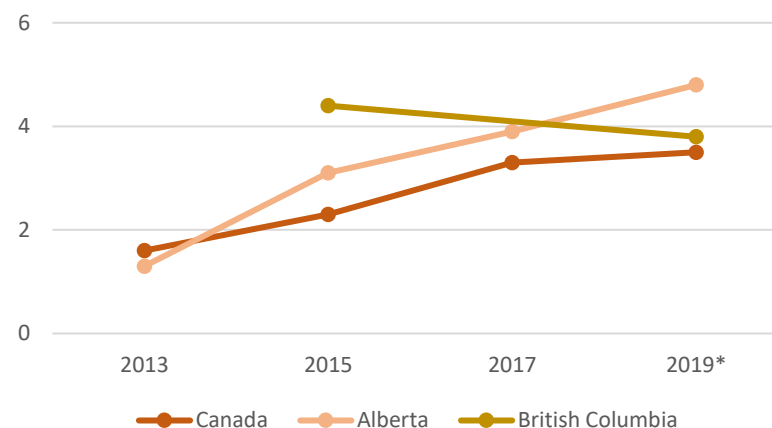
* Any of 6 drugs in 2019

⁴² Cocaine/crack, speed/methamphetamine/crystal meth, ecstasy, hallucinogens (excluding salvia), and heroin

⁴³ Cocaine/crack, speed/methamphetamine, ecstasy, hallucinogens, heroin, salvia

⁴⁴ *Canadian Alcohol and Drugs Survey (CADS): 2019 detailed tables.* (2021). Government of Canada.

Percentage of past year users, any of 5* drugs



** No data was available for BC in 2017

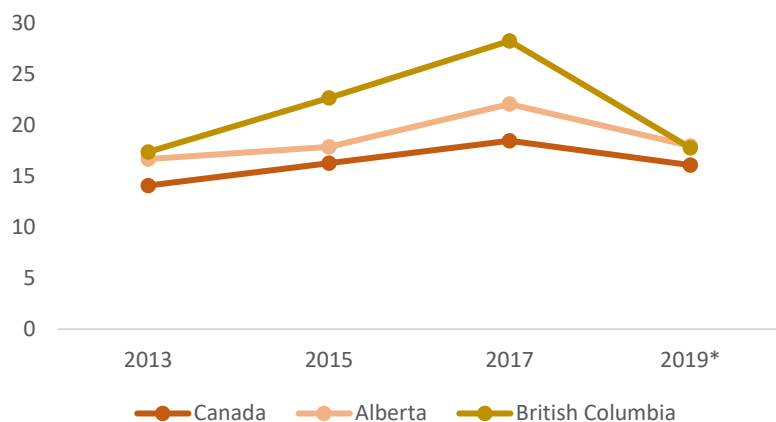
Fig. 11. Data sourced from Government of Canada (2021).

Past year drug use appeared to increase between 2013 and 2019 in Canada and Alberta. The number of lifetime users appeared to drop between 2017 and 2019 in Canada, Alberta, and BC,⁴⁶ but this may be attributable to changes in the survey.

⁴⁵ Due to sample size, it cannot confidently be said that past year drug use was higher in Alberta and lower in BC in 2019 (the only year for which confidence intervals were provided).

⁴⁶ *Canadian Alcohol and Drugs Survey (CADS): 2019 detailed tables.* (2021). Government of Canada.

Percentage of lifetime users, any of 5* drugs



* Any of 6 drugs in 2019.

Fig. 12. Data sourced from Government of Canada (2021).

Fentanyl and Overdose Deaths

The single most significant factor that seems to affect the number of people dying due to drug overdoses across Canada’s provinces is the degree to which fentanyl is present in the drug supply. Based on data from Health Canada’s Drug Analysis Service (DAS), which identifies substances contained in samples seized by law enforcement, fentanyl was detected much more

⁴⁷ *Adulterants, Contaminants and Co-occurring Substances in Drugs on the Illegal Market in Canada.* (2020). Canadian Centre on Substance Use and Addiction.

⁴⁸ *Substance use surveillance data.* (2023). Government of Alberta.

frequently in Western Canada than in Eastern Canada.⁴⁷ The table below compares the rate of fentanyl detected in seized samples in different regions and their respective AAOTD death rate.

Region (2021)	Canada	BC	Ontario	Quebec
Fentanyl detection	69%	91%	55%	14%
Deaths per 100,000	20.2	42.2	18.7	5.2

In Alberta, in 2021, fentanyl was detected in 81% of all accidental drug poisoning deaths.⁴⁸ In BC, between 2019 and 2022, fentanyl was detected in 85% of all illicit overdose deaths.⁴⁹ Further, fentanyl detection in BC has risen in tandem with the death rate (see fig. 8, pg. 28).⁵⁰

When considered with the previously reviewed CADs data, it appears the increase in opioid-related harms in Canada are driven by the increased toxicity of the supply, rather than an increase in the number of drug users in the general population.

⁴⁹ *Illicit Drug Toxicity Deaths in BC: January 1, 2012—October 31, 2022.* (2022). British Columbia Coroners Service.

⁵⁰ *Illicit Drug Toxicity Deaths in BC: January 1, 2012—October 31, 2022.* (2022). British Columbia Coroners Service.

Policing and Criminal Justice

Glossary of Criminal Justice Terminology and Acronyms:

Incident:	a set of connected events usually constituting an occurrence report. An incident may involve multiple perpetrators and victims.
Charge:	When a person is charged, they are formally accused of committing an offence. Charges are made on an individual basis.
Convictions:	Guilty outcomes in court.
TPD:	Trafficking, production, and distribution

Illicit drug markets are a key aspect of the addiction crisis in Canada, being responsible for the supply of unregulated opioids into communities and with criminals based in Canada and those overseas exploiting users suffering addiction. Organised crime understands that addiction makes their ‘customers’ desperate to maintain access to drugs, even if this means buying them illegally from street dealers, or becoming indebted to them. As the opioid crisis has unfolded, enforcement by the police and prosecutors has continued, but the true picture of how drug markets are addressed by law enforcement agencies is difficult to determine.

Canadian criminal justice and policing statistics are not sufficiently granular to make comparisons between municipalities on how cases are processed. Data at the

⁵¹ Greg Moreau. (2022). *Police-reported crime statistics in Canada, 2021*. Canadian Centre for Justice and Community Safety Statistics.

provincial level and reported to StatsCan provides a high-level summary of drug crime across the country, and incident data is also available for larger census areas. Police department data (where such city police departments exist) is not consistent or comparable.

The majority of reported opioid-related offences occur in BC. In 2021, BC – comprising approximately 13% of Canada’s population – had nearly half of all police-reported opioid possession, trafficking, production, and important/exportation incidents in Canada. BC’s rate of opioid-related police reported incidents was more than four times the recorded incident rate in Alberta.⁵¹

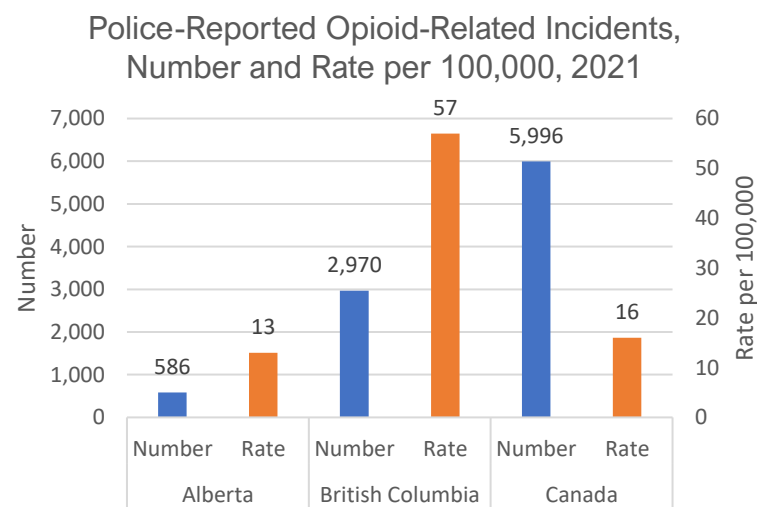


Fig. 13. Data sourced from Statistics Canada (2022).

All Drug Incidents, Select Albertan and BC Cities, Number and Rate per 100,000, 2021

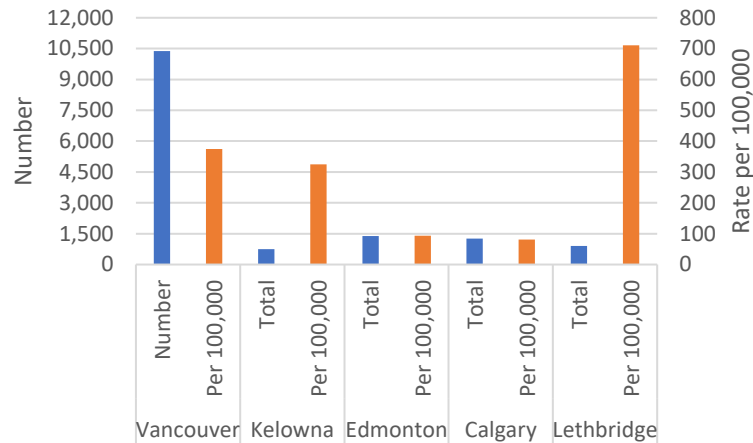


Fig. 14. Data sourced from Statistics Canada (2022).

For all drug violations, Vancouver reported 374 incidents per 100,000 compared to 99 in Edmonton and 162 in Canada.⁵²

Enforcement to suppress illicit drug markets and to address unregulated supply requires police incidents to result in charges and convictions. Given the high volume of drug violations in BC, it is noteworthy that charges are low, and are disconnected from charge rates. Meanwhile charges for drug-related crimes are much higher in

⁵² *Incident-based crime statistics, by detailed violations, Canada, provinces, territories, Census Metropolitan Areas and Canadian Forces Military Police.* (2022). Statistics Canada.

Alberta for TPD and increases in charges broadly tracked the trend in incidents, with rising rates after 2012 and reductions more recently.

Alberta drug incidences vs. charges (excl. cocaine)

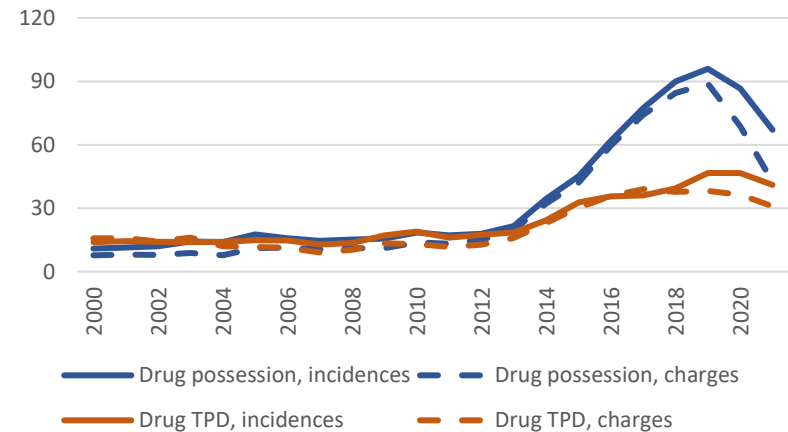


Fig. 15. Data sourced from Statistics Canada (2022).

In BC, drug possession incidents have increased significantly in the last decade, and TPD incidences have also spiked after 2016, but charge rates for both categories have remained broadly flat or even fallen over the same period.

BC drug incidences vs. charges (excl. cocaine)

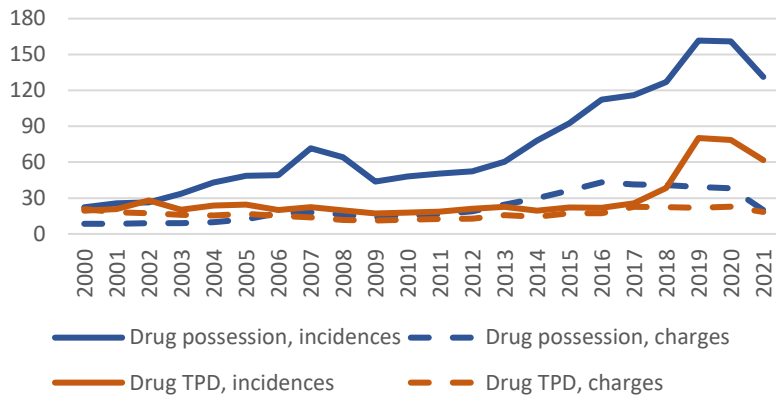


Fig. 16. Data sourced from Statistics Canada (2022).

For Canada overall, sentencing volumes for drug-related crime have dropped by over 50% in the past decade.⁵³

Guilty Drug Cases in Canada, Possession and Other

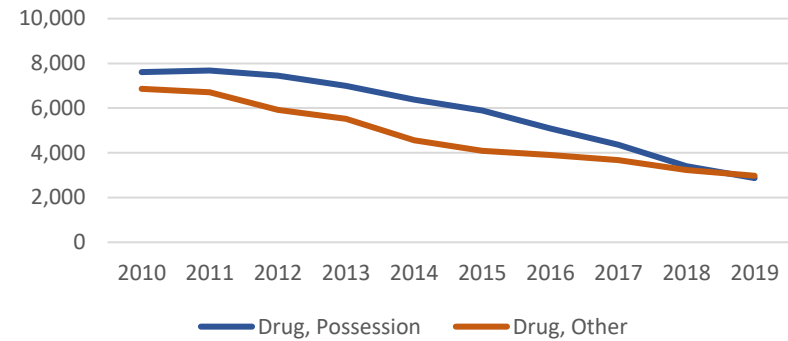


Fig. 17. Data sourced from Statistics Canada (2022).

