Interior Health

BOARD BRIEFING NOTE

Submission to: **Board of Directors Regular/Public (BoD)**

Date of Meeting: **June 14, 2022**

Title	Medical Health Officer Report 2021: Toxic Drug Crisis in B.C.'s Interior Region (Part 1)
Purpose	To fulfil a statutory duty to report on the health of the population within the Interior region, specifically related to the worsening toxic drug crisis. Part 1 of 2, this report focuses on the historical context and a chart review of toxic drug deaths.
Brief Type	For Discussion
Presenter(s)	Dr. Sue Pollock, Interim Chief Medical Health Officer (CMHO) Dr. Karin Goodison, Medical Health Officer
Time Requested	20 mins
Lead	Dr. Karin Goodison, Medical Health Officer Dr. Carol Fenton, Medical Health Officer
Portfolio Sponsor(s)	Dr. Sue Pollock, Interim Chief Medical Health Officer (CMHO)
Materials (Appendices)	Appendix A. The Toxic Drug Crisis in B.C.'s Interior Region. Medical Health Officer Report. Part 1 (2021) Appendix B. The Toxic Drug Crisis in B.C.'s Interior Region. (presentation slides)
Link to a Strategic Priority or Goal	Mental Health & Substance Use, focused on overdose response, harm reduction, reducing stigma, mental wellness and increased access to quality person centered care.

1.0 PROPOSED RECOMMENDATION/RESOLUTION

That the Board of Directors receives the Medical Health Officer Report 2021 for discussion.

2.0 DISCUSSION

The 2021 report is Part 1 of two Medical Health Officer (MHO) reports on the toxic drug crisis, reflecting the critical importance of this complex issue and helping to inform Interior Health's (IH) response to the BC Coroners Service Death Review Panel recommendations. [1] Part 2 will be completed later this year as the MHO Report 2022.

The MHO Report 2021 (Part 1):

- provides a background summary of the toxic drug crisis in British Columbia (B.C.) and then delves into the problem experienced in IH;
- describes the trends of increasing drug toxicity and associated deaths over the past few years, and the demographics of people affected by the toxic drug crisis in IH;
- presents the findings of a pre-pandemic (2017-2019) chart review project that examined IH service access by individuals who died from toxic drugs and had accessed IH services within one year before their death;
- explores opportunities to further expand health services and take collective action with community partners on the risk and protective factors associated with toxic drug poisoning and death.

The report incorporates feedback from extensive consultation, including with IH's Toxic Drug Supply Task Force, Emergency Department Network, Mental Health & Substance

Use (MHSU) Council, Aboriginal Partnerships portfolio, Health Authority Medical Advisory Committee, Quality Management Committee, and Senior Executive Team.

The MHO Report 2022 (Part 2) will describe and share stories of the lived experience and impact of the toxic drug crisis, as well as exploring the MHO perspective on prevention within this crisis.

3.0 INFORMATION SUPPORTING BOARD or COMMITTEE INPUT

3. 1 Background

Under B.C.'s Public Health Act [2], IH must:

- designate an MHO to report on the health of the population within the Interior region, and on the extent to which population health targets have been met;
- require the MHO to report to IH at least once each year;
- publish each report made.

The MHO may include in the report, recommendations relevant to health promotion and health protection in the Interior region.

The MHO Report 2021 (Part 1) was developed by the CMHO portfolio in collaboration with Digital Health (Epidemiology & Surveillance Unit), Population Health (Harm Reduction), MHSU Network, Communications, and a Peer Advisor (person with lived experience). Meaningful engagement with First Nations and Métis partners is underway, and will be a focus area for the MHO Report 2022 (Part 2).

3. 2 Options Considered

N/A

3. 3 Risk Considerations

3.3.1 (External Relations: External Partners) The toxic drug crisis is complex, involving health, social, economic, environmental and political interests. Tensions between these interests may limit IH's ability to reduce the health harms and health system impacts associated with toxic drugs.

3.3.2 (Legal/Regulatory: Compliance) Progress in IH has also been significantly delayed by federal regulations on controlled drugs and substances. For example, drug checking services have required exemptions from provisions relating to the collection, storage and transport of controlled substances.

3.3.3 (Clinical: Quality Care & Patient Safety) As well as being deemed an offence under federal regulation, substance use is often seen as a moral failing. The associated stigma can cause additional harms, limit treatment options, and create a barrier to accessing and benefitting from health care services.

3. 4 Financial Implications

The financial impact of the toxic drug crisis on the health system is substantial, including direct costs of ambulance attendances, hospitalizations and aftercare. Societal impacts on families and communities also lead to indirect health system costs. Population-based preventive measures and equity-oriented care, including specialized MHSU services, can reduce health harms and health care demand associated with toxic drug poisoning and death. Mental health promotion and substance use prevention require additional focus and resources. Additional funding is not being requested at this time.

3. 5 Operational Implications

As with financial implications, the toxic drug crisis has both direct (e.g. service provision) and indirect (e.g. staff stress and burnout) impacts on IH operations. IH's implementation of the report recommendations, and the recommendations of the BC Coroners Death Review Panel, will have implications for health service design and delivery, and collaboration with community partners.

REFERENCES

[1] BC Coroners Service. 2022. BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths. Retrieved from 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

[2] British Columbia's Public Health Act. [SBC 2008] Chapter 28. Queen's Printer, Victoria, British Columbia, Canada. Retrieved from http://www.bclaws.ca/civix/document/id/complete/statreg/08028_01

APPROVAL OF SUBMISSION & RECOMMENDATIONS

Name	Signature	Date Approved
Dr. Sue Pollock, Interim CMHO		May 26, 2022

Name	Signature	Date Approved
Susan Brown, President & CEO		May 27, 2022

Appendix A

Interior Health

The Toxic Drug Crisis in BC's Interior Region

2021 Medical Health Officer Report Part 1

Contents

06 MESSAGE FROM THE MEDICAL HEALTH OFFICER

08 EXECUTIVE SUMMARY

14 ACKNOWLEDGEMENTS

15 NOTE ON TERMINOLOGY

15 TRIGGER WARNING

16 INTRODUCTION

- 16 The toxic drug crisis has been getting dramatically worse
- 21 The drug supply has become increasingly toxic
- 30 Who is dying from drug toxicity in IH?

34 FINDINGS FROM THE PRE-COVID CHART REVIEW

- 34 Purpose
- 34 Scope of the review
- 35 Results
- 40 Limitations
- 40 Conclusion
- 41 Recommendations from Chart Review

43 DISCUSSION

44 REFERENCES

46 APPENDIX A. Distribution of illicit drug toxicity deaths in B.C. 2015-2022 (February)

48 APPENDIX B. Trends in drug toxicity deaths and paramedic-attended overdose events in IH and B.C.

52 APPENDIX C. Expansion of IH Substance Use Services in Response to Drug Toxicity Deaths

Just accept people as they are.
Just treat people the way you want to be treated.

Excerpt from End the Stigma: Brian's Story

Message from the

Medical Health Officer

The COVID-19 pandemic has challenged us all. It has impacted everyone in some way, with many people reporting decreased mental wellness, greater stress or increased use of substances. [1] British Columbians report having lost jobs, becoming socially isolated or disconnected from their families, schools or cultures, experiencing delayed and reduced in-person services and appointments, and experiencing increased racism and stigma. The pandemic has disproportionately impacted people who use substances. The drug supply became much more toxic; access to services, such as Overdose Prevention Sites and treatment services, was interrupted; people received disparate messaging - stay apart to prevent COVID-19, stay together to be safe when using drugs. The combination of all these things led to the worst year on record, with 372 lives lost to drug poisoning events in the Interior region through 2021.

I would like to extend my heartfelt condolences to the individuals, families, friends and communities impacted by these deaths.

These deaths are preventable.

To highlight the critical importance of prioritizing and responding to this complex issue, we have decided to commit two Medical Health Officer (MHO) reports to the toxic drug crisis. At the same time, we would like to bring attention to the timely release of the BC Coroners Service Death Review Panel and its important recommendations. [2] Our Interior Health (IH) MHO reports will complement the BC Coroners death review, and provide in-depth analysis for the Interior region, including the additional learnings we have gleaned from reviewing the medical charts of people who have died from exposure to toxic drugs.

Part 1 (MHO Report 2021) will describe the population health impacts of the toxic drug supply, introduce many of the issues at play, and report on the results of a chart review of people who died before the pandemic began. We will highlight the many interventions advanced within the health care system, highlighting some of the successes and challenges.

Part 2 (MHO Report 2022) will describe further chart reviews completed during the pandemic, review the successes and challenges to date, and consider additional steps to be taken both within the sphere of our health care system, and by stakeholders outside the sphere of health care.

Important to the context of this two part report are the voices of people who use substances, the voices of First Nations and Métis peoples, the impacts of COVID-19, and the openness of us all to listen to the experiences and stories of all those impacted by this complex situation.

