

BC Coroners Service Death Review Panel: A Review of Illicit Drug Toxicity Deaths

Report to the Chief Coroner of British Columbia

Release Date: March 9, 2022

This report is dedicated to the families, friends and communities who have lost loved ones, and is an urgent call to action to prevent similar deaths in the future.

The BC Coroners Service acknowledges with gratitude that this death review panel was convened on the traditional territory of the Coast Salish peoples.

Preface

On December 15, 2021, the British Columbia Coroners Service (BCCS) convened a second death review panel into illicit drug toxicity deaths. Four years after the first panel, which reviewed 1,854 deaths between January 1, 2016 and July 31, 2017, the death toll continues to climb with 6,000 more British Columbians dying – almost six persons each day.

Panel support was provided by BCCS staff, Andrew Tu, Carla Springinotic, Dean Campbell and Quiana Foster.

I would like to thank the panel members for sharing their expertise, bringing the support of their respective organizations and participating in a collaborative discussion. I believe the panel has generated actionable recommendations that I am confident will contribute to addressing illicit drug toxicity deaths in British Columbia.

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On behalf of the panel, I submit this report and recommendations to the chief coroner of B.C.



Michael Egilson
Chair, Death Review Panel

Executive Summary

In April 2016, a significant increase in illicit drug-related emergency events and deaths in British Columbia prompted the B.C. Provincial Health Officer to declare a public health emergency. Since that time, deaths due to illicit drug toxicity have continued to increase in B.C., with an average of six illicit drug toxicity deaths per day in 2021. This is more than double the number of deaths since the public health emergency was declared. During the review period between August 1, 2017 and July 31, 2021, there were a total of 6,007 deaths due to illicit drug toxicity, and more than 8,700 people have died since the public health emergency was declared. Illicit drug toxicity is the leading cause of unnatural death in the province, accounting for more deaths than homicides, suicides, motor vehicle incidents (MVI), drownings and fire-related deaths combined. Deaths due to illicit drug toxicity are second only to cancers in terms of potential years of life lost in B.C. Many of these deaths were preventable.

The primary cause of increased deaths is the growing toxicity and unpredictability of the street supply of drugs. The current drug policy framework of prohibition is the primary driver of this illegal, unregulated and toxic street supply. Until new regulatory approaches are implemented within the national drug policy framework, and improvements in the quality and reach of the continuum of support, harm reduction and treatment services are made, the risk of significant harms, death and this public health emergency are unlikely to improve.

This crisis is not confined to inner cities in urban areas. These deaths continue to occur across the province, amongst all socio-economic groups and continue to have a tragic impact on the decedents' families, friends and communities. With illicit drug-related deaths continuing to increase, it has become clear that the current response to this emergency is not working.

The issue of drug use in society is complex. Long-term solutions to the harms caused by the toxic illicit drug supply are not simple and will require increased investment and coordination to improve the overall substance use system of care, from health promotion to recovery services. Urgent action is needed. The first priority must be to stop people from dying, and this will need to include a **safer drug supply** for people who use street drugs. **Decriminalization** of substance use is also required so that people using illicit drugs may access support and services without the stigma of drug use or having a substance use disorder.

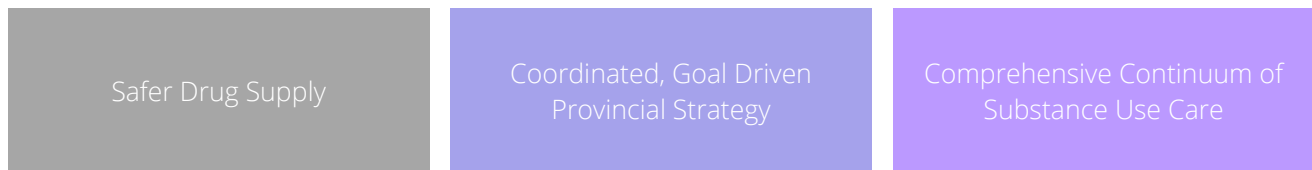
Although a number of provincial initiatives have been undertaken in an attempt to address the drug toxicity crisis, these initiatives have not been sufficient to stop the rising death toll. A new approach is required, one that includes a specific focus on the toxic drug supply. The provincial response to the COVID-19 public health emergency has demonstrated that urgent action, coordinated efforts, and new ways to approaching complex problems are possible and impactful.