Convictions for crime overall in Canada have also dropped, but not to the same extent, indicating a general lessening of criminal justice enforcement against drug offences in Canada during the escalating health crisis of opioid addiction.

⁵³ Adult criminal courts, guilty cases by type of sentence. (2012). Statistics Canada.

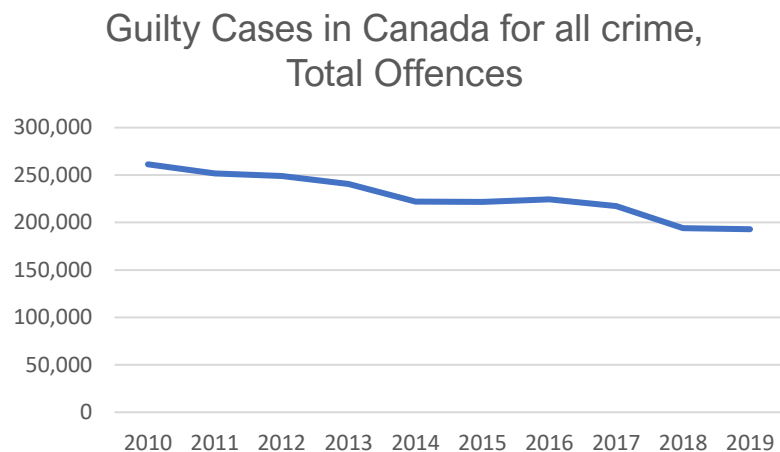


Fig. 18. Data sourced from Statistics Canada (2022).

Multi-Drug Use

Though fentanyl now dominates drug toxicity deaths in BC and Alberta, many drug samples were found to contain other substances, and many of those who died of overdoses were found to have other substances in their system.

In their national review of submitted opioid samples, Health Canada’s Drug Analysis Service found that only 31% contained only opioids. 13% contained other psychoactive substances, and most samples contained cutting agents (non-psychoactive adulterants or co-

occurring substances). In BC, 15% of submitted samples contained other psychoactive substances, the highest in the country.⁵⁴

In both BC and Alberta, it appeared that drugs other than fentanyl frequently contributed to the deaths of drug users. As can be seen in the below table, a significant proportion of all fentanyl deaths would have involved another substance.

Percentage of deaths involving specific substances ^{55 56}		
Substance	Alberta (2021)	BC (2019-22)
Fentanyl	81%	86%
Methamphetamine	57%	42%
Cocaine	24%	45%
Alcohol	23%	26%

⁵⁴ *Adulterants, Contaminants and Co-occurring Substances in Drugs on the Illegal Market in Canada.* (2020). Canadian Centre on Substance Use and Addiction.

⁵⁵ *Substance use surveillance data.* (2023) Government of Alberta.

⁵⁶ *Illicit Drug Toxicity Deaths in BC: January 1, 2012—October 31, 2022.* (2022). British Columbia Coroners Service.

Risk Factors

Opioid harms are not distributed evenly across different groups in Canada. Some are far more likely to suffer opioid-related harms than others.

Sex

Men are significantly more likely to suffer opioid-related harms in Canada than women.

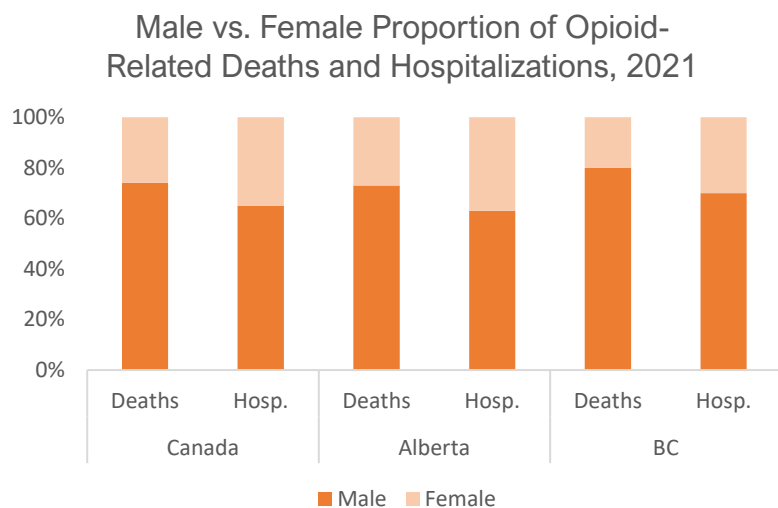


Fig. 19. Data sourced from Government of Canada (2022).

In 2021, three quarters (74%) of all AAOTDs and 65% of all accidental opioid-related poisoning hospitalizations (AOPHs) were men. The ratio of male to female deaths in Alberta was in line with national averages, but was more

⁵⁷ *Opioid- and stimulant-related harms.* (2022). Government of Canada.

acute in BC, where 80% of all AAOTDs in 2021 were men. Though the proportion of men to women dying of AAOTDs has remained relatively stable in the past few years (2017-2021), the proportion of men to women being hospitalized for AOPHs has been rising steadily.⁵⁷ CADs data did not break down responses by both province and gender, so it is not possible to evaluate whether the ratio of men to women in BC's drug using population differs from other provinces.

Percentage of Men Hospitalized for Accidental Opioid-Related Poisonings

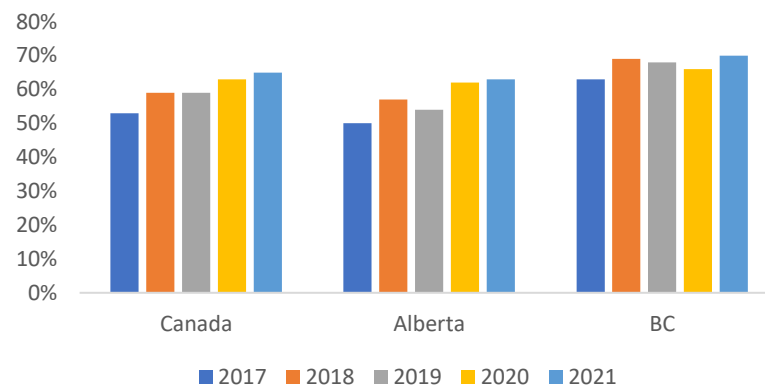


Fig. 20. Data sourced from Government of Canada (2022).

Age

Drug use often begins in adolescence or young adulthood. However, the ages most impacted by AAOTDs in Canada are those between 30 and 49. In 2021 30-49-year-olds represented 27% of the population and over half (52%) of all AAOTDs. 20-29-year-olds and 50-59-year-olds together then represent 26% of the population and 38% of AAOTDs.

Alberta is similar to the Canadian average, with 30-49-year-olds representing 30% of the population and 54% of deaths. Those dying in BC, however, tend to be older. 50–59-year-olds represented only 13% of the population in 2021 but account for 28% of all AAOTD deaths.

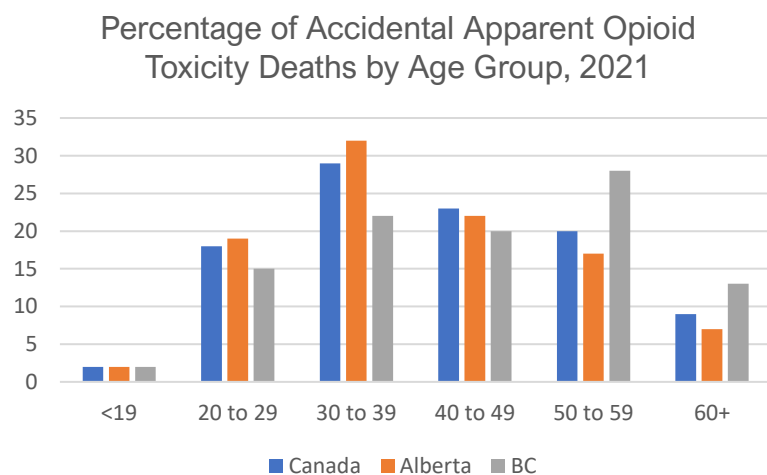


Fig. 21. Data sourced from Government of Canada (2022).

⁵⁸ *Population estimates on July 1st, by age and sex. (2022).* Statistics Canada.

Those in middle age – 30-49-year-olds – then represent 42% of deaths (and 27% of the population).^{58 59}

Similar to gender, AOPH rates for different age groups do not entirely align with AAOTD rates. Most notably, those who are over 60 are hospitalized at a much greater rate than the rate at which they are dying, while those 50-59 are dying at a greater rate than they are hospitalized.

Proportion of Opioid-Related Deaths and Hospitalizations by age, 2021

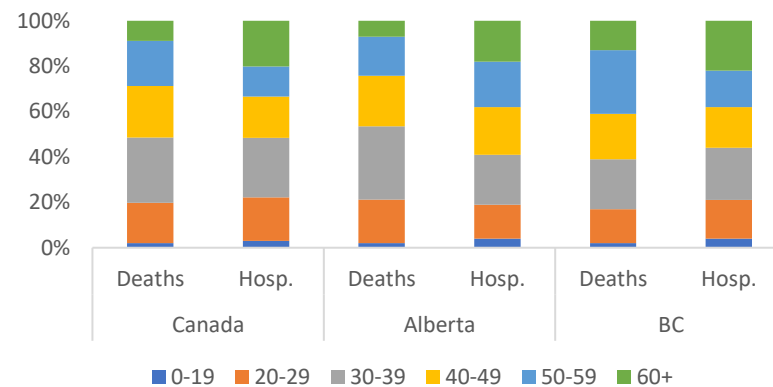


Fig. 22. Data sourced from Government of Canada (2022).

⁵⁹ *Opioid- and stimulant-related harms. (2022).* Government of Canada.

As with sex, however, the age of those being hospitalized has increasingly come to resemble the age of those dying of opioid overdoses.

Age Ratios of AAOTDs and AOPHs over time

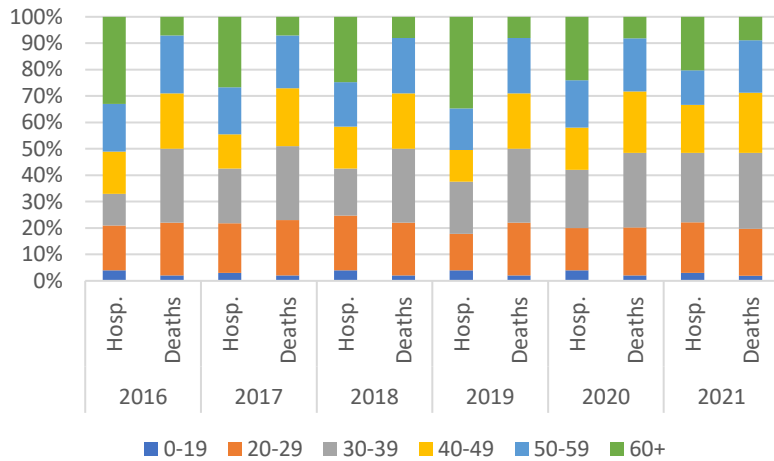


Fig. 23. Data sourced from Government of Canada (2022).

Age and Sex

Taken together, age and sex are major determinants of AAOTDs. In Canada 30-59-year-old men represent 54% of all AAOTDs but only make up 20% of the total population (2021). The next two most significant categories are 20–29-year-old men (12% of deaths, 7% of the population) and 30-39-year-old women (8% of deaths,

7% of the population). Taken together, these groups represent 74% of all AAOTDs but only 34% of the population.

Ethnicity

There is a lack of data regarding ethnicity and opioid harms in Canada. Four sources of data were identified.

Reports were published in both BC and Alberta analyzing the impact of the opioid crisis on First Nations populations (note that this does not encompass all indigenous peoples in Canada, see Appendix C), and the BC Coroners Service analyzed the representation of indigenous peoples in illicit overdose deaths.

In Alberta, First Nations individuals were dying at a rate nearly 7 times that of non-first nations in the first six months of 2020.⁶⁰

⁶⁰ *Alberta Opioid Response Surveillance Report: First Nations People in Alberta.* (2021). The Alberta First Nations Information Governance Centre.

Alberta First Nations Mortality Rates per 100,000

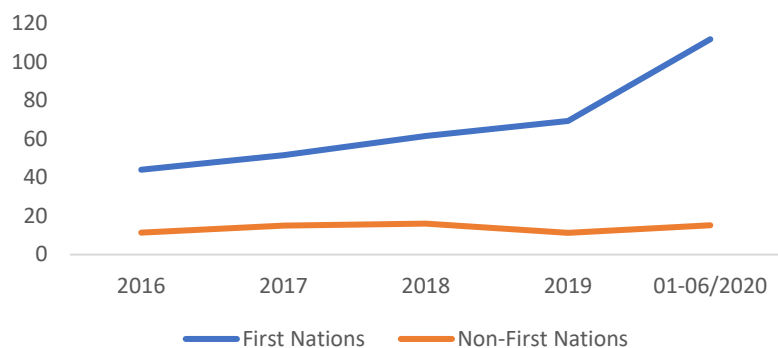


Fig. 24. Data sourced from The Alberta First Nations Information Governance Centre (2021).

In BC, between January and June 2021, 14% of overdose deaths were among First Nations peoples despite them representing only 3.3% of the population, resulting in a death rate 4.8 times greater than for other BC residents.⁶¹

The third identified source was a report analyzing the demographic characteristics of people hospitalized across Canada (excluding Quebec) due to opioid poisonings between 2011 and 2016.⁶² The report found that those who self-identified as visible minorities had a hospitalization rate of only 2.6 per 100,000, compared to people who did not identify as a member of a visible minority who had a hospitalization rate of 13.2 per 100,000. Self-identified indigenous peoples were found to have significantly higher rates of hospitalization due to opioid poisoning.