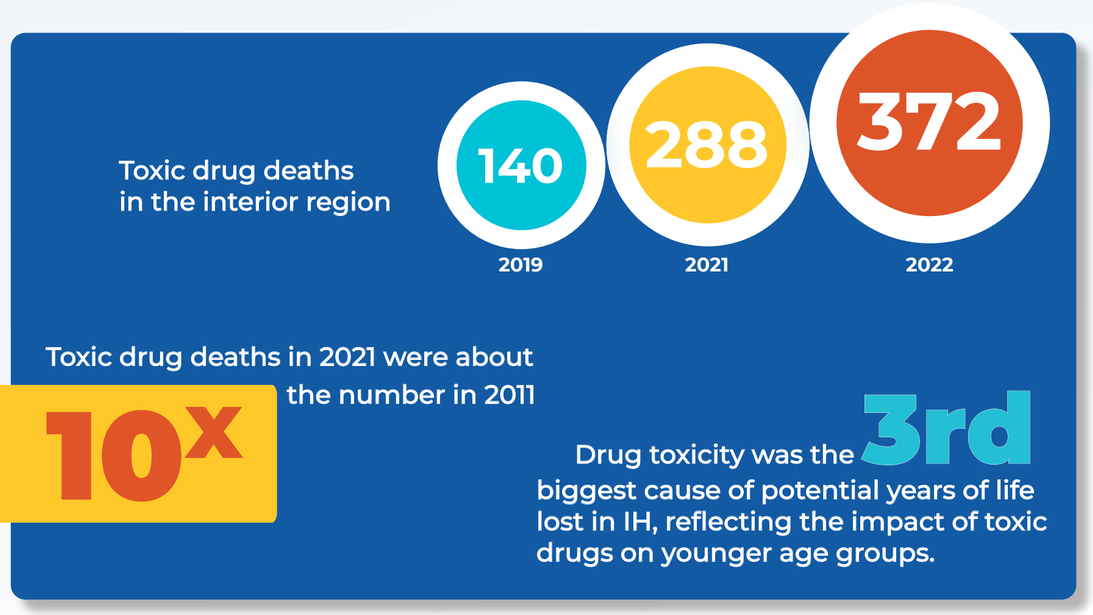
This is a wicked problem, with many factors contributing to the injuries, deaths and other harms associated with toxic drugs. In Part 2, using the tiers of prevention, we will consider the key steps being taken and explore how to enhance our response here in the Interior, recognizing this will take broad work from many stakeholders both inside and outside of the health care system.

Dr. Karin Goodison,
Medical Health Officer

Executive Summary

The toxic drug crisis has been getting dramatically worse.

The toxic drug crisis has been a public health emergency in B.C. since April 2016, and has been getting dramatically worse across B.C. since the onset of the COVID-19 pandemic.



The drug supply has become increasingly toxic, for multiple reasons.

1. Increasing occurrence and higher concentrations of fentanyl and fentanyl analogues in drug products
2. Addition of other sedatives (benzodiazepines) to illicit fentanyl, increasing risk of a complex overdose that is more difficult to reverse
3. Fentanyl contamination of stimulants, used by people who are not used to fentanyl and may not consider themselves at risk
4. Unpredictable concentrations and types of drugs found in a substance, including unexpected occurrence of ultra-high potency, synthetic opioids

Fentanyl is a very potent synthetic opioid, estimated to be 20 to 40 times more potent than heroin and 100 times more potent than morphine.

Certain population groups are disproportionately impacted by drug toxicity

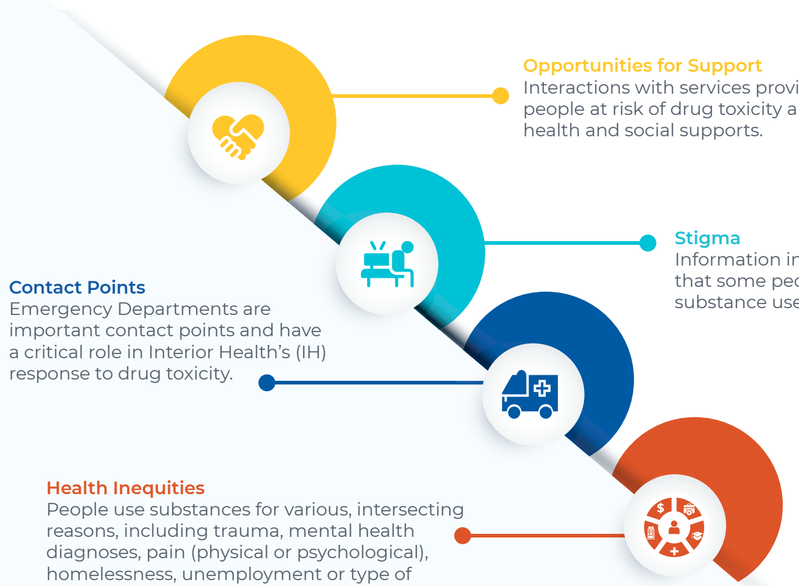
The age groups that are most affected, and saw the greatest increases during the COVID-19 pandemic, are the younger, working populations aged 19-39 years and 40-59 years old. In 2021, 79% of people dying in Interior B.C. were male and 84% of toxic drug deaths occurred inside. There have not been any deaths at Supervised Consumption or drug Overdose Prevention Sites.

According to the First Nations Health Authority (FNHA), women continue to represent a higher proportion of First Nations toxic drug poisoning deaths compared to other B.C. residents.

Overall, First Nations people are disproportionately impacted by the toxic drug crisis. The unique and historical context for these differences, including ongoing complex trauma impacts, racism, power imbalances and colonization, as well as the distinct strengths and resilience of individuals and communities, will be explored further with First Nations and Métis partners in the MHO Report 2022.

Findings from the pre-COVID-19 chart review

This review of medical charts included 270 people who died from toxic drug supply between November 1, 2017 and October 31, 2019, and had accessed IH health care services in the year before their death. Key findings from this quality improvement project included:



Opportunities for Support
Interactions with services provide opportunities to identify people at risk of drug toxicity and make connections with health and social supports.

Stigma
Information in medical charts suggested that some people had experienced substance use-related stigma.

Contact Points
Emergency Departments are important contact points and have a critical role in Interior Health's (IH) response to drug toxicity.

Health Inequities
People use substances for various, intersecting reasons, including trauma, mental health diagnoses, pain (physical or psychological), homelessness, unemployment or type of employment, and barriers to care.

Saving lives through collective action

Toxic drug deaths continue to increase despite the expansion and diversification of substance use services. Reducing the risk factors that contribute to toxic drug poisoning and death, and enhancing the protective factors, will require a whole society effort. For example:

- Improving employment, housing and other social determinants of health
- Identifying people with mental health and substance use disorders, and offering early supports that are culturally safe and trauma-informed
- Taking concrete action on commitments to First Nations and Métis peoples
- Providing effective management of chronic pain
- Adopting a harm reduction approach, including decriminalization of illicit drug use and support for a safer drug supply
- Promoting positive childhood experiences, and enhancing relationships for children and parents

We invite everyone to consider their role in influencing these many factors and improving the health and wellness of others, from birth to end of life.

Acknowledgements

IH provides health and wellness services across the ancestral, unceded, and traditional territories of the Dãkelh Dené, St'át'imc, Syilx, Tŝilhqot'in, Ktunaxa, Secwépemc, and Nlaka'pamux Nations. We honour the First Nations as the traditional stewards of these lands and waters.

IH also recognizes Métis Nation BC and Métis peoples in the Interior region who contribute to the diverse landscape of Aboriginal knowing and being.

This report was prepared by:

- Dr. Karin Goodison, Medical Health Officer
- Dr. Carol Fenton, Medical Health Officer
- Kasie Hays, Peer Advisor
- Ornella D. Wafo N., Epidemiologist
- Danielle Kreutzer, Project Lead Opioid Agonist Treatment Rural Communities
- Maja Karlsson, Director Population Health
- Andrew Kerr, Practice Lead Mental Health & Substance Use Network
- Julian Mallinson, Population Health Specialist

Thanks to the many dedicated people who contributed to this report, including those who collected and analyzed the data, reviewed the draft, and provided input throughout the development of the report.

Note on Terminology

In many spaces, the term 'Indigenous' has increasingly replaced the term 'Aboriginal'. At this time, the term 'Aboriginal' is preferred by First Nation and Métis Leadership Tables within the Interior region, as this term is consistent with the Canadian Constitution (Section 35 (2)).

Trigger Warning

The report includes information related to toxic drug deaths. We recognize that this content and subject matter may be triggering and cause trauma to readers. Please find the right time and space where you are ready to engage with the material before you proceed, and care for your safety and wellbeing.

For crisis support, please call:

Interior Crisis Line Network: 1-888-353-2273
For immediate and urgent mental health assistance

KUU-US Crisis Line Society: 1-800-588-8717
For First Nations and Aboriginal peoples; these crisis response personnel are certified and trained in Indigenous cultural safety

Métis Crisis Line: 1-833-638-4722
24/7 crisis line operated by Métis Nation of BC

Introduction

The toxic drug crisis has been getting dramatically worse

The toxic drug crisis has been a public health emergency in B.C. since April 2016, and has been getting dramatically worse across B.C. since the onset of the COVID-19 pandemic. [3]

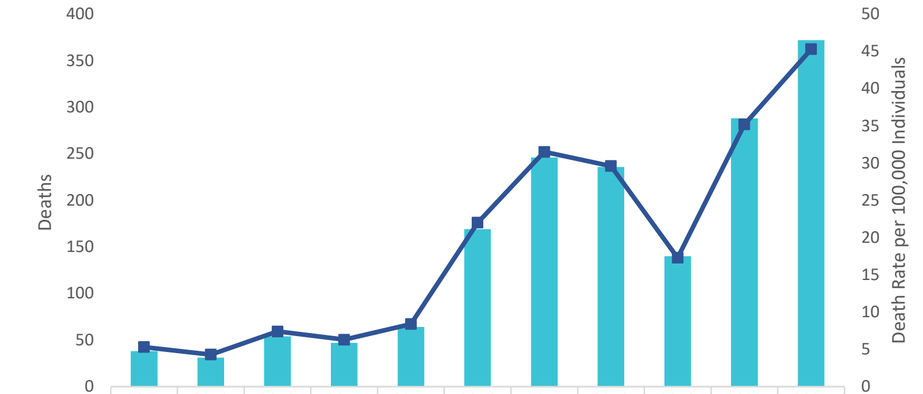
Serving the southern interior region of B.C., IH saw high numbers of drug toxicity deaths between 2016 and 2018 (Figure 1; Appendix A). There was a decrease in these deaths in 2019, which may be attributable to the rapid implementation of various harm reduction and substance use treatment programs across the province.

However, since the onset of the COVID-19 pandemic, a dramatic increase in deaths due to toxic drugs has affected families and communities in B.C. The highest number of deaths seen previously in IH had been 246 deaths in 2017. IH had a shocking 372 deaths in 2021, which is about 10 times the number of deaths in 2011. Reports of deaths in early 2022 show no sign that this trend is improving. According to the First Nations Health Authority (FNHA), the number of toxic drug deaths among First Nations people [1] across B.C. increased by 25.6% between 2020 and 2021. [4]

The trend in deaths per 100,000 individuals is similar across B.C. health authorities (Figure 2), and is also reflected in paramedic-attended overdose events across IH and B.C. (Appendix B).

These deaths have outstripped other unnatural causes of death in B.C., greater than double the total number of deaths from suicide, motor vehicle incidents, homicides, and prescription drug deaths combined (Figure 3). Illicit drug toxicity was the sixth most common cause of death in IH from March 2020 to February 2022, but was the third biggest cause of potential years of life lost in IH (after cancers and similar to heart diseases) reflecting the impact of toxic drugs on younger age groups (Figure 4).

Figure 1. Annual drug toxicity deaths and death rate per 100,000 individuals in IH.

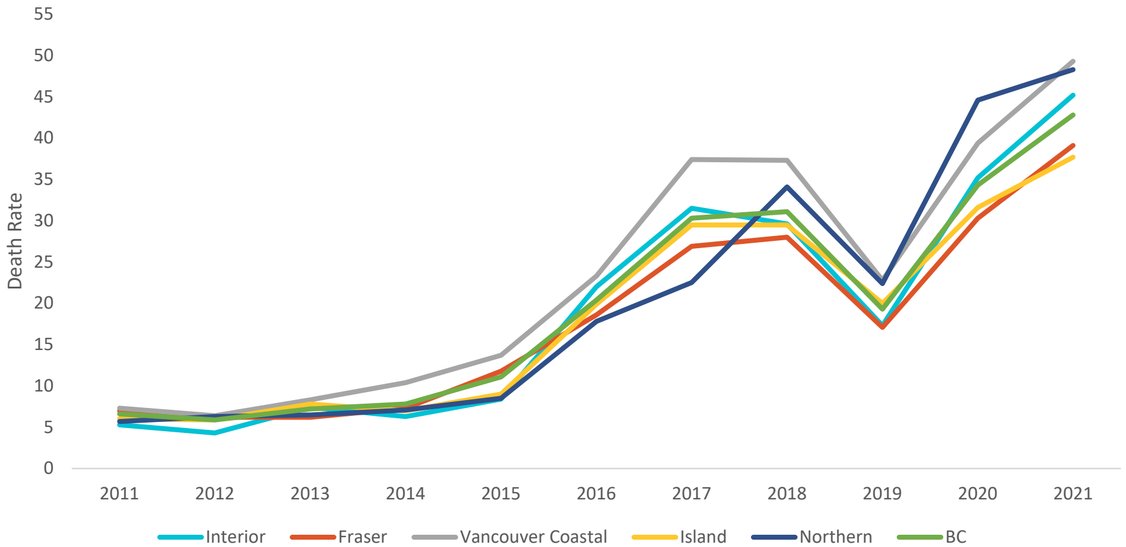


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Deaths	38	31	54	47	64	169	246	236	140	288	372
Rate	5.3	4.3	7.4	6.3	8.4	22	31.5	29.6	17.3	35.2	45.3

Source: Created by IH Epidemiology and Surveillance Unit using data from BC Coroners Service

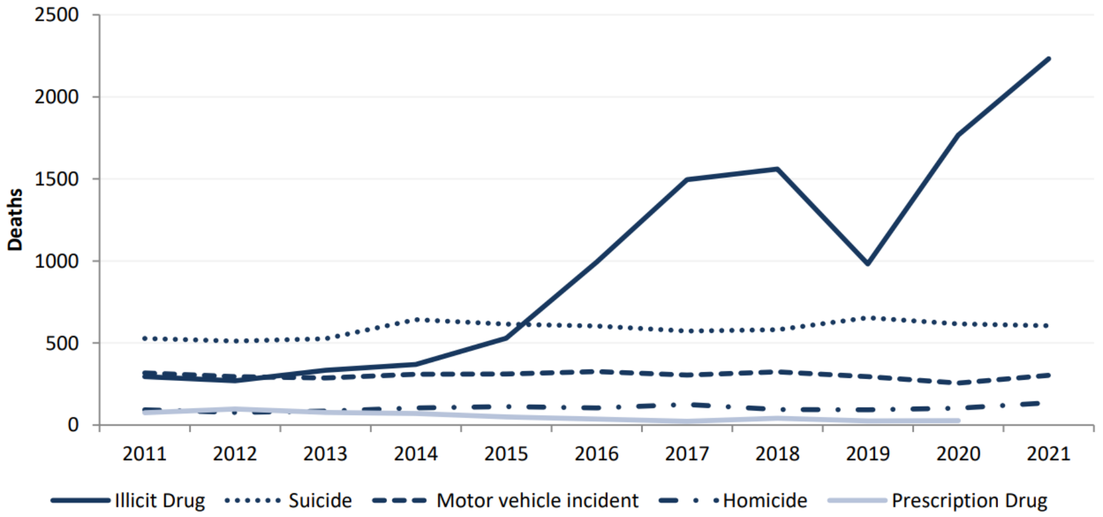
[1] *'Indigenous people who are not recognized as having First Nations status under the Indian Act are not represented in FNHA toxic drug data'. [4]*

Figure 2. Rates of drug toxicity death per 100,000 individuals by health authority, 2011-2021.



Source: Created by IH Epidemiology and Surveillance Unit using data from BC Coroners Service

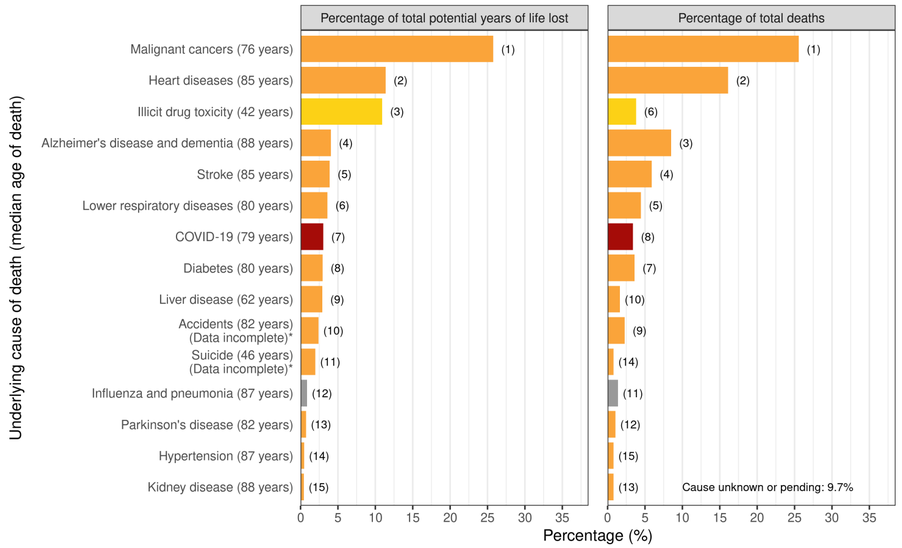
Figure 3. Comparison to other common causes of unnatural deaths in B.C. from 2010 to 2021.