Rates of Hospitalization Due to Opioid Poisoning by Self-Identified Ethnicity, 2011-2016							
Group	Not visible minority	Visible minority	First Nations	On Reserve (First Nations)	Off reserve (First Nations)	Métis	Inuit
Crude Rate per 100,000	13.2	2.6	34.1	47.6	26.4	24.8	22.7

⁶¹ BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths. (2022). BC Coroners Service.

⁶² Gisèle Carrière, Rochelle Garner, & Claudia Sanmartin. (2018). *Social and economic characteristics of those experiencing hospitalizations due to opioid poisonings*. Statistics Canada.

Employment and Socio-Economic Status

Though there was not Canada-wide data available on employment status and opioid-related deaths, the BC Coroners Service found that only 35% of those who suffered illicit drug toxicity deaths between August 2017 and July 2021 were employed at the time of their death. Of those employed, over half worked in the trades, in transportation, or as equipment operators.⁶³

When it comes to hospitalization, research found that unemployment correlated with opioid-related incidents. Those under 65 who were not in the labour force were most likely to be hospitalized (30.8 per 100,000), while those who were employed were least likely to be hospitalized (6.5 per 100,000).⁶⁴

Other research also found that income levels were also correlated with opioid-related mortality and hospitalization.⁶⁵ Those in the lowest quintile were 3.8 times more likely to suffer opioid-related mortality⁶⁶ and

4.3 times more likely to be hospitalized for opioid-related reasons.⁶⁷

Average Opioid-related mortality by income quintile, 2000-2017				
Income Quintile	Death Cases	Population	Adjusted rate	Rate Ratio
1 (highest)	1,585	4,923,280	18.9	1.0 (reference)
2	2,325	5,115,515	26.4	1.4
3	4,035	6,070,270	38.5	2.0
4	4,960	6,086,520	48.2	2.6
5 (lowest)	5,955	4,792,290	72.1	3.8

The death rate ratio between the highest and lowest quintile has been decreasing over time (having gone from 4.33 in 2000 to 2.15 in 2017), but the hospitalization ratio has not changed significantly.

⁶³ BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths. (2022). BC Coroners Service.

https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/review_of_illicit_drug_toxicity_deaths_2022.pdf

⁶⁴ Gisèle Carrière, Rochelle Garner, & Claudia Sanmartin. (2018). *Social and economic characteristics of those experiencing hospitalizations due to opioid poisonings*. Statistics Canada. <https://www150.statcan.gc.ca/n1/pub/82-003-x/2018010/article/00002-eng.htm>

⁶⁵ Wasem Alsabbagh, Martin Cooke, Susan J. Elliott, Feng Chang, Noor-UI-Huda Shah, & Marco Ghobrial. (2022). *Stepping up to the*

Canadian opioid crisis: A longitudinal analysis of the correlation between socioeconomic status and population rates of opioid-related mortality, hospitalization and emergency department visits (2000–2017). Government of Canada. <https://www.canada.ca/en/public-health/services/reports-publications/health-promotion-chronic-disease-prevention-canada-research-policy-practice/vol-42-no-6-2022/canadian-opioid-crisis-longitudinal-analysis-correlation-socioeconomic-status-population-rates-mortality-hospitalization-emergency-department-visits-2000-2017.html>

⁶⁶ 2000-2017

⁶⁷ 2000-2013, age- and sex- adjusted rate.

Average Opioid-related hospitalization by income quintile, 2000/01-2012/13				
Income Quintile	Hosp. cases	Population	Adjusted rate	Rate Ratio
1 (highest)	4,520	4,923,280	96.5	1.0 (reference)
2	5,835	5,115,515	138.9	1.4
3	9,020	6,070,270	203.8	2.1
4	15,785	6,086,520	284.7	3.0
5 (lowest)	21,855	4,792,290	413.2	4.3

Location of Death and Household Characteristics

There is no Canada-wide data on location of death, and there is no published geographic mapping of deaths below provincial level, however both BC and Alberta have category data.

In both BC and Alberta, the majority of drug overdose deaths occurred in private residences. In BC, between August 2017 and July 2021, 65% of all illicit drug toxicity deaths occurred in private non-subsidized residences, and a further 19% occurred in subsidized housing, hotels or shelters.⁶⁸ In 2021, in Alberta the average quarterly death rate in private residences where the decedent lived long-term was 68% of all deaths.⁶⁹

Research found that the most common living arrangements of those being hospitalized were those

living alone (25.1 per 100,000) and single parents (25.5 per 100,000). They were also far more likely to be in band housing (53.8 per 100,000) or renting (21.3 per 100,000).⁷⁰

Though Canada-wide data was not available on the relationship between opioid harms and homelessness, the BC Coroners Service found that 12% of those who died of illicit drug toxicity between 2017 and 2021 were homeless.⁷¹

⁶⁸ BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths. (2022). BC Coroners Service.

⁶⁹ *Substance use surveillance data*. (2023) Government of Alberta.

⁷⁰ Gisèle Carrière, Rochelle Garner, & Claudia Sanmartin. (2018). *Social and economic characteristics of those experiencing hospitalizations due to opioid poisonings*. Statistics Canada.

⁷¹ BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths. (2022). BC Coroners Service.

Marital Status

Data from BC found that, in 2016 and 2017, 65% of those who died had never been married, and 18% were separated or divorced.⁷² Comparable data was not available elsewhere in Canada, but is mirrored by statistics from the United States.⁷³

Marital Status of Those Suffering from Illicit Drug Overdose Deaths in BC, 2016-2017

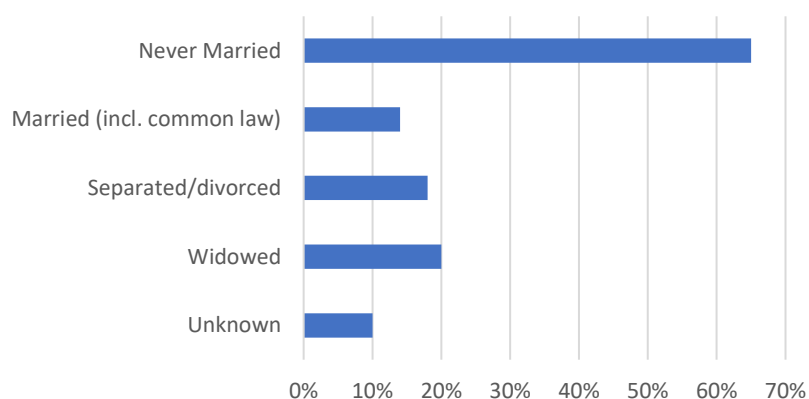


Fig. 25. Data sourced from BC Coroners Service (2022).

Area-Level Characteristics

A study found that in 2016-2017, the majority of deaths occurred in major population centres (30% of all deaths occurred in metropolitan zones with 1,500,000+ residents), but the highest rate of deaths occurred in

smaller centres (15.9 deaths per 100,000 occurred in zones with 100,000-499,999 residents. 1,500,000+ zones only had a death rate of 10.7).⁷⁴

Mental Health and Contact with Healthcare System

Though there is not Canada-wide data on the intersection between opioid harms and contact with the healthcare system, both Alberta and BC report on whether those who suffer from AAOTDs had contact with the healthcare system prior to their death.

In Alberta, January to June 2022, 56% of those who suffered a non-pharmaceutical opioid-related death had received at least one health service within 30 days of death, 34% had been dispensed an antidepressant, 18% had had a mental health visit, and 16% had a visit related to chronic pain.⁷⁵

In BC, between August 2017 and July 2021, 62% of people who died of illicit drugs were experiencing mental health issues. 50% had a mental health diagnosis, while 12% and anecdotal evidence of a mental health disorder. 43% had a health visit related to mental health in the year prior to their death, compared to 14% of the B.C. population. 72% of those who died had a visit with a health professional less than three months before their death, and 87% had a visit within one year of their death.

⁷² *Illicit Drug Overdose Deaths in BC*. (2018). BC Coroners Service.

⁷³ *The Numbers Behind the Opioid Crisis*. (2017). Social Capital Project.

⁷⁴ *Canadian area-level characteristics of substance-related acute toxicity deaths, 2016 to 2017*. (2022). Government of Canada.

⁷⁵ *Substance use surveillance data*. (2023) Government of Alberta.

Decedents had a higher number of health visits, and 30% had had a previous paramedic attended non-fatal illicit drug related event.⁷⁶ A prior BC report looking at 2016 and 2017 data found that 45% of decedents had sought assistance for pain-related issues in the year prior to their death.⁷⁷

Education

Education was highly predictive of risk of hospitalization due to opioid poisoning. Those with no credentials were hospitalized at a rate of 23 per 100,000, while those with a university degree were hospitalized at a rate of 5.5 per 100,00.⁷⁸

Rate of hospitalization due to opioids by education level, 2011-2016	
Highest level of education attainment	Crude rate per 100,000
No certificate, diploma, or degree	23.0
High school diploma and/or trade certificate	14.3
College Diploma or university below bachelor	12.7
University degree	5.5

⁷⁶ BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths. (2022). BC Coroners Service.

⁷⁷ Illicit Drug Overdose Deaths in BC. (2018). BC Coroners Service.

Summary: Canada, Alberta, BC

The published data enables a summary of differences between Alberta and BC, Canada’s two opioid hotspots.

Over half the people suffering AAOTDs in Canada are 30–59-year-old men, and the majority of deaths have occurred in Alberta and BC. Though there appear to be a higher prevalence of drug use, and more drug users in the two provinces than in other Canadian provinces, this factor is insufficient for explaining why deaths are so concentrated in the two provinces. Instead, deaths seem concentrated in Alberta and BC because of the relative toxicity of the drugs being supplied and consumed there.

Those dying were generally poorer, unemployed, unmarried, and less educated. For those that were employed, they were most commonly working in the trades, transportation, or as equipment operators. They often would have had recent contact with the healthcare system, mental health issues, and/or have sought assistance for chronic pain.

First Nations peoples suffer disproportionately high levels of opioid harms. Other visible minorities are significantly less likely to suffer opioid-related harms than the general population.

⁷⁸ Gisèle Carrière, Rochelle Garner, & Claudia Sanmartin. (2018). *Social and economic characteristics of those experiencing hospitalizations due to opioid poisonings*. Statistics Canada.

The majority of deaths occurred in large population centres with populations over 1.5 million, but the highest rate of deaths occurred in smaller population centres.

Alberta and BC are Canada’s opioid hotspots, but there are some differences in how the crisis has presented in the two provinces. First, BC has a much longer history with substance harms with Alberta, and volume of harm is much higher in BC, measured according to deaths and hospitalisations. However, the rise in AAOTDs in Alberta during the pandemic has been steeper relative to its pre-pandemic levels.

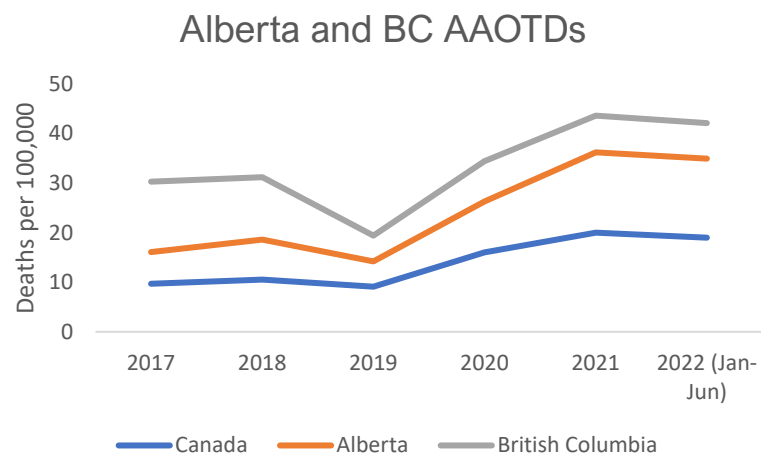


Fig. 26. Data sourced from Government of Canada (2022).

Those dying of AAOTDs in BC are notably older than those dying in Alberta and the rest of the country. They are also the most likely to be male, with 80% of all deaths being men (vs. 74 % in Canada and 73% in Alberta).

Finally, police incident data confirms BC is the epicentre of drug-crime in Canada, reporting 57 opioid-related incidents per 100,000 vs. 13 in Alberta. In terms of the major cities, Vancouver also has significantly higher numbers of drug-related violations than either Calgary or Edmonton, which could be a reflection of police activity, as opposed to underlying prevalence. Despite this, there are significantly fewer arrests for drug-related crime in the BC, and a low charge rate despite rising rates of incidents.

Considering the recent decriminalisation of possession in BC it is perhaps unsurprising that drug users have not been routinely charged by police when caught in possession in recent years; however, this does not seem to reflect a law enforcement focus on upstream interdiction against dealers and traffickers instead. When considering the more serious drug offences involved in supply and profiting from the illicit market – namely importing and trafficking – the gap between TPD incidents and charges, however, is significant (80 per 100,000 incidents vs. 22 per 100,000 charges in 2019). In contrast, Alberta charges far more people for TPD relative to the incidents detected (46.6 per 100,000 incidents vs. 38 per 100,000 charges).

CHAPTER 4: Policies and Services in Alberta and British Columbia

This chapter summarises the respective programs that Alberta and BC have implemented to address the addiction crisis. The backdrop is stark: BC in 2022 experienced its second worst year of overdose deaths ever (2,272), just behind the 2021 total (2,306).⁷⁹ Alberta too went through its second worst year of overdoses (1,346) in 2022, compared to its worst total the preceding year (1,621).⁸⁰ Nevertheless, the recent annualised decline in deaths of 17% in Alberta – if sustained in 2023 – would be the start of a positive trend.

Provincial Contrast?