Source: BC Coroners Service Monthly Report

**Data is preliminary and subject to change. Prescription drug toxicity deaths (accidental and undetermined) include cases where only a prescription drug is involved and reported for closed investigations only to 2020.*

Figure 4. Top 15 causes of death (ranking) in IH for March 2020 to February 2022.



Source: BCCDC Mortality Context App [5]

**External causes of death (other than illicit drug toxicity) incomplete due to reporting delay and may rise in rankings as cause of death become complete. Data Sources: 1) BC Vital Statistics; 2) Data on illicit drug toxicity deaths provided to BCCDC by BC Coroners Services; 3) Statistics Canada Table 13-10-0114-01 Life expectancy and other elements of the life table, Canada, reference period 2017-2019.*

The drug supply has become increasingly toxic

Since the beginning of the COVID-19 pandemic, there have been multiple reasons why the drug supply has become increasingly toxic, and they are:

1 Increasing occurrence and higher concentrations of fentanyl and fentanyl analogues in drug products, which increases the likelihood that someone could unintentionally use more than intended and more than they can tolerate;

2 The addition of benzodiazepines to illicit fentanyl - this combination increases the risk of a complex overdose that is more difficult to reverse due to the sedating effects of benzodiazepines and their non-response to naloxone, as well as creating the additional risk of benzodiazepine dependence and withdrawal, even without the person's awareness;

3 Fentanyl contamination of stimulants or "uppers" (non-sedating drugs, such as cocaine or methamphetamine) – individuals using stimulants may not realize their substance is contaminated or consider themselves at risk of opioid poisoning, and a very small amount of fentanyl can be life threatening when your body isn't used to fentanyl;

4 Unpredictable concentrations and types of drugs found in a substance – for example, the more recent appearance of nitazenes (ultra high potency, synthetic opioids, found unexpectedly in substances thought to be other opioids, such as fentanyl).

Fentanyl is a very potent synthetic opioid, estimated to be 20 to 40 times more potent than heroin and 100 times more potent than morphine [6]. This potency, along with unpredictable concentrations in the illicit and unregulated drug supply, makes the risk of drug poisoning very high. Fentanyl is typically used in a hospital setting and prescribed to help control severe pain. Illegally produced fentanyl is cheap to make into an illicit drug, compared to other opioids, and is increasingly found as a contaminant in, or a replacement for, other illicit drugs such as heroin. People may be unaware that the drug they are taking is contaminated with fentanyl or other additives, which increases the risk of drug poisoning.

Among the drug types involved in toxic drug deaths investigated by the BC Coroners Service, illicit fentanyl and other fentanyl-like drugs (such as carfentanil) were detected in 4% of deaths in 2012, increasing to 85% in 2020 (Figure 5).

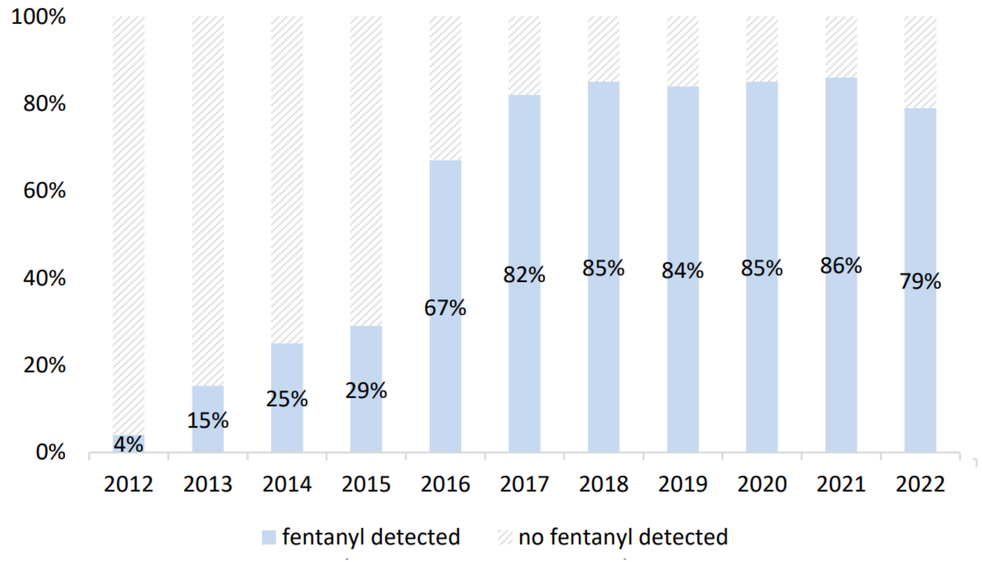
Preliminary toxicology results suggest that the proportion of deaths involving illicit fentanyl remained relatively stable in 2021 (83%).

However, for that proportion of people where fentanyl is detected, the concentrations of fentanyl found in people who died has continued to increase, suggesting higher amounts of fentanyl in the drug supply. This finding is reflected in drug checking results.

Both province wide and IH specific information demonstrate these increases. Between January 2019 and March 2020, extreme fentanyl concentrations (>50µg/L) were detected in 6% of toxic drug deaths in IH (Figure 6); between November 2021 and March 2022, it had increased to 19% of deaths .

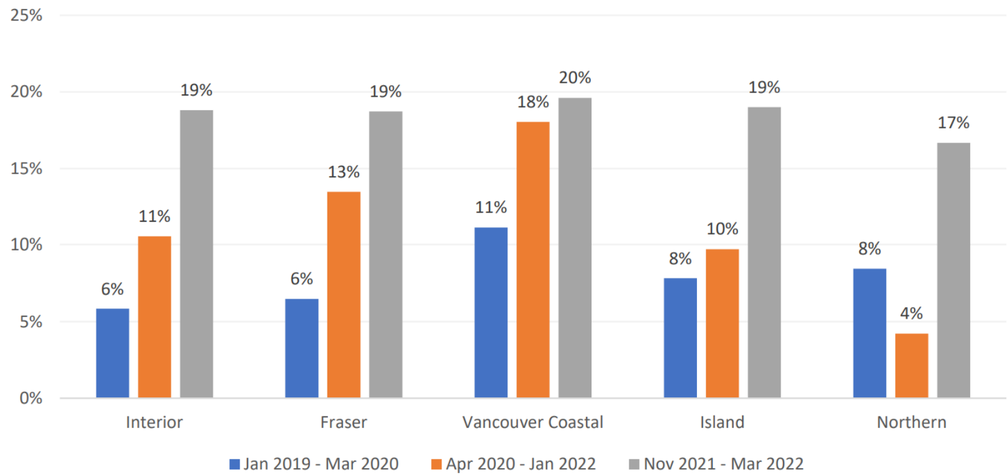
An IH-wide alert was issued in February 2022 when, across multiple sites in the region, people were bringing street drugs for testing that were found to have concentrations of fentanyl as high as 55%. This concentration was more than 5 times the average usually seen, so these drugs are very dangerous.

Figure 5. Percent of illicit drug deaths with fentanyl detected, 2012-2021.



Source: BC Coroners Service Monthly Report

Figure 6. Percent of fentanyl detected illicit drug toxicity deathswith fentanyl concentrations >50µg/L by health authority.



Source: BC Coroners Service Monthly Report

**Data from most recent months are considered preliminary and are subject to change as more tests are completed. Based only on cases where fentanyl concentrations were available.*

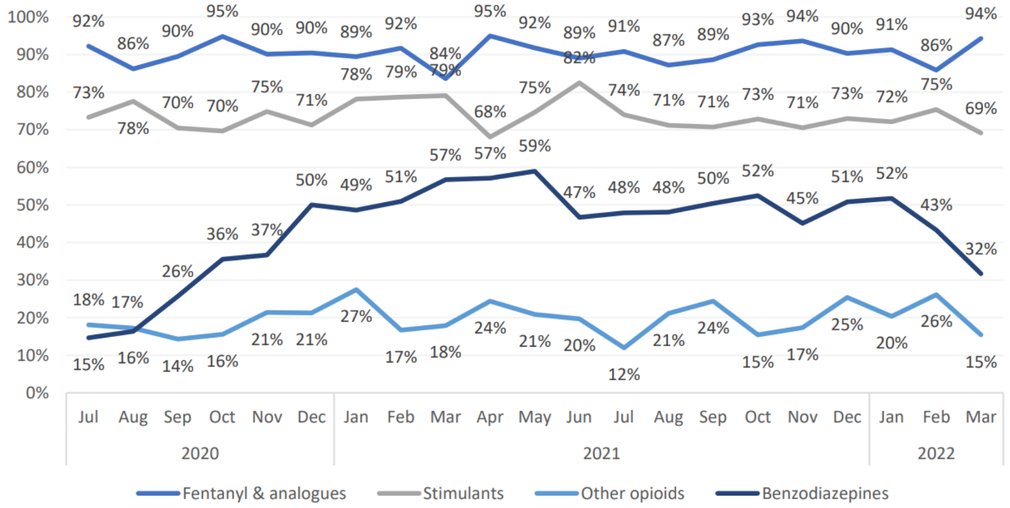
That same drug alert also reported concentrations as high as 25% of etizolam, which is a sedative medication in the family of benzodiazepines. B.C. has seen an increasing proportion of people who have died with evidence of exposure to illicit benzodiazepines, from 15% in July 2020 to as high as 59% in May 2021 (Figure 7).

Benzodiazepines are similar to opioids in that they provide a sedative, or 'relaxing' effect; however, they work differently in the body and do not respond to Naloxone, the opioid overdose reversing medication. This not only makes the street supply more dangerous, as death may be more likely to occur, but also makes it more dangerous to "detox", and more difficult to manage treatment and/or safer supply for people using the current toxic drug supply.

The other concern for people who use substances is fentanyl contamination in stimulant drugs, such as cocaine and methamphetamines.

This contamination is particularly dangerous for people who do not regularly use opioids, as they would have a very low tolerance for high potency opioids such as fentanyl, and it would not take much contamination to cause a poisoning or death.

Figure 7. Drug types detected in expedited toxicology among illicit drug toxicity deaths in BC, July 2020 – March 2022.



Source: BC Coroners Service Monthly Report

Street drugs are consumed in many ways, all of which can lead to drug poisoning and death. The method of consuming drugs changes over time with injection, snorting, smoking and oral consumption routes being more or less common at different times.

Information from the BC Coroners Service indicates that in 2016, injection was the most common mode of consumption associated with toxic drug deaths in B.C. [7]. From 2017 onwards, smoking was the most common mode of consumption. Injection declined from 39% in 2016 to 19% in 2020, whereas smoking increased from 31% to 56% during the same period.

Evidence for multiple modes of consumption was found in about 16% of cases.

The 2021 B.C. Harm Reduction Program survey of **harm reduction supply distribution site clients** across B.C. found that between March 2021 and January 2022:

64% of people living in the IH region identified smoking or inhalation as their preferred method of drug use, while 12 % preferred injection and 5% preferred snorting (consistent with BC Coroners Service data for people who died from drug toxicity).

66% of people had a Take Home Naloxone kit.

Crystal Meth Crystal meth (methamphetamine) was the most common drug used in the past 3 days (74% of people), followed by fentanyl (54%), heroin (46%), crack (28%) and cocaine (22%).

60% reported using drugs alone often or always.

50% of those people who injected drugs, had used drugs at an Overdose Prevention Site in the past 6 months. Over the same period, 26% experienced an opioid overdose, 7% experienced a stimulant overdose, and 57% witnessed an opioid overdose.

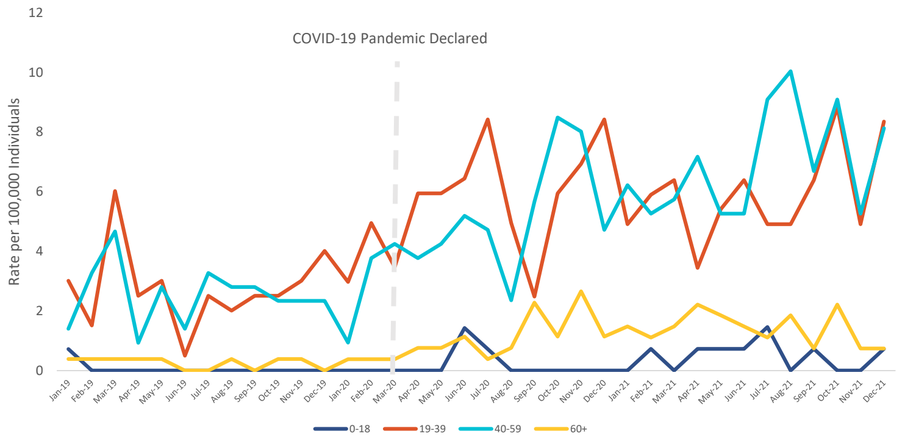
Who is dying from drug toxicity in IH?

While there are people in every age group who have died from drug toxicity, the age groups that are most affected are the younger, working populations aged 19-39 years and 40-59 years old. After the onset of the COVID-19 pandemic we saw increases in every age group, but particularly in those two age groups (Figure 8). In 2021, 79% of people dying in Interior B.C. were male, and 70% were aged 30 to 59. [3] The median age at death was 42 years old. [5]

According to the FNHA, women [2] continued to represent a higher proportion of First Nations toxic drug poisoning deaths (36.3%) compared to other B.C. residents (19.2% female). [4] Overall, First Nations people were disproportionately impacted by the toxic drug crisis. In 2021: First Nations people died at 5.4 times the rate of other B.C. residents (5.3 times in 2020); First Nations women died at 9.8 times the rate of other female B.C. residents; and First Nations men died at 4.2 times the rate of other male BC residents. In the Interior region, First Nations people were represented in 4.1% of the population compared to 16.0% of paramedic-attended toxic drug events and 14.6% of toxic drug deaths. [8] The unique and historical context for these differences, including ongoing complex trauma impacts, racism, power imbalances and colonization, as well as the distinct strengths and resilience of individuals and communities, will be explored further with First Nations and Métis partners in the MHO Report 2022 (Part 2).

[2] *'Two spirit, transgender, non-binary, intersex, and gender diverse Indigenous people may be identified by the biological sex assigned at birth, and therefore misidentified in the toxic drug data. The FNHA is committed to working with provincial partners towards meaningful, systemic change that will make more inclusive data collection possible'. [4]*

Figure 8. Drug toxicity death rates by age group in IH, January 2019 – December 2021.



Source: Created by IH Epidemiology and Surveillance Unit using data from BC Coroners Service

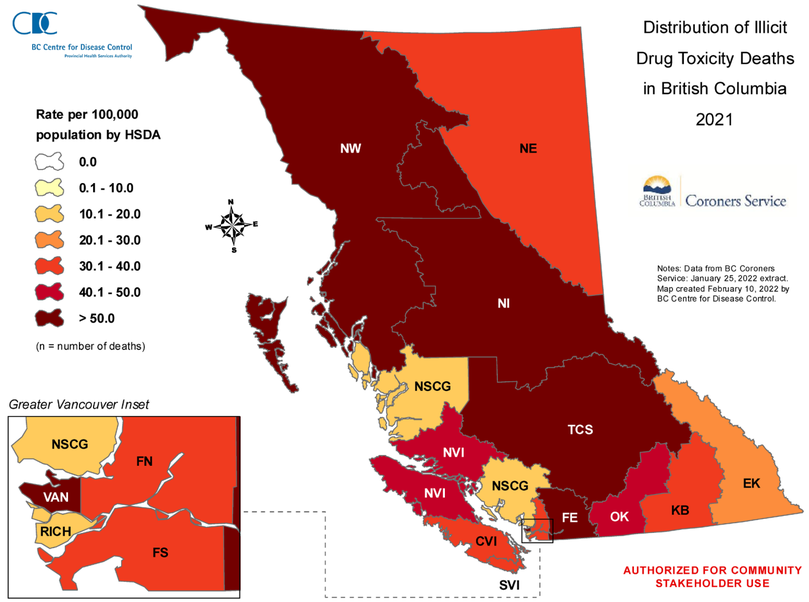
The region within IH that is most affected currently is the Thompson-Cariboo-Shuswap, with 149 toxic drug deaths between January and December 2021, equivalent to a death rate greater than 60 people per 100,000 individuals (Appendix B). The next most affected region is the Okanagan, with 172 deaths and a death rate between 40 and 50 per 100,000 (Figure 9). Kootenay Boundary had 29 deaths in the same period, with a death rate between 30 and 40 per 100,000 population, and the East Kootenay region, with 22 deaths and a death rate between 20 and 30 per 100,000 population. [3]

Thompson Cariboo was one of the five Health Service Delivery Areas (HSDA) in B.C. with the highest rates of toxic drug deaths. Merritt, Enderby, Lillooet, and North Thompson were four of the five Local Health Areas (LHA) with the highest rates, recognizing that LHA rates are difficult to interpret due to small numbers. [3]

In 2021, 84% of toxic drug deaths in Interior B.C. occurred inside (50% in private residences and 34% in other residences, including social and supportive housing, single room occupancy housing, shelters, hotels, and other indoor locations) and 12% occurred outside, including in vehicles, sidewalks, streets, parks and recreational spaces. [9]

It is very important to note that there have not been any deaths at Supervised Consumption or drug Overdose Prevention Sites.

Figure 9. Distribution of Drug Toxicity Deaths in B.C. 2021.



Source: Data from BC Coroners Service. Map by BC Centre for Disease Control.