The two broad policy approaches explored in this section include both harm reduction, which dominates the approach in BC, and recovery-oriented care, which is the model being pursued in Alberta since 2019.

Some observers have suggested that Alberta's emphasis on recovery (inspired by 'Towards an Alberta Model of Wellness') represents a new model of care in Canada and a departure from the harm reduction policies embraced in British Columbia.⁸¹ This is an oversimplification as it

⁷⁹ Wells, V. S. (2023, January 31). *2022 was second deadliest year for toxic drug deaths ever*. The Georgia Straight.

⁸⁰ *Substance use surveillance data*. (2023). Government of Alberta.

presupposes that Alberta's current service approach is wholly distinct from British Columbia's, which it is not. For example, harm reduction efforts are also undertaken in Alberta, and BC funds residential recovery provision. Nevertheless, there is a distinct contrast in the strategic emphasis that is placed on recovery in Alberta, compared to what is currently guiding all policy in BC, and as of January 2023, both provinces take different policing responses to drug possession.

Enforcement and Decriminalization

In an attempt to further reduce the potential for drug users to be subject to enforcement, the BC Government has advocated decriminalisation of drug possession in the province. As of 31 January 2023, and following approval from the federal government in November 2022, BC has now adopted a decriminalization policy that prevents law enforcement from arresting individuals aged 18 or above for possessing minor quantities (2.5g) of illicit substances.⁸² Given that charges for possession were already low, this could also be viewed as the formalization and codification of current practices. Possessing drugs for the purpose of trafficking, possessing drugs at schools, child-care facilities and airports remains illegal and several municipalities have local bylaws prohibiting

⁸¹ *Alberta, B.C., and two different approaches to fight Canada's epidemic of drug deaths*. (2022, October 11). The Globe and Mail.

⁸² Kulkarni, A. (2023, January 31). *What you need to know about the decriminalization of possessing illicit drugs in B.C.* CBC.

drug use at public facilities and in private spaces like shopping malls.⁸³

Meanwhile, Alberta is maintaining conventional enforcement pertaining to possession of illicit substances. The Alberta Association of Chiefs of Police has stated that it is too soon to look at decriminalization in Alberta because the necessary levels of support, including addiction treatment services, are unavailable.⁸⁴ Despite this position, as recently as last year the city of Edmonton passed a motion to develop its own decriminalization strategy to reduce future harm from toxic drugs.⁸⁵

Along with the rest of Canada, with the exception of BC, drug possession remains illegal in Alberta without a prescription. Alberta police officers can now offer diversion to treatment to individuals caught with illicit substances; however, drug possession is not decriminalised and individuals can still be arrested, charged, and processed for possession. Overall incident rates for possession in Alberta have reduced in recent years, though this is probably best attributed to the COVID-19 pandemic.

⁸³ Kulkarni, A. (2023, January 31). *What you need to know about the decriminalization of possessing illicit drugs in B.C.* CBC.

⁸⁴ Graveland, B. (2022, January). *It's too soon to support drug decriminalization: Alberta police chiefs.* Global News.

⁸⁵ Amato, S. (2022, April 11). *Edmonton moves forward on decriminalizing 'simple personal possession' of drugs.* CTV News.

⁸⁶ Hyshka, E., Anderson-Baron, J., Karekezi, K., Belle-Isle, L., Elliott, R., Pauly, B., Strike, C., Asbridge, M., Dell, C., McBride, K., Hathaway,

The next section will explore elements of harm reduction and recovery-oriented models of care.

'Safer Supply' and Harm Reduction

The origins of harm reduction in British Columbia can be traced to the first needle exchange and distribution programs in 1988 and 1989 aiming to limit the reuse and sharing of needles to help address the AIDS epidemic.⁸⁶ The federal government then adapted harm reduction as part of its drug policy and introduced further measures such as attempts to decriminalize cannabis possession and providing for exemptions to criminal prosecution to open Insite in 2003 in BC, which was the first supervised injection facility to exist in North America.⁸⁷

Since this time BC embraced more elements of harm reduction, including investments in naloxone distribution, Opioid Agonist Therapy (OAT), supervised drug consumption services, overdose prevention technology, 'safer supply' distribution and most recently, decriminalization of illicit substances.

A., & Wild, T. C. (2017). *Harm reduction in name, but not substance: A comparative analysis of current Canadian provincial and territorial policy frameworks.* Harm Reduction Journal, 14(1), 50.

⁸⁷ Hyshka, E., Anderson-Baron, J., Karekezi, K., Belle-Isle, L., Elliott, R., Pauly, B., Strike, C., Asbridge, M., Dell, C., McBride, K., Hathaway, A., & Wild, T. C. (2017). *Harm reduction in name, but not substance: A comparative analysis of current Canadian provincial and territorial policy frameworks.* Harm Reduction Journal, 14(1), 50.

In March 2020, BC rolled out the first ‘safer supply’ pilot program to residents.⁸⁸ According to Dr. Thomas Kerr, a senior scientist at BC’s Centre on Substance Use, safe supply is defined as a legal supply of drugs that enables individuals to use regulated substances as opposed to toxic supplies from the illicit market.⁸⁹ As part of its 2021 budget, BC increased funding to expand the program and as of February 2022, at least 12,000 citizens have accessed prescribed safer supply.⁹⁰ There is no way of tracking who is in receipt of drugs via these channels, what proportion of these drugs are given or sold to others not enrolled in the program. Note also that drug users enrolled in ‘safer supply’ may choose to continue to source drugs from the illicit market.

The many dimensions of harm reduction in BC have become a defining strategy for how the province addresses the addiction crisis. Below, BC lists specific examples of harm reduction measures currently practiced in the province.⁹¹ This represents an overview of how BC is defining harm reduction and what types of service provisions the province has adopted in response to the opioid crisis.

Components of Harm Reduction in BC

- *Supply distribution and needle recovery programs*
- *Options for opioid substitution (agonist) therapies such as methadone or suboxone*
- *Take home naloxone kits. The kits include medication to reverse an opioid overdose*
- *Supervised consumption/injection services and overdose prevention services*
- *Mental wellness and healing support programs and centres*
- *Outreach and support programs*
- *Information and resources on safer ways to use substances*
- *Public awareness campaigns to support de-stigmatisation of drug use*
- *Peer support programs run and attended by people with experience using substances*

Alberta also has elements of harm reduction present in its public policy approach to substance use and addiction. The province distributes naloxone, offers OATs – including the rapid deployment of new therapies like Sublocade since late 2021 – and hosts SCS across the province.

⁸⁸ Grochowski, S. (2022, February). *What is safe supply? A look at what B.C. drug users, advocates are demanding*. Vancouver Sun.

⁸⁹ Grochowski, S. (2022, February). *What is safe supply? A look at what B.C. drug users, advocates are demanding*. Vancouver Sun.

⁹⁰ *B.C. introduces new prescribed safer supply policy, a Canadian first*. (2021, July 15). BC Gov News.

⁹¹ *Understanding Harm Reduction: Substance Use*. (2020). HealthLinkBC.

Recovery

The origins of the recovery-orientated model in Alberta can be tracked back to 2019 when the United Conservative Party (UCP), under Jason Kenney, entered office. The party's election platform at the time promised to prioritizing investments in rehabilitation beds and spaces that could help expand treatment capacity and support more drug users to recover, as a key strategy to reverse the opioid crisis in Alberta.⁹²

According to Alberta Health Services, recovery-oriented care providers work with individuals in their current state, respect autonomy and dignity and place an emphasis on individual safety and providing support for harm reduction, positive risk taking and continual personal growth.⁹³ Moreover, recovery seeks to transcend symptom management and cravings and instead aims to support the development of a return to social, psychological, cultural, sexual, and spiritual aspects of life.⁹⁴

The following reflects some of the key features of the recovery-oriented model of care in Alberta.⁹⁵

⁹² *How Alberta is tackling its toxic drug crisis.* (2022). The Drug and Alcohol Testing Association of Canada.

⁹³ *Recovery Oriented Care.* (2020). Alberta Health Services.

Components of Recovery Oriented Care in Alberta

- *Individual, family, or group therapies*
- *Professional/clinician-led or peer-led therapies*
- *Privately or publicly managed*
- *Formal or informal settings*
- *Wellness-focused or treatment-focused*
- *Prevention-focused or action-focused*
- *Cultural interventions*

Alberta Health Services includes harm reduction references within its definition of recovery-oriented care, and drug users can still access many services that are also available in BC.

Services

The following section aims to investigate what services are available to citizens within the scope of each province's overarching policy model.

Supervised Consumption Sites

Currently, both Alberta and BC deploy SCS in each province as reflected in the table below. Each province hosts sites that offer a variety of services to visitors, but data on capacity or current service caseload is not published:

⁹⁴ *Recovery Oriented Care.* (2020). Alberta Health Services.

⁹⁵ *Recovery Oriented Care.* (2020). Alberta Health Services.

Supervised Consumption Sites in Alberta and BC			
Province	City	Location	Authorized services
Alberta	Calgary	Sheldon M. Chumir Health Centre (Alberta Health Services) 1213 4 th St SW	Injection Intranasal Oral
Alberta	Edmonton	Boyle McCauley Health Centre (Boyle McCauley Health Centre) 10628 96th St	Injection Intranasal Oral Peer assistance
Alberta	Edmonton	George Spady Centre Society (George Spady Centre Society) 10015 105A Ave NW	Injection Intranasal Oral Peer assistance
Alberta	Edmonton	Royal Alexandra Hospital (Alberta Health Services) 10240 Kingsway Ave	Injection Intranasal Oral
Alberta	Grande Prairie	Northreach Mobile Supervised Consumption Service (Northreach Society) 10101 97A St	Injection Intranasal Oral
British Columbia	Vancouver	Dr. Peter Centre (Dr. Peter AIDS Foundation) ⁹⁶ 1110 Comox St	Injection
British Columbia	Vancouver	Hope 2 Health (BC Centre for Excellence in HIV/AIDS) 611 Powell St	Drug content checking Injection Intranasal Oral
British Columbia	Vancouver	Insite (Vancouver Coastal Health) 139 East Hastings St	Drug content checking Injection Intranasal Oral Safer supply prescription fulfillment
British Columbia	Victoria	The Harbour Supervised Consumption Service (Island Health) 941A Pandora Ave	Drug content checking Injection Intranasal Oral Peer assistance

⁹⁶ No representative could be reached from the Dr. Peter Center who would confirm whether they fulfilled safer supply prescriptions.

Insite, being North America's first legal SCS, still operates in Vancouver's Downtown Eastside. Since its inception in 2003, funding has been expanded to other sites throughout the province. These sites provide hygienic environments to consume drugs without fear of arrest for possession and to help improve the integration of care for individuals who use substances.⁹⁷

In Alberta, the first permanent SCS in Calgary began operations in 2018 and rapidly expanded services to additional sites in Edmonton, Lethbridge, and Grand Prairie. Currently, Alberta has five sites in operation that are authorized by the same valid exemption from the federal government under section 56.1 of the Controlled Drugs and Substances Act.

Alberta previously hosted an additional site in Lethbridge which saw the highest volume of visitors in North America⁹⁸ but this site has subsequently closed.⁹⁹ According to a government audit, the site closed due to the discovery of misappropriated funds.¹⁰⁰

It is not possible to determine the number of clients that the network of consumption sites supports in each province, although given their longer history, it is likely that the four sites in BC have a higher caseload. What is

⁹⁷ *Supervised Consumption Services: Operational Guidance*. (2017). British Columbia Centre on Substance Use.

⁹⁸ *Lethbridge supervised consumption site shutting down at month's end*. (2020, August). Calgary Herald.

⁹⁹ *Lethbridge supervised consumption site shutting down at month's end*. (2020, August). Calgary Herald.

apparent is that the only services unique to BC are drug checking and safer supply prescription fulfillment. All other authorized services are available in each province depending on the site.

It is argued by advocates that there have not been fatal overdoses at drug consumption sites in BC and this is proof that the model is working. However, there is no published operating criteria for these sites and no means to hold providers accountable, and the expansion of drug consumption sites has occurred in parallel to continued increases in drug deaths in the community. There is also a lack of evidence that supervised consumption sites reduce mortality.¹⁰¹

Data is not publicly available that demonstrates the impacts of SCS on drug harms. It is possible that while these sites were initially effective for their intended purpose to limit the spread of HIV and other communicable diseases, they are not generating the same success in reducing overdose deaths.

Rehabilitation

In 2019, the Government of Alberta, in support of the recovery model, announced \$140 million of spending

¹⁰⁰ *Lethbridge supervised consumption site shutting down at month's end*. (2020, August). Calgary Herald.

¹⁰¹ Panagiotoglou, D. (2022). *Evaluating the population-level effects of overdose prevention sites and supervised consumption sites in British Columbia, Canada: Controlled interrupted time series*. PLoS ONE, 17(3), e0265665.

over four years with an additional \$20 million investment in 2022, including 8,560 new treatment and recovery spaces, which would reportedly increase available spaces to over 27,000 from 19,000 spaces in 2019.¹⁰² As part of this they are the first province to eliminate fees for addiction recovery programs.¹⁰³

Part of this investment is directed towards creating communal settings for care that are defined as ‘rehabilitation/therapeutic communities.’ These communities enable individuals to receive treatment that focuses on many facets of the individual and their overall lifestyle changes that prepare them for a return to normal life.¹⁰⁴ The treatment is funded by the provincial government and is a gradual recovery program that assists individuals returning to full community living on their own.

BC points to treatment and supportive recovery services as either live-in or bed-based substance use services offering a variety of programs that can be shorter or longer depending on individual need. The amalgam of

services and models of care differ depending on the individual as well.