Findings from the Pre-COVID-19 Chart Review

Purpose

We conducted a chart review of people who died from the toxic drug supply between November 1, 2017 and October 31, 2019 and had accessed IH health care services in the year before their death.

The purpose of this quality improvement project was to better understand the types and frequency of interactions people have with the health system that might help us identify improvements and inform strategies to prevent these deaths.

Scope of Review

Data Sources

All available IH records, including paper charts, and electronic medical records from Meditech, Mental Health & Substance Use (MHSU) and Profile clinical information systems. Strict protocols were in place to maintain the privacy of clients and only summarized findings have been shared.

Eligibility

All people who died of illicit drug toxicity in IH between November 1, 2017 and October 31, 2019 (as identified by BC Coroners Service), had a B.C. Personal Health Number, and had accessed any IH service within one year prior to death.

Project Sample

Total number of people who died within the period = **380**

Number of people eligible for review and reviewed = **270**

Eligible persons by location of residence (HSDA)

- Okanagan **(155)**
- Thompson Cariboo Shuswap **(76)**
- Kootenay Boundary **(18)**
- East Kootenay **(6)**

Results

Populations Impacted

Consistent with previous analyses (regional and provincial), certain population groups were disproportionately impacted by drug toxicity, including people who were male (75% of people), aged 30-59 (73%), single (50%), had a mental health disorder (e.g. 36% depression, 30% suicidal ideation), or self-identified as Aboriginal (17%). 7 out of 10 (71%) people died in the more urban areas of Kamloops, Vernon, Kelowna/Central Okanagan [3] and Penticton. The percentage of people dying who were aged <30 years was higher in urban areas (24%) than in rural and remote areas (11%). The risk of drug toxicity death is likely to increase when these various factors combine.

First Nations and Métis Peoples

Highlighting systemic health inequities can lead to positive change. The same data, collected or used poorly, can reinforce the stigmatization of communities, leading to individual and community harm [10]. When considering First Nations and Métis peoples, a new partnership approach is needed to understand the unique and historical influences on substance use and socioeconomic health determinants, including the ongoing impacts of racism and colonization. Any approach needs to be built on respectful relationships, principles of data sovereignty and self-determination, and a commitment to addressing systemic health inequities.

IH is dedicated to working alongside First Nations and Métis partners to understand and take concrete action on the recommendations within the Truth and Reconciliation Commission Calls to Action [11], Declaration on the Rights of Indigenous Peoples Act [12], National Inquiry into Missing and Murdered Indigenous Women and Girls Calls to Justice [13], and In Plain Sight Report addressing Indigenous-specific racism and discrimination in B.C. health care [14]. Coming to this work with humility and respect, IH is committed to supporting Aboriginal people through Mental Health and Substance Use supports, and trauma-informed and culturally safe practices, recognizing the ongoing traumas of residential schools and the tragic confirmations of unmarked residential school site graves.

[3] *Central Okanagan Local Health Area includes Kelowna, Lake Country, West Kelowna and Peachland.*

Support Services

Connecting people who are at-risk from drug toxicity to health and social supports is a critical component of IH's response to this public health emergency. Within the two years prior to death, people were most often referred to a community mental health program (39%), psychiatrist (32%), family physician (34%), or income support (27%). About 2 out of 10 (20%) people who self-identified as First Nations or Métis were referred for Aboriginal support. The suitability and availability of this support, and the mechanisms for referral, need to be explored further with First Nations and Métis partners.

Substance Use

Based on the medical charts reviewed, the most documented substance consumed was alcohol (64% of people), followed by tobacco (56%). Consumption of heroin was documented in more than half (51%) of the charts. About 2 out of 10 (18%) people had a documented diagnosis of Alcohol Use Disorder (AUD). According to chart documentation, most people (81%) had been offered Take Home Naloxone (THN) and just over one quarter (27%) had accepted; and about 2 out of 10 (17%) people had received Opioid Agonist Treatment (OAT).

Health Inequities

In addition, this review found that people who died from drug toxicity often: were unemployed (29%) or receiving disability assistance (18%); had experienced violence or abuse (26%); had a history of criminal justice involvement (41%), early substance use (before aged 20) (37%), or being in care of the Ministry of Children & Family Development (11%); or had a family history of mental health or substance use concerns (28%). 3 out of 10 (30%) people had associations with the construction industry, although most were not actively employed at time of death.

Contact Points

Emergency Departments (ED) have a critical role in IH's response to drug toxicity, with 6 out of 10 (66%) people having their final health care interaction with ED (excluding the ED visit with drug toxicity that led to death). Primary care and mental health services were also identified as important contact points. Information in medical charts suggested that some people had experienced substance use-related stigma (14%) or had care needs that were not fully met. It is significant that some people did not access care, or declined care, to the detriment of their own health and wellness. This finding speaks to the importance of equity-oriented approaches (trauma-informed practice, cultural safety and humility, and harm reduction) that create safe and inclusive care.

In subsequent analysis of ED visits with a presenting complaint of substance use, the percentage of patients referred to MHSU showed a significant improvement from 3% in 2016 to 16% in 2021.

In addition, sharing the chart review finding that the majority of final interactions were with ED facilitated the expansion of a program to initiate treatment for opioid use disorder in EDs across IH.

Pain Management

Nearly two-thirds (65%) of people had previously sought medical care for pain. 4 out of 10 (40%) people had a documented history of pain treatment, of which about one fifth (22%) had received opioids. One quarter (25%) had taken prescription opioids, with some reports of non-medical use.

This animated video by the Canadian Mental Health Association explores how stigma impacts all aspects of pain treatment for people living with opioid use disorder, and how health care partners can work together to move beyond stigma.

Opportunities for Support

About one third (35%) of people had their final interaction with an IH service within 2 weeks of death (70% within 3 months). Overall, people with more recent final interactions had more frequent interactions and a higher percentage of final interactions with MHSU services. For example, of those who interacted within 2 weeks of death, about 7 out of 10 (68%) had more than 10 interactions over the previous two years (vs 16% of people with final interaction more than 3 months prior to death) and one quarter (25%) had their final interaction with MHSU (vs 12%). Other differences were difficult to interpret due to incomplete documentation. Frequent interaction with IH services provides multiple opportunities to identify and support people at risk of drug toxicity.

Limitations

These initial findings are significant, but superficial. Further work is needed to fully understand what these findings mean and, more importantly, what actual change needs to follow. The findings reflect people who had contact with IH health care services, so may not be reflective of people in contact with other health care services or not in contact with health care. Most values are lowest estimates due to incomplete documentation, particularly relating to social determinants of health.

Conclusion

In broad terms, the review identified three main types of health care interaction among people who died from drug toxicity that would benefit from tailored approaches for engagement and support. These approaches will be explored further in the MHO Report 2022 (Part 2).

1. People occasionally involved and supported by health care services, but still at risk from drug toxicity;

2. People in frequent contact and with ongoing health and social support needs; and

3. People not involved or supported by IH healthcare services.

A broad range of characteristics that describe people who are more likely to die from drug toxicity have been identified in the chart review. The Coroner Death Review Panel offers further descriptions of factors that may contribute to toxic drug deaths, and includes people who have not connected with health care services in the year prior to their death. People use substances for a variety of reasons – this chart review highlights some of the intersecting issues including trauma, mental health diagnoses, pain (physical or psychological), homelessness, unemployment and/or type of employment, stigma and barriers to care that contribute to toxic drug deaths.

Recommendations from Chart Review

The review validates IH's response to the toxic drug crisis (Appendix C), and informs the ongoing strategic and operational planning of health care services. In the broader context of toxic drug deaths and an increasingly toxic drug supply, the review also highlights the importance of collective action between health and other sectors. While the health system experiences many of the direct impacts of the toxic drug crisis, there are significant opportunities and consequences for community partners that can be addressed most effectively in partnership. Some specific recommendations for IH and community partners to consider include:

- Ensuring 'every door is the right door', with all health care providers able to screen, provide brief intervention, and refer to more specialized substance use services (when appropriate).

- Providing equity-oriented health care across the Interior region that is trauma-informed and culturally-safe, and that reduces harm and stigma.

- Developing a new partnership approach to First Nation and Métis data governance that is distinctions-based and aligned with the principles of data sovereignty and self-determination.

- Supporting the care system to further expand evidence-based practices in primary and acute care, and specialized MHSU services, such as supervised consumption, Opioid Agonist Therapy (OAT) and treatment for Alcohol Use Disorder (AUD).

- Further expanding IH's Suboxone in ED program, a treatment intervention that can be initiated in the Emergency Department (ED). This initiative has already grown significantly across the Interior region in response to the chart review finding that the ED is a key location for connecting with people who may be at risk of toxic drug poisoning.

- IH creating a resource toolkit for internal stakeholders, to share detailed chart review findings, support staff to apply findings to practice, and inform planning and continuous improvement.

- Meeting people where they are at with public health interventions that reduce harm, including through the expansion of high quality drug checking access and overdose prevention services.