In 2016, in BC, the number of rehabilitation beds totaled approximately 2,547.¹⁰⁵ Currently, the province has a total of 3,261.¹⁰⁶ In 2022, the government announced the investment of \$164 million to build more complex-care housing.¹⁰⁷

Making accurate inter-provincial comparisons on treatment beds and spaces is not possible because Alberta and BC do not use common definitions. It appears that Alberta has significantly more spaces dedicated to rehabilitation than BC, but its numbers encompass both ‘live in’ and ‘communal’ settings. Additionally, it appears BC does not currently offer any therapeutic community settings as defined in Alberta.

When it comes to wait times to access rehabilitation spaces and beds, while provincial health authorities like Island Health suggest waitlists for existing rehabilitation beds in BC is typically about five weeks,¹⁰⁸ Albertans face

¹⁰² Johnson, L. (2022, March). *Toxi-City (Part 3): Deadly drugs in Edmonton — How is the Alberta government tackling the problem?* Edmonton Journal.

¹⁰³ French, J. (2020, November 7). *Financial hurdle gone: Alberta first province to eliminate fees for addiction recovery programs.* CBC.

¹⁰⁴ *Recovery Community Operations Competitive Grant.* (n.d.). Government of Alberta.

¹⁰⁵ McElroy, J., & Clancy, N. (2016, September). *Are there enough beds for drug treatment in B.C.?* CBC.

¹⁰⁶ Russ, G. (2022, September 27). *A tale of two provinces: Assessing the opioid crises in BC and Alberta.* Macdonald-Laurier Institute.

¹⁰⁷ Cowie, A. (2022, May 21). *Powell River and Bella Coola to receive funding for complex-care housing.* CityNews.

¹⁰⁸ Dickson, L. (2022, August 28). *People seeking detox treatment face weeks-long waits.* Times Colonist.

a waitlist to access beds that can range between six weeks and twelve months depending upon location.¹⁰⁹

Moreover, the definition of rehabilitation beds in each province is not uniform. This is particularly important because Alberta is charting a comparatively new path when it comes to creating rehabilitation communities, which encompass rehabilitation beds in a manner that does not appear to exist in BC.

Ultimately, despite funding announcements around creating new rehabilitation spaces and beds in Alberta, demand is still exceeding supply and it is therefore too early to conclude whether the expansion in rehabilitation beds is impacting the opioid crisis.

Naloxone

Naloxone provision is another service that is offered in both Alberta and BC. Naloxone is an opioid antagonist medication that can temporarily reverse the effects of an overdose and allow time for help to arrive by blocking the effects of opioids and restoring normal breathing.¹¹⁰

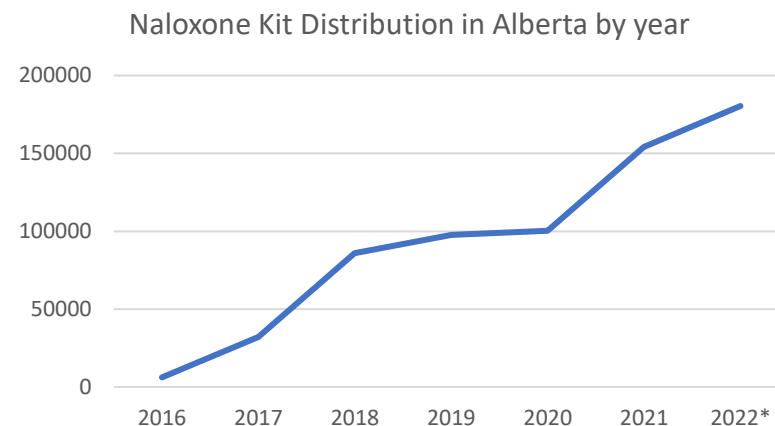
Antagonist medications bind to the same brain receptors as opioids, which stops the receptor from producing the suppressed respiratory response.

¹⁰⁹ Bhatti, A. (2017, October 16). *Waitlists Are Growing in Alberta for Treatment Centres*. Andy Bhatti.

¹¹⁰ Naloxone. (n.d.). CAMH.

¹¹¹ *Get Naloxone*. (n.d.). Alberta Health Services.

In Alberta, there are currently over 2000 sites that provide naloxone kits free of charge for individuals to take home.¹¹¹ In BC, there are approximately 1800 currently on record.¹¹² In recent years there has been a dramatic upswing in naloxone kit distribution in Alberta where in 2022 there was approximately 135,330 kits distributed compared to only 32,140 in 2017, and 6,181 in 2016.¹¹³ In BC, over one million naloxone kits were distributed between 2012 and 2021.¹¹⁴ With clear efficacy, both provinces continue to increase the number of naloxone kits distributed in recent years. However, the increase in distribution in Alberta has been particularly rapid.



*2022 Q4 data not yet available. Chart uses average of prior three quarters. Fig. 27. Data sourced from Government of Alberta (2023).

¹¹² *Take Home Naloxone*. (n.d.). Towards the Heart. Retrieved 6 March 2023, from <https://towardtheheart.com/naloxone>

¹¹³ *Substance use surveillance data*. (2023). Government of Alberta.

¹¹⁴ *More than one million naloxone kits shipped in B.C. as overdose crisis continues*. (2021, June). BC Centre for Disease Control.

Opioid Agonist Treatment

OATs are defined as *agonist medications*, which are drugs that produce a similar response to illicit opioids, but in a safer and more stable fashion.¹¹⁵ Agonist medications bind to the same brain receptors as illicit opioids, reducing withdrawal symptoms and creating biological and emotional stability for the patient.¹¹⁶ This is different from naloxone, which is an *antagonist* drug designed to rapidly reverse the effects of opioid overdoses.

The process for engaging in an opioid agonist treatment plan in BC does not involve a referral and most OATs are covered for all provincial residents who have sought treatment from a doctor to explore their options.¹¹⁷ The Island Health Authority in BC is careful to point out that these treatments often require a combination of individual and group counselling.

Similarly, the Government of Alberta defines opioid agonist therapy as taking medications to treat opioid use disorder by reducing cravings and helping to manage withdrawal symptoms.¹¹⁸ These types of medications are prescribed to be taken daily and treatment plans exist within a long-term or short-term context depending on each individual.

¹¹⁵ *Opioid Agonist Therapy*. (n.d.). Island Health.

¹¹⁶ *Pharmacological Treatment*. (n.d.). Indian Health Services.

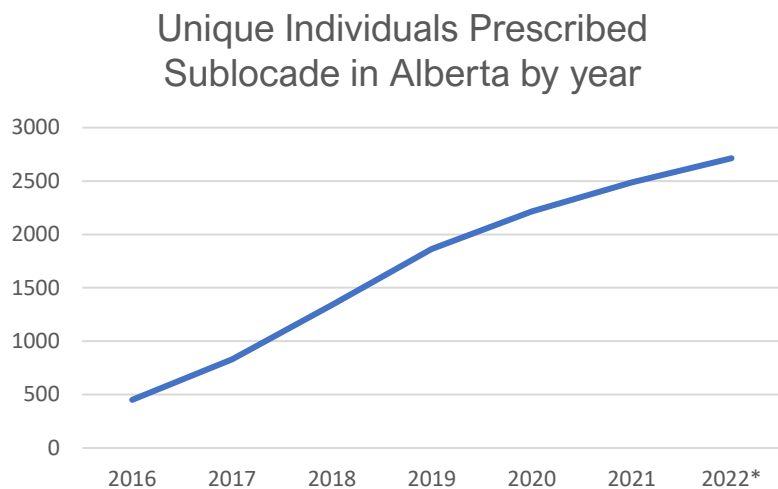
¹¹⁷ *Opioid Agonist Therapy*. (n.d.). Island Health.

The process for engaging in an opioid agonist treatment plan in Alberta requires the acquisition of a prescription and dispensation by a pharmacist. The associated dispensing fees can provide a barrier to individuals without health benefits coverage.¹¹⁹ However, the OAT coverage program offered by the Government of Alberta aims to eliminate the gap in coverage by offering OAT to individuals for up to 120 days free of charge for those with a valid prescription and a current provincial health card identification number.

Clearly, the role OATs play in reducing or eliminating cravings is significant. Nonetheless, it does not appear as though it is more difficult to gain access to this type of treatment. In Alberta, there has been a rapid deployment of Sublocade – an injection that can satiate cravings for 30 days – and which was licensed in Canada in 2018.

¹¹⁸ *Opioid Agonist Therapy Gap Coverage Program*. (n.d.). Government of Alberta.

¹¹⁹ *Opioid Agonist Therapy Gap Coverage Program*. (n.d.). Government of Alberta.



*2022 Q4 data not yet available. Chart uses average of prior three quarters.

Fig. 28. Data sourced from Government of Alberta (2023)

Technology

Alberta has recently emerged as a leader on the technology front when it comes to addressing the opioid crisis.

In 2017, the government introduced the virtual opioid dependency treatment program (VODP), utilizing telehealth infrastructure to support the provision of OATs to Albertans.¹²⁰

¹²⁰ *The Virtual Opioid Dependency Program (VODP)*. (n.d.). Health Standards Organization.

¹²¹ *Digital Overdose Response System*. (n.d.). DORSAPP.

¹²² *Digital Overdose Response System*. (n.d.). DORSAPP.

Additionally, the Digital Overdose Response System (DORS) app allows Albertans using opioids or other substances to rely on automated alerts to summon emergency response to their location if they become unconscious.¹²¹

The DORS app also provides information on national and provincial addiction recovery supports and services, such as the Addiction Helpline, to ensure a range of support is available to individuals using the app.¹²² Another supporting piece of technology deployed in Alberta is an online tool called My Recovery Plan, which offers assessment tools, generates recovery goals, monitors progress, and helps with challenge management.¹²³ This platform, developed in partnership with the treatment provider Last Door, and derived from their own in-take assessment system, is geared around tracking not just interventions, but the drug users 'recovery capital', as a individualised metric of their place on a recovery journey. The tool has become the basis for tracking policy impact beyond 'harm' metrics, and the expansion of MRP is underway.

BC, on the other hand, has technology available such as Lifeguard.¹²⁴ This is a smartphone app, like DORS in Alberta, which alerts first responders by automatically dialing 911 during a suspected overdose event. Another

¹²³ *My Recovery Plan*. (n.d.). Government of Alberta.

¹²⁴ *Two years later, Lifeguard App continues to save lives*. (2022, May). BC Emergency Health Services.

smartphone app that exists in BC is the Brave App, which acts as a panic button for individuals using substances and at risk for overdose.¹²⁵ In an effort to prevent overdoses in the first place, a piece of technology currently being tested is a portable drug checking machine called a Fournier-Transform Infrared Spectrometer, which would be the first piece of technology of its kind in Canada.¹²⁶

Though both provinces are investing in and deploying technology to support users, Alberta has married the investment in this area with a plan to track and eventually publish more data on the whole addiction journey, including the progress being made towards recovery. With technology in Alberta integrated into this coherent structure of services, in years to come it will be possible for policy-makers to evaluate the province's impact on improving recovery capital as well as addressing drug harms – a first of its kind in the developed world.

Summary

Both Alberta and BC deploy elements of recovery and harm reduction. The most apparent difference in policy between the provinces is BC's recent decriminalization of substance possession. Alberta, while, bolstering funding and support around its recovery model, is maintaining current approaches to law enforcement around illicit

drugs. Alberta continues to invest in rehabilitation beds and spaces, such as therapeutic communities and has not adopted the models of 'safer supply' – including proposals for automated dispensing – that have been setup in BC.

New policy innovation in BC is not currently apparent on the issue of drug addiction, whereas Alberta's nascent model has not yet had time to fully deliver results, with recovery communities still being constructed for example. In a similar way, though BC has emphasized harm reduction for two decades, its safer supply strategy only reached the implementation phase 2021.

As the implementation of these strategies advances, ongoing scrutiny of their impacts and effectiveness is required to inform policy-makers in Canada and other jurisdictions. Close engagement between policy-makers and service leads in both provinces will be important to allow sharing of learnings and best practice, especially in those areas where provincial practices diverge.

¹²⁵ *Overdose Detection Saves Lives*. (n.d.). Brave.

¹²⁶ *Overdose prevention*. (n.d.). Government of BC; Province of British Columbia.

CONCLUSIONS

Canada has been grappling with a worsening opioid crisis for over two decades. The harms caused by the crisis are substantial, causing half as many deaths in 2020 and 2021 as COVID-19 and five times as many life years lost. The problem is particularly acute in Alberta and BC, which together account for 50% of all AAOTDs in Canada despite representing only 25% of the population.

The data reviewed for this project gives a broad picture of why drug harms are so high in Alberta and BC and who is bearing the brunt of these harms. Harms are highest in Alberta and BC principally because in these two provinces the drug supply is most toxic. Though there are likely more drug users in these two provinces, the difference in self-reported drug use is insufficient to explain the concentration of harms on the west coast. Though a number of other factors may contribute to the crisis (e.g., innovation in the illicit market, inward migration of drug users¹²⁷, and access to housing), their impact is likely to not be as significant as the toxicity of the drug supply itself.

¹²⁷ Somers, J. M., Moniruzzaman, A., & Rezansoff, S. N. (2016). Migration to the Downtown Eastside neighbourhood of Vancouver and changes in service use in a cohort of mentally ill homeless adults: A 10-year retrospective study. *BMJ Open*, 6(1), e009043.

¹²⁸ *Substance use surveillance data*. (2023). Government of Alberta.

¹²⁹ *Illicit Drug Toxicity Deaths in BC: January 1, 2012—December 31, 2022*. (2022). British Columbia Coroners Service.

Alberta and BC

As the opioid crisis in Alberta and BC have intensified, so have comparisons of their respective policy platforms. In particular, a number of commentators have held up Alberta's recovery-oriented system of care as a new alternative for BC's harm-reduction oriented approach. This report makes three observations on this subject.