- Understanding how stigma impacts all aspects of pain treatment for patients who are at-risk of drug toxicity, and managing the tension between safe prescribing of opioids for pain control and safer supply for harm reduction.

- Reaching out to individuals who use substances, but do not access IH services directly or routinely.

- Reviewing policies and practices to embed a harm reduction approach that is inclusive and non-stigmatizing, and supporting staff and patients to access appropriate care.

Discussion

‘Wicked’ problems are those problems that are very difficult to resolve because of multiple, complex, competing, and intertwined factors. These problems require cooperation and collaboration across a variety of sectors that may or may not have shared goals and agendas. While substance use disorders and the harms from substance use and the toxic drug supply certainly have impacts on the health system, the contributing factors are wide ranging: from individual health issues (e.g. mental health disorders, chronic pain and other physical health problems) to society-wide problems (e.g. racism and discrimination).

Reducing the risk factors that contribute to toxic drug poisoning and death, and enhancing the protective factors, will require a whole society effort. Improving employment, housing and other social determinants of health; engaging people effectively in a health care system that offers early identification and treatment of mental health and substance use disorders; taking concrete action on commitments to First Nations and Métis peoples; providing effective management of chronic pain; decriminalizing illicit drug use to enhance connections with harm reduction and care supports; supporting an alternative to the current toxic drug supply; promoting positive childhood experiences; enhancing positive relationships for children and parents; and other creative approaches for challenging the unacceptable status quo; are all things that deserve our attention and resources to make a difference.

As noted in the BC Coroners Service Death Review Panel Report (March 2022) [2], we continue to see increasing rates of toxic drug deaths despite the expansion and diversification of substance use services. The intersection of complex issues, alongside the unintended consequences of the COVID-19 pandemic, call for an enhanced, society-wide response, which will be explored further in the MHO Report 2022 (Part 2). In the meantime, we invite everyone to consider their role in influencing the many factors that determine health and wellness from birth to end of life.

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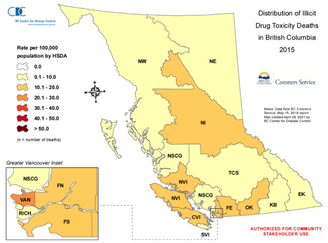
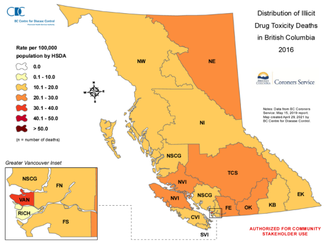
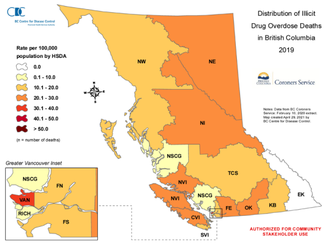
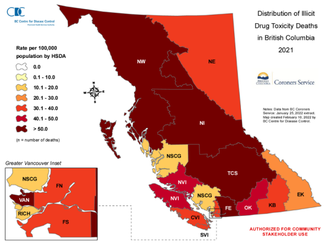
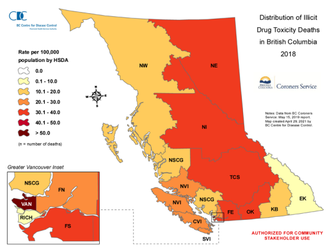
Appendix A: Distribution of illicit drug toxicity deaths in B.C. 2015-2022 (February).

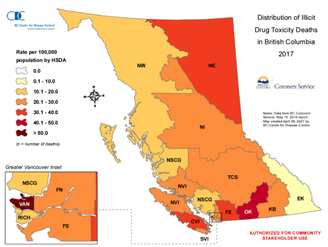


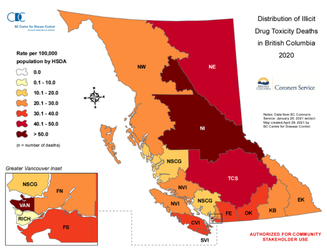


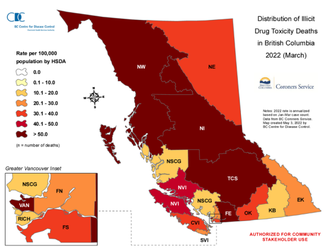






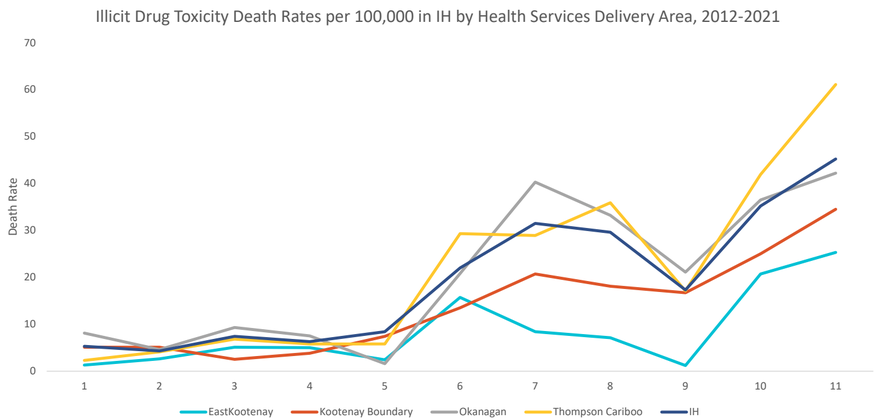




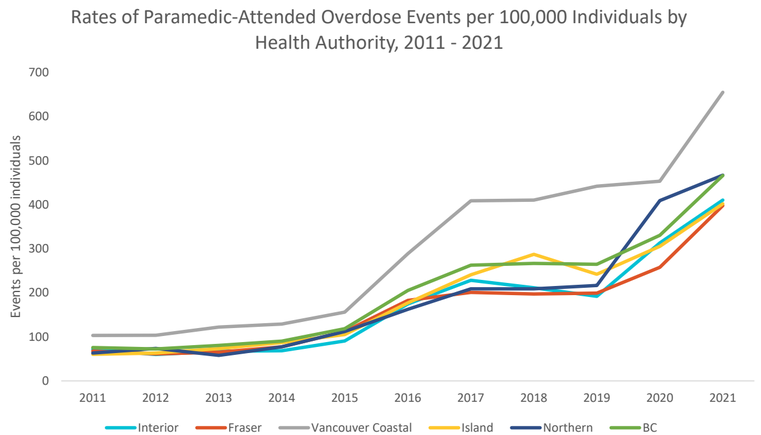


Source: Data from BC Coroners Service. Map by BC Centre for Disease Control. 2022 rate annualized based on February case count.

Appendix B: Trends in drug toxicity deaths and paramedic-attended overdose events in IH and B.C.



Source: Created by IH Epidemiology and Surveillance Unit using data from BC Coroners Service