First, though there was a greater decline in Alberta's overdose-related deaths compared to British Columbia's between 2021 and 2022 (17%¹²⁸ vs. 1.4%¹²⁹ respectively) it is still Alberta's second most deadly year on record with regards to drug-related harms.¹³⁰ Sustained reductions in the opioid mortality rate in 2023 would be needed to confirm a positive trend in Alberta. Also of course, overdoses are not the only indicator of success of drug policy.

Second, however much differences are emphasized between the provinces, both utilize harm-reduction and recovery-oriented interventions. Alberta, for example, distributes more naloxone than BC.

¹³⁰ *Substance use surveillance data*. (2023). Government of Alberta.

Third, data gaps and differences in definitions in certain key areas makes effective comparisons across the two provinces harder. For example, different definitions prevent comparisons of recovery beds and spaces available in the two provinces.

It is too soon to determine if Alberta's recovery-oriented system of care is delivering better results than BC's more harm-reduction centred approach, however BC's longstanding approach has been the subject of the most intense criticism, given the scale of drug harms there. The rate of drug deaths in the province has been increasing for two decades, and 2022 only saw a very modest decline, so it is unclear whether further investment in the same harm-reduction efforts will improve this state of affairs.

The differences between Alberta and BC's policies are real, but in terms of provincial approaches, their service offerings are more similar than they are different. As Alberta's recovery-orientated model is implemented, it is possible that the differences in approach will become clearer.

The two provinces studied for this project have made some progress in becoming more transparent, and have also pioneered new prescription treatment programs. Compared to a decade ago, there is more information in the public domain, and more system-wide performance data being published. In recent months, Alberta has launched a detailed online data dashboard that allows the

addiction crisis and other interventions there to be tracked, with an innovative 'recovery capital' scoring matrix to track more than harmful episodes or agency demand.

However, key metrics are still difficult to evaluate given gaps in reporting and the lack of data collection. Alberta has the more comprehensive dataset to report on current performance, although some of British Columbia's data – though harder to access and compare – is more granular and has a longer time series. The two provinces are suffering the same public health crisis, and as neighbouring jurisdictions, their respective approaches warrant further investigation. Primary research, supported by comprehensive government data, is required to extract identifiable best practices from comparisons between the two, and this is the type of activity that a Federal Government study could seek to evaluate.

Where Next?

There is an ongoing public health emergency of drug addiction in Canada. The Covid-19 pandemic and its consequences exacerbated the harms associated with the pre-existing challenges around poly-drug use combined with mental illness, and homelessness among a cohort of individuals suffering from low levels of social capital.

Our research indicates that current approaches in both provinces, based on the available data, are not yet

showing the progress that the public and those impacted by drug addiction deserve. Of the two provinces, Alberta is currently experiencing a reduction in key addiction-related harms, however it is based on two quarters of data, and would need to be sustained through 2023 in order to represent an established trend.

Politicians, the public and practitioners working in the field across both provinces want to see better progress to mitigate the health harms from addiction. And although the pandemic was an accelerant to some negative trends, and despite major investments in services, the Federal Government has not undertaken an intervention to properly score the impact of provincial and municipal responses in Western Canada. Given the scale of the crisis and the number of lives lost, and set against the assertive role played by Health Canada and other national agencies in responding to the pandemic, this reticence is hard to explain.

In both provinces, and in Canada overall, the biggest impediment to an informed public policy debate is the lack of data around long-term treatment outcomes, desistence, and recovery. This is one area where a set of nationally agreed definitions and counting rules would benefit everyone. Overdoses are relatively easy to count but cannot be the only metric by which drug policy is judged.

The lack of good data on the downstream interventions and the addiction recovery journey may be the symptom

of a wider problem in that public health practitioners and provincial and federal policy-makers do not share a single view on the evidence base around intervention efficacy, nor the best pathways towards, effective recovery from drug addiction.

Public concern about this challenge is likely to continue and as death rates remain high, more transparency, innovation and new policy responses are therefore needed. Alberta Government's development of a 'recovery-orientated system of care' provides an important example of how political leadership and a comprehensive strategy are necessary conditions for success. Combined with new technology and data tracking that captures a drug user's recovery potential, it may provide a collective impetus to widen the policy agenda across Canada as a whole from a narrow goal of reducing fatal overdoses.

Whatever new policy responses take hold in either BC or Alberta, it is not constructive for the wider debate in Canada for the media and researchers to be hampered by a lack of coherence around policy goals combined with inadequate data collection and publication.

Drug addiction and its consequences are problems shared across many jurisdictions, but provinces like BC and Alberta, and Canadian policy-makers in general, should be well placed to develop an evidence-based policy framework that is comprehensive for the whole addiction journey, and supported by the best data. Such

a robust policy framework would encompass prevention, enforcement and interventions, through to treatment and recovery.

Canada's experience could provide lessons to other countries like the USA, but only if governments at all levels commit to a consistent reporting measure that accurately describes the progress being made, and one that counts more than caseloads, inputs, or a series of 'harm' metrics. Despite the urgency of this crisis, that basic information architecture is still not fully in place and as a result, the impact of many policies in Canada to reduce harms and to aid recovery cannot be properly evaluated.

With COVID-19 we have recently seen the kind of mobilization that both the Federal and Provincial governments are capable of when they actively cooperate. The scale of opioid-related harms in Canada warrants major coordinated action of this kind, led by Ottawa, with much more focus on how progress at all levels will be measured, and much greater transparency around what outcomes are being pursued.

Policy Recommendations

Agree what success looks like.

- Given the significant public funds that continue to be spent, provincial and federal policy-makers should now urgently agree what success looks like and how it will be measured.

- The Federal government should agree with Canadian provinces a core set of performance metrics that will be routinely collated and published, and fund a full evaluation of the provincial policy framework in British Columbia, where the crisis is most acute;
- Health Canada should publish a comprehensive policy briefing that summarises the international evidence-base for all currently funded addiction services, including innovative models like 'safer supply';
- Key national metrics must be developed collaboratively and in a way that covers all provinces and encompasses the full spectrum from prevention, through enforcement and other interventions, to treatment and recovery, with a balance between positive and negative outcomes where possible.
- Alberta and British Columbia should work together to share learnings as new approaches are adopted in each province, such as recovery communities in Alberta, the use of treatment interventions using Sublocade, or the impact of decriminalisation in BC.

Collate and publish more, better data.

- All public authorities and those service providers funded by the government, should be obliged to monitor and report on the full set of outputs at every stage and in a standardised format. Better data that is published in a more accessible way will aid the media and public to understand trends and to gauge whether current approaches are working.
- Existing data that relates to harms should be augmented with new data relating to benefits, such as long-term recovery rates and first-time entrants. BC would benefit from adopting a platform similar to MRP in Alberta where recovery capital is scored and tracked.
- Standardised counts are needed for intra-provincial comparisons, especially of activity-based measures like safer supply prescribing behaviour, attendance at overdose prevention sites, and capacity and utilisation of treatment spaces.
- Data that is not currently published, but which would enhance public debate, such as the geographic concentration of drug deaths below the provincial level, or the costs associated with treatment programmes, should be released.
- Local population and user surveys that would inform public understanding of areas like Vancouver's Downtown East Side should be commissioned, including documenting the residency history of drug

users in that area to determine the level of inward migration.

- Collect and publish more federal and provincial data on enforcement and criminal justice caseloads related to drug crime. This would enhance the policy debate, especially in the context of decriminalisation now underway in BC, which is affecting possession but is not meant to lead to a reduction in enforcement against drug traffickers and those detected and charged at a local level with more serious offences like importation or distribution of illicit drugs.

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Appendix A: Calculations for COVID-19 and Opioid Life Years Lost, 2020-2021

COVID-19

Age distribution estimates were made based on Canada's COVID-19 statistics on November 22, 2022.¹³¹

Age	Deaths	Proportion of total
0 to 11	41	0.09%
12 to 19	25	0.05%
20 to 29	144	0.31%
30 to 39	335	0.73%
40 to 49	720	1.56%
50 to 59	2061	4.48%
60 to 69	4889	10.62%
70 to 79	9875	21.45%
80+	27939	60.70%
Total	46029	100.00%

A midpoint was then assigned for each age group (e.g., 20-29 was assigned 25), and subtracted from 75 (e.g., 20-29 that died of COVID-19 lost an average of 50 life years).

The total number of deaths as of January 1, 2022 (30,145) was assigned the above age distribution and the estimated number of deaths in each age group multiplied by the midpoint of LYL. The sum of LYL was then taken for the report.

Age	Deaths	LYL by age (75 - midpoint)	Sum of LYL Lost
0 to 11	26.85144148	70	1879.600904
12 to 19	16.37283017	60	982.3698103
20 to 29	94.30750179	50	4715.37509
30 to 39	219.3959243	40	8775.836972
40 to 49	471.537509	30	14146.12527
50 to 59	1349.776119	20	26995.52239
60 to 69	3201.870668	10	32018.70668
70 to 79	6467.267918	0	0
80+	18297.62009	0	0
Total	30145	N/A	89513.53712

¹³¹ COVID-19 daily epidemiology update. (2020). Public Health Agency of Canada.

Opioids

Statistics were provided for both the number and distribution of accidental-apparent opioid toxicity deaths in 2020 and 2021, and these were combined to determine the number of deaths per age group.¹³² A midpoint was assigned for each age group and subtracted from 75, and the estimated number of deaths in each age group multiplied by the midpoint of lost life years. The sum of lost life years was then taken for the report.

	Distribution by age		2020 deaths: 6090	2021 deaths: 7725	Total Deaths	LYL by age (75 - midpoint)	Estimated LYL by Category
	2020, %	2021, %	2020, #	2021, #			
0 to 19	2%	2%	121.8	154.5	276.3	65	17959.5
20 to 29	18%	18%	1096.2	1390.5	2486.7	50	124335
30 to 39	27%	29%	1644.3	2240.25	3884.55	40	155382
40 to 49	23%	23%	1400.7	1776.75	3177.45	30	95323.5
50 to 59	21%	20%	1278.9	1545	2823.9	20	56478
60 +	10%	9%	609	695.25	1304.25	0	0
Total	101%	101%	6150.9	7802.25	13953.15	N/A	449478

Due to rounding, the total in the chart is slightly higher than the actual number of deaths.

The lost life years for 60+ was set to 0 to make the above figure a more conservative estimate.

¹³² *Opioid- and stimulant-related harms.* (2022). Government of Canada.

Appendix B: Estimating Drug User Population Based on CADs Data

The Canadian Alcohol and Drugs Survey (CADS), formerly the Canadian Tobacco, Alcohol and Drugs Survey (CTADS) measures drug use in a number of ways. For this paper, the ‘any of 5 drugs’ category (2013, 2015, and 2017) and the any of 6 drugs category (2019) was used to estimate the Canadian user population. These categories were chosen because they were the most continuous across the shift from CTADS to CADS.¹³³

The main issue is that, prior to legalization in 2018, cannabis significantly inflated the numbers in most categories when it came to counting illegal drug use in Canada. The ‘any of 5 drugs’ category in the CTADs excluded cannabis. The ‘any of 6 drugs’ category in the CADS did add salvia (a hallucinogenic), but the use of salvia is relatively low in Canada (In 2019 numbers were too low to estimate past-year use, and only 2.9% of the population reported having used Salvia in their lifetime).

¹³³ *Canadian Alcohol and Drugs Survey (CADS): 2019 detailed tables.* (2021). Government of Canada.

Appendix C: Terminology for Different Indigenous Groups in Canada

There are a number of different terms for indigenous groups in Canada. Some terms have specific legal meaning.¹³⁴

Indigenous: Indigenous is a term that refers to a variety of aboriginal or native groups, often in a global context. In the United Nations, 'indigenous' refers to people of long settlement and connection to specific lands who have been adversely affected by colonialism.

Aboriginal: in a Canadian context aboriginal refers to the first inhabitants of Canada. Section 35 of the Canadian Constitution recognizes three aboriginal groups (First Nations, Métis and Inuit).

First Nations: refers to Aboriginal peoples in Canada who are ethnically neither Métis nor Inuit. Often used in place of the legal term 'Indian.'

Inuit: Refers to specific groups of people generally living in northern Canada.

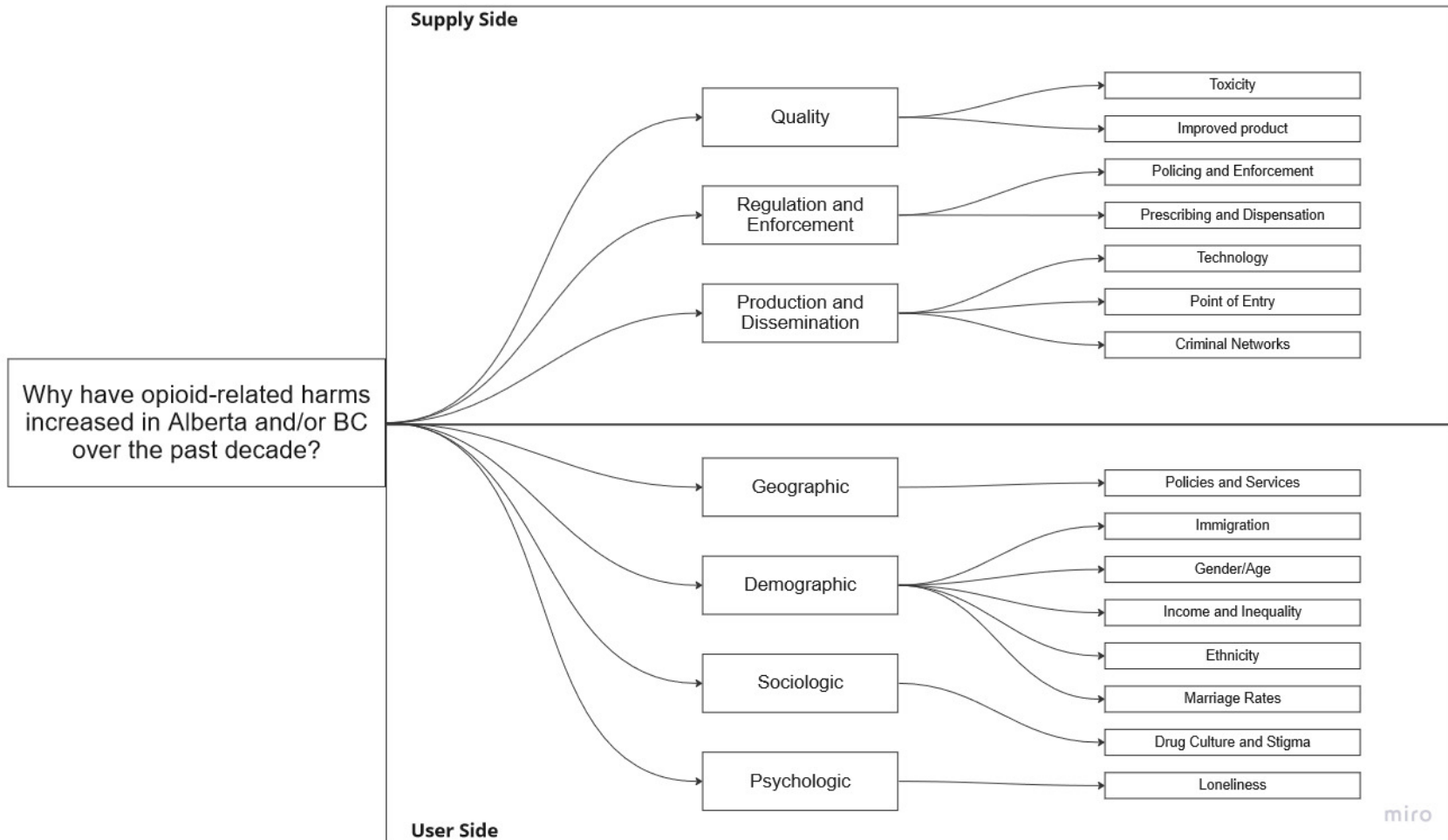
Métis: Refers to a collection of cultures and identities that resulted from unions between aboriginal and European people.

Indian: Refers to the legal identity of a First Nations person registered under the Indian Act. Outside of a legal context the term is often considered offensive.

¹³⁴ *Terminology*. (n.d.). Indigenous Foundations.

Appendix D: Drivers of the Opioid Crisis

Having reviewed the policy differences between Alberta and BC, the final section of this paper will explore possible explanations for why the opioid crisis has become so acute in western Canada, as well as factors that may differentiate the crisis in Alberta versus BC. The following chart breaks down all the factors identified that might be driving the crisis.



There are, ultimately, two ways in which factors can increase drug harms. They can increase the number of users, or they can increase the risk of harm to users. Some factors may do both. For any particular level of harm, the number of users and the risk of harm will be inversely related.

As previously reviewed, the number of users in Alberta and BC appear to be higher than in other provinces; however, this difference is not a drastic one. As can be seen from the below table, the ratio of users between Alberta, the province with the largest user population (proportionately) and Newfoundland/PEI, the provinces with the smallest user populations, was 2.18 in 2019 (4.8/2.2). The ratio between their AAOTDs rates, however, were 5.68 and 4.43 respectively. The AAOTD ratio between Alberta and Saskatchewan was 1.53, and Saskatchewan has only a 0.1% larger user base than Newfoundland and PEI. In other words, the size of the user population seems to impact opioid-related harms, but the size of a provinces user population does not consistently predict AATODs.¹³⁵ Note that, due to sample size, the figures used here represent only rough estimates.

Use of at least one of six illegal drugs, 2019											
	Canada	BC	AB	SK	MB	On	QC	NB	NS	PE	NL
Past year	3.5%	3.8%	4.8%	2.3%	2.6%	3.5%	3.2%	2.2%	3.2%	2.2%	2.2%
Lifetime	16.1%	17.8%	18.0%	13.4%	16.5%	14.2%	17.8%	19.4%	16.9%	12.1%	12.7%

¹³⁵ Canadian Alcohol and Drugs Survey (CADS): 2019 detailed tables. (2021). [Surveys]. Government of Canada.

Legend	
	Driver
	Possible Driver
	Not a Driver
	Out of Scope

	Toxicity
	Improved Product
	Policing and Enforcement
	Prescribing and Dispensation
	Technology
	Point of Entry
	Criminal Networks
	Services
	Immigration
	Gender/Age
	Income and Inequality
	Housing and Homelessness
	Ethnicity
	Marriage Rates
	Drug Culture and Stigma
	Physical and Mental Health

Increased Toxicity

As previously discussed, drug toxicity appears to be a major factor in opioid harms in Canada. Though there is not a significant amount of data available, that which is available suggests that fentanyl is significantly more prominent in BC than in the rest of the country. Though data was not provided for Alberta, fentanyl has been detected in the majority of Alberta's accidental drug poisonings (93% in 2021).¹³⁶

Based on the alignment between AATODs and fentanyl detection as previously identified in the report and the lack of correlation between the user population and AAOTDs, the toxicity of the supply seems like the single most significant determinant of opioid-related harms.

Unfortunately, since there was not data available regarding the prevalence of fentanyl in Alberta's illicit drug supply seized by police, it is not possible to compare the significance of this factor between the two provinces.

¹³⁶ *Substance use surveillance data.* (2023). Government of Alberta.

Legend	
	Driver
	Possible Driver
	Not a Driver
	Out of Scope

	Toxicity
	Improved Product
	Policing and Enforcement
	Prescribing and Dispensation
	Technology
	Point of Entry
	Criminal Networks
	Services
	Immigration
	Gender/Age
	Income and Inequality
	Housing and Homelessness
	Ethnicity
	Marriage Rates
	Drug Culture and Stigma
	Physical and Mental Health

Improved Product

One way to enhance demand for a product is to make better products. As far as drugs are concerned, this might entail improved delivery mechanisms, advertising, or providing 'better' drugs. Unfortunately, it was not within the scope of this project to conduct the investigation that exploring this factor would require.

Legend	
	Driver
	Possible Driver
	Not a Driver
	Out of Scope

	Toxicity
	Improved Product
	Policing and Enforcement
	Prescribing and Dispensation
	Technology
	Point of Entry
	Criminal Networks
	Services
	Immigration
	Gender/Age
	Income and Inequality
	Housing and Homelessness
	Ethnicity
	Marriage Rates
	Drug Culture and Stigma
	Physical and Mental Health

Policing and Enforcement

The extent to which policing, and enforcement has impacted opioid harms in different provinces is unclear. Consider the following factors:

- Leading up to 2020 Alberta charged significantly more people for drug crimes than BC. In 2019, Alberta charged 38 people per 100,000 for TPD-related crimes, while BC only charged 22.
- As a ratio of charges to incidents, 82% of incidents in Alberta result in a charge, while only 29% of incidents in BC result in a charge.
- Charges and recorded incidents both dropped with the onset of COVID-19, suggesting that police backed off enforcement.
- There was a significant drop in opioid-related harms immediately prior to the pandemic which can most likely be attributed to supply-side interventions in China.

From these facts, it is difficult to determine how policing impacts opioid-related harms. Drug markets are also subject to upstream enforcement and interdiction, and to seizures of illicit drugs entering Canada or being produced domestically. There is no public declaration of drug volumes seized at provincial level by police and customs in Canada, however the volume of charges in BC for serious drug offences (i.e. other than possession cases) is low and has dropped in recent years.

In terms of an enforcement role, they could be a relation between decreased policing during the pandemic and increased harms, if it enabled illicit market actors to become more assertive. As the worst affected province, BC seems to do minimal enforcement around drugs in terms of users, and very low volumes of active charges in the case of drug supply, importation and trafficking.

Supply-side interventions in markets like China where much fentanyl is produced seemed to reduce drug harms in 2019 but establishing causality is problematic because of wider changes occurring at the same time.

Set in contrast to BC, higher levels of enforcement in Alberta do not seem to have insulated the province from drug-related harms. Also, supply-side interventions may have only pushed innovation in the Canadian black market, driving dealers to find ways to produce opioids and other drugs in Canada rather than importing it, or shifting to new production areas like Mexico. Ultimately, further investigation is needed into the relation between enforcement and opioid harms, and the current experiment in decriminalisation of drug possession in BC also warrants thorough, federal evaluation to determine its impact, including on the illicit market itself.

Legend	
	Driver
	Possible Driver
	Not a Driver
	Out of Scope

	Toxicity
	Improved Product
	Policing and Enforcement
	Prescribing and Dispensation
	Technology
	Point of Entry
	Criminal Networks
	Policies and Services
	Immigration
	Gender/Age
	Income and Inequality
	Housing and Homelessness
	Ethnicity
	Marriage Rates
	Drug Culture and Stigma
	Physical and Mental Health

Prescribing and Dispensation

As previously discussed, high levels of historical opioid prescribing played an important role in the development of Canada’s opioid crisis. Given that Canada is still the fourth-largest consumer of opioids per capita, it would make sense that prescribing still plays a role in the crisis.

However, the available evidence suggests that its current impact in Canada’s hotspots is relatively small compared to illicit opioids. For example, in Alberta there were 1,471 acute accidental drug poisoning deaths related to opioids. Only 5% (78) of these deaths were attributed to pharmaceutical opioids.¹³⁷

One study found that, between 2007 and 2016, dispensing rates were correlated with opioid-related hospitalization in three provinces, Quebec, New Brunswick, and Nova Scotia. This suggests that dispensing levels still have an impact on opioid harms in Canada, but likely has a minimal impact in BC and Alberta given the relative importance of their illicit markets.¹³⁸

¹³⁷ *Substance use surveillance data*. (n.d.). Government of Alberta.

¹³⁸ Jones, W., Kurdyak, P., & Fischer, B. (2020). *Examining correlations between opioid dispensing and opioid-related*

hospitalizations in Canada, 2007–2016. BMC Health Services Research, 20(1), 677.

Legend	
Driver	Green
Possible Driver	Yellow
Not a Driver	Orange
Out of Scope	Grey

Toxicity	Green
Improved Product	Grey
Policing and Enforcement	Yellow
Prescribing and Dispensation	Green
Technology	Grey
Point of Entry	White
Criminal Networks	White
Policies and Services	White
Immigration	White
Gender/Age	White
Income and Inequality	White
Housing and Homelessness	White
Ethnicity	White
Marriage Rates	White
Drug Culture and Stigma	White
Physical and Mental Health	White

Technology

Technological innovation could be playing a role in the availability of opioids in Canada. Given that supply chains have been disrupted twice in recent years, first by regulatory change in China and second by the pandemic, it would not be surprising if new production technology has been developed in the black market. One report found that a contributing factor to the worsening AAOTD rate during COVID-19 was producers experimenting with alternative substances and precursors.¹³⁹

However, finding specific data on the impacts of technological innovation is beyond the scope of this project.

¹³⁹ Ali, F., Russell, C., Nafeh, F., Rehm, J., LeBlanc, S., & Elton-Marshall, T. (2021). *Changes in substance supply and use characteristics among people who use drugs (PWUD) during the*

COVID-19 global pandemic: A national qualitative assessment in Canada. International Journal of Drug Policy, 93, 103237.

Legend	
	Driver
	Possible Driver
	Not a Driver
	Out of Scope

	Toxicity
	Improved Product
	Policing and Enforcement
	Prescribing and Dispensation
	Technology
	Point of Entry
	Criminal Networks
	Policies and Services
	Immigration
	Gender/Age
	Income and Inequality
	Housing and Homelessness
	Ethnicity
	Marriage Rates
	Drug Culture and Stigma
	Physical and Mental Health

Point of Entry

Given Vancouver's status as a major port and BC's relative proximity to China, it makes a certain amount of sense that illicit opioids would enter Canada on the west coast. This may partially explain why fentanyl is so much more present in the drug supply in BC and Alberta (and the Yukon) than in other more eastern regions. However, international illicit drug trafficking would also have been hindered by the pandemic, and during this period drug harms increased drastically.

It was ultimately beyond the resources of this project to investigate whether being on the western side of Canada facilitated drug harms in Alberta and BC. However, it seems highly unlikely that this factor has not played a role in the proliferation of fentanyl in western Canada.

Legend	
Driver	Green
Possible Driver	Yellow
Not a Driver	Orange
Out of Scope	Grey

Toxicity	Green
Improved Product	Grey
Policing and Enforcement	Yellow
Prescribing and Dispensation	Green
Technology	Grey
Point of Entry	Grey
Criminal Networks	Grey
Immigration	White
Gender/Age	White
Income and Inequality	White
Housing and Homelessness	White
Ethnicity	White
Marriage Rates	White
Drug Culture and Stigma	White
Physical and Mental Health	White

Criminal Networks

It is undoubtedly and increasingly difficult to dispute the role of organized crime in facilitating the accessibility of illicit drugs to the Canadian populace. In fact, a 2021 RCMP report highlighted that there are well over 2600 active Organized Crime Groups (OCGs) that continue to contribute to both fentanyl-related deaths and methamphetamine addiction.¹⁴⁰ Moreover, the same report concludes that there has been a rapid increase in OCGs involved introducing higher-risk opioids, such as Isotonitazene, which is even more potent than fentanyl.¹⁴¹ Therefore, it is difficult to divorce criminal networks from the opioid crisis.