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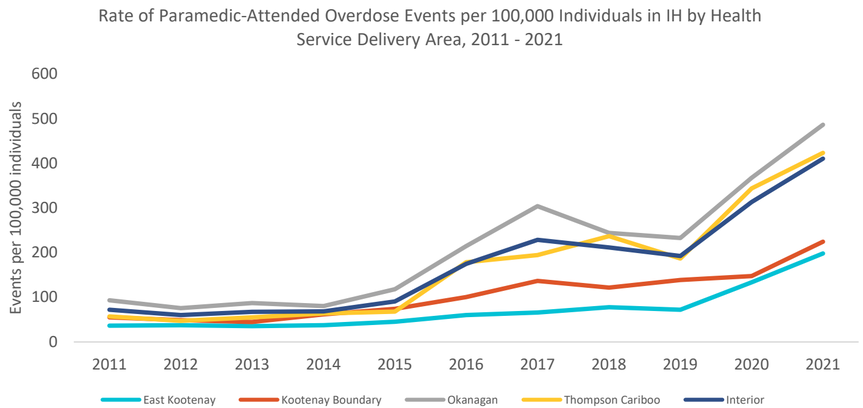
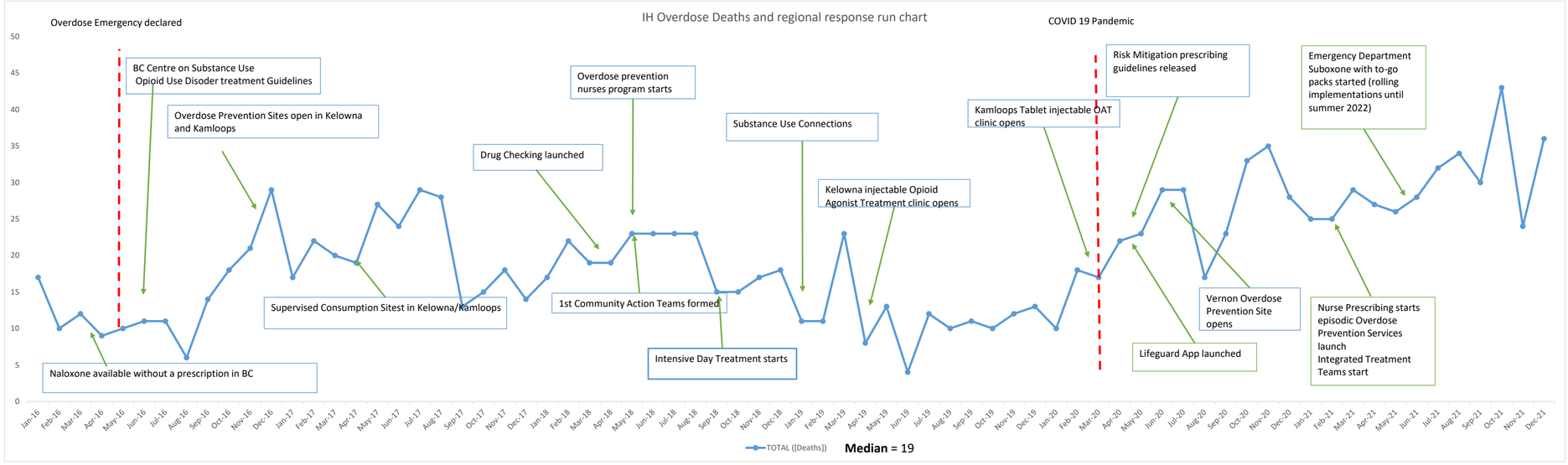
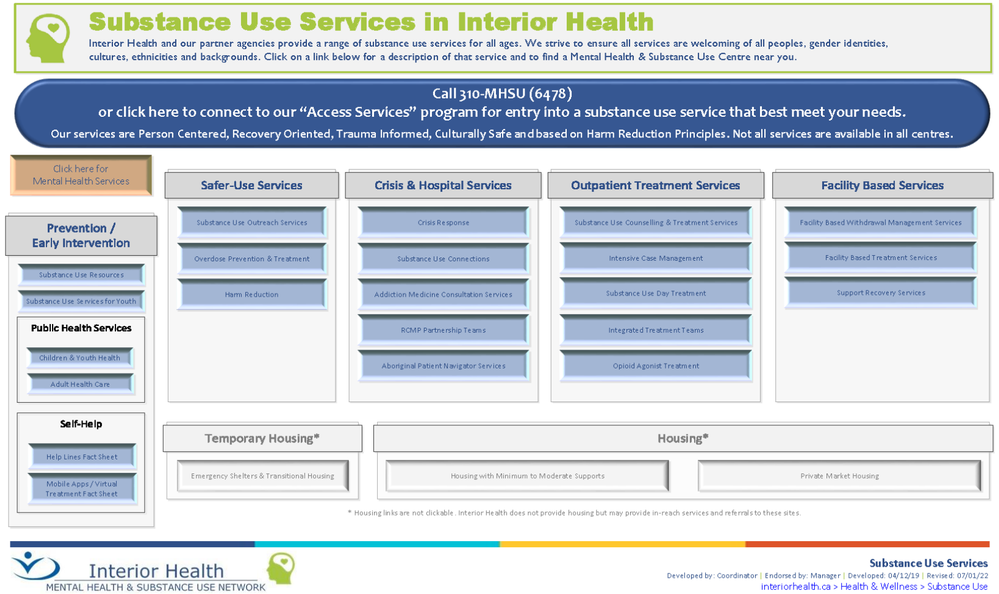


Source: Created by IH Epidemiology and Surveillance Unit using data from BC Coroners Service

Appendix C: Expansion of IH Substance Use Services in Response to Drug Toxicity Deaths





[See IH website for further details on substance use services.]

Appendix B

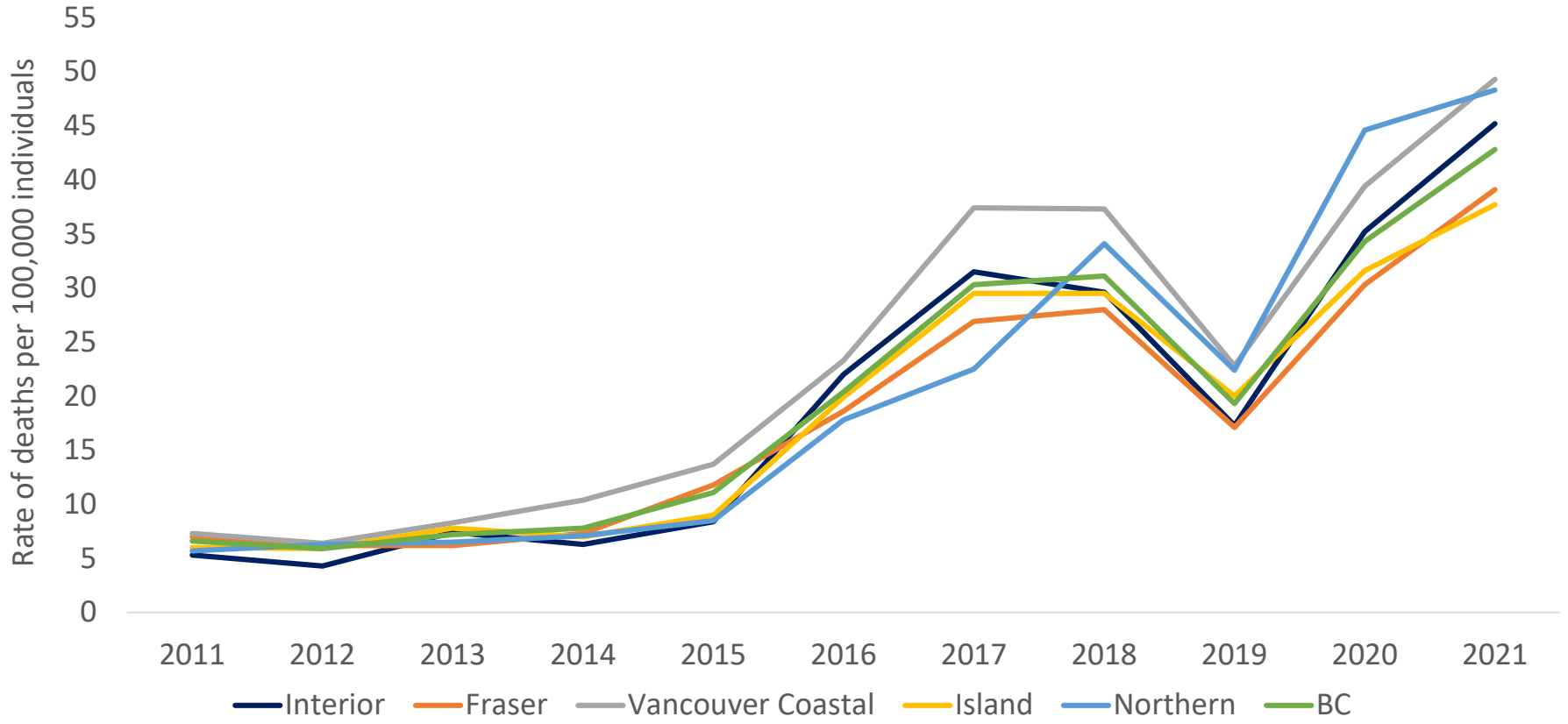
The Toxic Drug Crisis in B.C.'s Interior Region (Part 1)

Medical Health Officer Report 2021

Dr. Karin Goodison, Medical Health Officer

June 14, 2022

The toxic drug crisis has been getting worse



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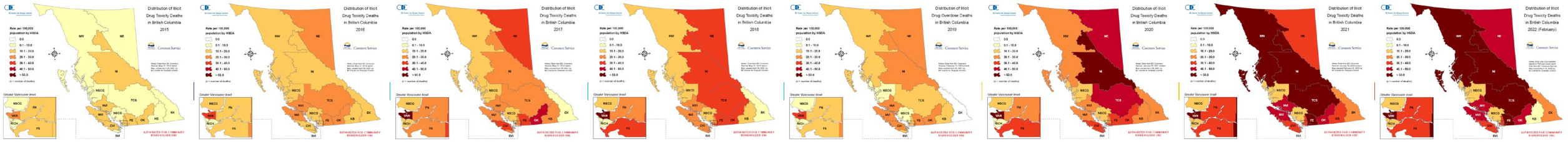

2022

Understanding impacts to guide response

- Certain populations are disproportionately impacted
- No deaths overdose prevention services
- People use substances for various, intersecting reasons
- Emergency Departments have a critical role in Interior Health's response
- Substance use-related stigma can be a barrier to treatment
- Interactions are opportunities to connect people with supports

Saving lives requires a whole-society effort

Recommendations for Interior Health and community partners include:

- Offering early supports that are culturally safe and trauma-informed
- Taking concrete action on commitments to First Nations and Métis peoples
- Providing effective pain management, and understanding impacts of stigma
- Adopting a harm reduction approach, including support for a safer drug supply
- Improving employment, housing and other social determinants of health
- Promoting positive childhood experiences and child/parent relationships