Nevertheless, while evidence may exist that criminal networks are germane to the proliferation of toxic drug supplies throughout the country, tracking, investigating, and analyzing the actions of OCGs and the subsequent impact on the opioid crisis in BC and Alberta is beyond the scope of this project.

¹⁴⁰ RCMP, “2021 Report: Organized Crime in Canada,” Criminal Intelligence Service Canada (Government of Canada, 2021).

¹⁴¹ RCMP, “2021 Report: Organized Crime in Canada.”

Legend	
	Driver
	Possible Driver
	Not a Driver
	Out of Scope

	Toxicity
	Improved Product
	Policing and Enforcement
	Prescribing and Dispensation
	Technology
	Point of Entry
	Criminal Networks
	Immigration
	Gender/Age
	Income and Inequality
	Housing and Homelessness
	Ethnicity
	Marriage Rates
	Drug Culture and Stigma
	Physical and Mental Health

Immigration

The authors explored whether geographic explanations might play a role in the concentration of drug harms, and considered whether inward migration to BC may be partially responsible for the scale of drug harms in the province, and in Vancouver in particular.

Survey data on residency of drug users is not collected routinely. However, those suffering drug harms in BC are notably older than in the rest of the country. This could be because older drug users have migrated to BC, attracted by its reputation as a service centre, or to be among other users. Significant congregation of drug users from other provinces in BC could partly explain the elevated levels of drug harms there.

Second, a notable portion (15%) of homeless people in Vancouver were found to be recent arrivals in the city's 2020 point-in-time homeless count,¹⁴² however, there was not comparable data from other point-in-time counts. Ultimately it seems plausible that inward migration impacts drug harms in BC, but there is minimal data to support this as a key driver and more surveys would be needed to profile the current user population.

¹⁴² 2020 Homeless Count in Metro Vancouver. (2020). BC Non-Profit Housing Association.

Legend	
Driver	
Possible Driver	
Not a Driver	
Out of Scope	

Toxicity
Improved Product
Policing and Enforcement
Prescribing and Dispensation
Technology
Point of Entry
Criminal Networks
Immigration
Gender/Age
Income and Inequality
Housing and Homelessness
Ethnicity
Marriage Rates
Drug Culture and Stigma
Physical and Mental Health

Gender/Age

Opioid harms are significantly weighted towards 30-to-60-year-old-men. As a proportion of population, 30-to-60-year-old-men are most concentrated in BC and Alberta, exempting the Yukon and Northwest Territories.¹⁴³

30-60-Year-Old-Men, % of total regional population (2021 data)										
Canada	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
20.09%	20.26%	21.41%	19.72%	19.25%	19.88%	20.11%	19.25%	18.87%	18.27%	19.47%

However, the difference is not significant enough to have much of an impact on harm statistics. The difference between the province with the most 30-60-year-old-men (Alberta) and the least (PEI) is 3.14%. In Alberta 3.14% of the population represents about 140,000 people, which, with a death rate of 36.2¹⁴⁴, would represent about 50 deaths in 2021 out of 1,608, or about 3%.

¹⁴³ *Population and dwelling counts: Canada, provinces and territories. (2022).* Statistics Canada.

¹⁴⁴ *Opioid- and stimulant-related harms. (2022).* Government of Canada.

Legend	
Driver	
Possible Driver	
Not a Driver	
Out of Scope	

Toxicity
Improved Product
Policing and Enforcement
Prescribing and Dispensation
Technology
Point of Entry
Criminal Networks
Immigration
Gender/Age
Income and Inequality
Housing and Homelessness
Ethnicity
Marriage Rates
Drug Culture and Stigma
Physical and Mental Health

Income and Inequality

As previously reviewed, opioid-related harms fall more heavily on the poor than on the wealthy. Further, AAOTDs increase in a relatively linear fashion from the highest income quintile to the lowest. This suggests that relative wealth, rather than material deprivation, plays a role in opioid-related harms.

BC and Alberta are two of the most unequal provinces in Canada based on their Gini index¹⁴⁵, as can be seen in the below table.¹⁴⁶

Provincial Gini Index based on Adjusted Household After-Tax Income, 2020										
Canada	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
0.302	0.306	0.307	0.293	0.290	0.308	0.280	0.272	0.282	0.271	0.290

The exact impact of this inequality, however, is difficult to determine. Based on available data and the scope of this project the most that can be said is that inequality may be impacting levels of opioid-related harms.

¹⁴⁵ The Gini Index is a measure of wealth distribution across a population. A score of zero means everyone has exactly the same amount of wealth, and a score of 1 means exactly 1 person owns all of the wealth.

¹⁴⁶ *Income inequality statistics across Canada: Canada, provinces and territories, census divisions and census subdivisions. (2022).* Statistics Canada.

Legend	
Driver	
Possible Driver	
Not a Driver	
Out of Scope	

Toxicity
Improved Product
Policing and Enforcement
Prescribing and Dispensation
Technology
Point of Entry
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Income and Inequality
Housing and Homelessness
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Marriage Rates
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Housing and Homelessness

There is insufficient evidence to suggest that housing characteristics impact opioid-related harms.

Those who are renting or who are homeless are notably more likely to suffer drug-related harms than those who own their own home. Home ownership is lower than average in BC, and higher than average in Alberta, but neither province stands out significantly.¹⁴⁷

Homeownership rates by region, 2021										
Canada	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
69.0%	66.8%	70.9%	70.7%	67.4%	59.9%	59.9%	73.0%	66.8%	68.8%	75.7%

Homelessness is, unfortunately, difficult to count. A very rough estimate can be made by looking at the number of homeless shelter beds across the provinces. However, even though there are more beds in Alberta and BC, it is unclear whether this is an accurate proxy for homeless populations in the province.¹⁴⁸

Homeless Beds per 100,000 across all shelter types, 2021										
Canada	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
0.88	1.01	1.00	0.79	0.85	0.66	0.77	0.87	0.71	0.51	0.66

¹⁴⁷ The Daily — To buy or to rent: The housing market continues to be reshaped by several factors as Canadians search for an affordable place to call home. (2022). Statistics Canada.

¹⁴⁸ Homeless shelter capacity, bed and shelter counts for emergency shelters, transitional housing and domestic violence shelters for Canada and provinces, Infrastructure Canada. (2022). Statistics Canada.

Legend	
Driver	Green
Possible Driver	Yellow
Not a Driver	Orange
Out of Scope	Grey

Toxicity	Green
Improved Product	Grey
Policing and Enforcement	Yellow
Prescribing and Dispensation	Green
Technology	Grey
Point of Entry	Grey
Criminal Networks	Grey
Immigration	Yellow
Gender/Age	Green
Income and Inequality	Yellow
Housing and Homelessness	Yellow
Ethnicity	Yellow
Marriage Rates	White
Drug Culture and Stigma	White
Physical and Mental Health	White

Ethnicity

As previously discussed, ethnicity has a notable impact on risk of opioid harms. Visible minorities were significantly under-represented, with only 2.6 per 100,000 being hospitalized for accidental opioid poisonings between 2011 and 2016. Those who did not identify as a member of a visible minority, however, were hospitalized at a much higher rate of 13.2 per 100,000.¹⁴⁹

First Nations people were significantly over-represented. In Alberta, for example, in 2019, First Nations had an AAOTD rate of 69.5 verses the non-First Nations rate of 11.3.

With that being said, though both Albertan and BC have a higher Indigenous population than the Canadian average, there are provinces with proportionately higher numbers of indigenous people. For example, 17% of Saskatchewan's population identified as indigenous in 2021, yet the AAOTD rate in the province peaked at 26.3. This suggests that harms accrue in indigenous communities, but a high indigenous population is not in itself causal.

Indigenous Population by Region, 2021										
Canada	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
5.0%	5.9%	6.8%	17.0%	4.4%	2.9%	2.5%	4.4%	5.4%	2.2%	9.3%

¹⁴⁹ Gisèle Carrière, Rochelle Garner, & Claudia Sanmartin. (2018). *Social and economic characteristics of those experiencing hospitalizations due to opioid poisonings*. Statistics Canada.

Legend	
Driver	Green
Possible Driver	Yellow
Not a Driver	Orange
Out of Scope	Grey

Toxicity	Green
Improved Product	Grey
Policing and Enforcement	Yellow
Prescribing and Dispensation	Green
Technology	Grey
Point of Entry	Grey
Criminal Networks	Grey
Immigration	Yellow
Gender/Age	Green
Income and Inequality	Yellow
Housing and Homelessness	Orange
Ethnicity	Yellow
Marriage Rates	Orange
Drug Culture and Stigma	White
Physical and Mental Health	White

Marriage Rates

As previously discussed, 65% of those who died of illicit toxicity deaths in BC in 2016 and 2017 had never been married, and a further 18% were divorced. This statistic could represent a proxy for social isolation and low levels of social cohesion.

However, looking at marriage statistics for the provinces, there does not appear to be any correlation between marriage rates and opioid harms. Alberta and BC do not stand out when compared with other provinces.

Percentage of Canadians never married or divorced by Province, 2021 ¹⁵⁰										
Canada	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
35%	34%	34%	34%	35%	35%	37%	32%	34%	33%	31%

¹⁵⁰ *Marital status, age group and gender: Canada, provinces and territories and census metropolitan areas.* (n.d.). Statistics Canada.

Legend	
Driver	Green
Possible Driver	Yellow
Not a Driver	Orange
Out of Scope	Grey

Toxicity	Green
Improved Product	Grey
Policing and Enforcement	Yellow
Prescribing and Dispensation	Green
Technology	Grey
Point of Entry	Grey
Criminal Networks	Grey
Immigration	Yellow
Gender/Age	Green
Income and Inequality	Yellow
Housing and Homelessness	Orange
Ethnicity	Yellow
Marriage Rates	Orange
Drug Culture and Stigma	Grey
Physical and Mental Health	White

Drug Culture and Stigma

There is undoubtedly potential for stigma to impact the volume of opioid related deaths. Moreover, the Government of British Columbia advocates for the reframing of language when referencing people who use drugs as reducing stigma is believed to improve trust in government healthcare services and thereby potentially reduce opioid related deaths.¹⁵¹ For its part, the Government of Alberta similarly identifies stigma as a barrier to seeking help for individuals who use substances seeking care, treatment, and recovery services.¹⁵² While these considerations create a compelling argument for stigma as a driver, the ability to quantify stigma is beyond the scope of this project.

It is also entirely possible that perceptions of a more pervasive and tolerant drug culture exist in British Columbia as opposed to Alberta; however, it is difficult to establish evidence of this reality, or that it would constitute a driver of the opioid crisis in these provinces, within the scope of this report, due to the limitations around gathering data from individuals with lived experience.

¹⁵¹ Government Communications and Public. (n.d.). Reducing stigma—Province of British Columbia. Government of BC; Province of British Columbia.

¹⁵² *Harm Reduction—Reducing Stigma*. (2019). Government of Alberta.

Legend	
Driver	Green
Possible Driver	Yellow
Not a Driver	Orange
Out of Scope	Grey

Toxicity	Green
Improved Product	Grey
Policing and Enforcement	Yellow
Prescribing and Dispensation	Green
Technology	Grey
Point of Entry	Grey
Criminal Networks	Grey
Immigration	Yellow
Gender/Age	Green
Income and Inequality	Yellow
Housing and Homelessness	Orange
Ethnicity	Yellow
Marriage Rates	Orange
Drug Culture and Stigma	Grey
Physical and Mental Health	Grey

Physical and Mental Health

It is unclear whether physical and mental health are drivers of the opioid crisis in Alberta and BC. Perceived mental and physical health varies across the provinces. Health and mental health in BC is somewhat worse than the Canadian average but Alberta's is slightly better, which makes it challenging to draw a causal connection, and it was beyond the scope of this project to do a more in-depth investigation.

Self-reported perceived health by Province, fair or poor, per 100,000 ¹⁵³											
	Canada	BC	AB	SK	MB	ON	QC	NB	NS	PE	NL
Health	95.4	126.1	74.8	102.3	91.6	99.6	76.3	132.2	128.8	121.6	126.3
Mental Health	68.7	84.5	63.4	74.1	67.1	77.1	44.4	78.6	106.7	98.4	67.1

A 2021 USDA study found that physical disability (which was used as a proxy for chronic pain) tracked opioid harms in the USA between 2000 and 2010.¹⁵⁴ Unfortunately, there is no comparable data in Canada to draw a similar comparison.

¹⁵³ *Health characteristics, annual estimates.* (2022). Statistics Canada.

¹⁵⁴ McGranahan, D. A., & Parker, T. S. (2021). *The Opioid Epidemic: A Geography in Two Phases* (No. 287; Economics Research Report). U.S. Department of Agriculture.

Driver Summary

The primary driver of opioid harms in Alberta and BC appears to be the toxicity of the drug supply. Other factors that the evidence supports having had an impact are prescribing and dispensation rates and specific gender and age demographics.

Drivers where the evidence was less definitive include policing and enforcement, immigration, income and socioeconomic inequality and ethnicity. Relatedly, this project identified several additional issues to consider as potential drivers but were limited by scope and resources to further investigate. These included improved products, technology, point of entry, criminal networks and drug culture and stigma, and physical and mental health.

Policies and services, housing and homelessness and marriage rates lacked sufficient evidence to be categorized as drivers of opioid harms in Alberta and BC. Furthermore, improved product, technology, point of entry, criminal networks, drug culture and stigma and physical and mental exceeded the scope of this report.

Driver Summary			
Drivers	Possible Drivers	Not Drivers	Out of Scope
Toxicity	Policing and Enforcement	Housing and Homelessness	Improved Product
Prescribing and Dispensation	Immigration	Marriage Rates	Technology
Gender/Age	Income and Inequality		Point of Entry
	Ethnicity		Criminal Networks
			Drug Culture and Stigma
			Physical and Mental Health