Major Findings

- Drug toxicity deaths continue to increase;
- The drug supply is increasingly toxic;
- Indigenous people are disproportionately affected;
- There is a strong concurrence of substance use and mental health disorders;
- Most decedents had recent contact with health professionals prior to their death;
- Individuals living in poverty, and with housing instability, are particularly vulnerable;
- Multiple substances are detected in the majority of the deaths;
- Very few of the decedents engaged with substance use disorder treatment services; and
- These deaths are occurring across the province in urban and rural and remote centres.

This multi-disciplinary panel was comprised of experts in substance use and addictions, medicine, public health, lived experience, regulatory practices, First Nations health, education, poverty reduction, policy, research, housing, labour and law enforcement.

The panel identified three key areas to reduce deaths due to illicit drug toxicity:



These findings are the basis for the following recommendations made to the chief coroner by the panel.

RECOMMENDATION 1:

Ensure A Safer Drug Supply To Those At Risk Of Dying From The Toxic Illicit Drug Supply

Priority actions identified by the panel are:

On an urgent basis and by May 9, 2022, the Ministry of Mental Health and Addictions and the Ministry of Health, in collaboration with the CEOs of the Regional Health Authorities, the Provincial Health Services Authority, and the First Nations Health Authority, will develop a plan to:

- Create a provincial framework for safer supply distribution, in collaboration with the BC Centre for Disease Control and the BC Centre on Substance Use and people who use drugs, that includes both medical and non-medical models;
- Rapidly expand the safer drug supply throughout the province to ensure a safer supply is available in all communities, including rural/remote and Indigenous communities where people are at risk of dying due to toxic illicit drugs;
- Identify eligibility criteria for people at risk of death from toxic illicit drugs that lowers barriers to obtaining and continuing a safer drug supply of pharmaceutical alternatives, and ensure this criteria is adopted across health authorities and practitioners in the province;
- Provide a range of medication options that reflect the needs and substance use patterns of those at risk;

- Ensure oversight, monitoring and timely evaluation of safer drug supply distribution and dissemination of preliminary findings;
- Connect more people accessing safer drug supply services with health and social services including substance use treatment where appropriate;
- Increase meaningful engagement of a diverse range of people with lived and living substance use experience in all health system planning, design and implementation to ensure the safer drug supply and distribution mechanisms address their needs; and
- Ensure that high-quality and fast drug checking services are available and accessible across the province, so that:
 - People have better knowledge about non-pharmaceutical drugs they consume; and
 - Health authorities can establish improved illicit drug market surveillance, identify novel dangerous adulterants, and provide early warnings about changes in the illicit drug supply.

RECOMMENDATION 2:

Develop A 30/60/90 Day Illicit Drug Toxicity Action Plan with Ongoing Monitoring

Priority actions identified by the panel are:

(A) By May 9, 2022, The Ministry of Mental Health and Addictions and the Ministry of Health, in collaboration with the CEOs of the Regional Health Authorities, the Provincial Health Services Authority, and the First Nations Health Authority, will develop a 30/60/90 day action plan to:

- Develop and implement a strategic management and governance framework that sets clear goals, targets and deliverable timeframes for reducing the number of illicit drug toxicity events and deaths;
- Identify roles and responsibilities provincially with health system partners, and with the health authorities both regionally and locally, for implementing the plan;
- Develop a public health framework for the oversight, monitoring and regulation of a safer drug supply;
- Establish metrics to identify relevant needs, levels, availability, and accessibility of substance use services and treatment (e.g. harm reduction, treatment and recovery services) at the local health area level in addition to morbidity and mortality data;
- Enhance data and information sharing across sectors and programs required for data analytics to support and enable system planning, system and programmatic oversight and monitoring, tracking of patient and population-level outcomes, and for identifying and managing risks; and,
- Develop and implement a broader communications and public reporting strategy on metrics and progress similar with the COVID-19 pandemic reporting.

(B) By April 11, 2022, the federal Minister of Health will:

- Approve British Columbia's October 2021, request for a federal exemption from *Section 56(1) CDSA* to decriminalize personal possession of illicit substances in British Columbia.

RECOMMENDATION 3:

Establish An Evidence-Based Continuum Of Care

Priority actions identified by the panel are:

(A) By April 11, 2022, the Ministry of Health and the Ministry of Mental Health and Addictions, and the CEOs of the Regional Health Authorities, the Provincial Health Services Authority, and the First Nations Health Authority, will:

- Review the 2017 Illicit Drug Toxicity Death Review Panel Recommendation 1: "Ensure Accountability for the Substance Use System of Care."

(B) By April 11, 2022, the Ministry of Mental Health and Addictions will prioritize completion of *A Pathway to Hope* priority action "Substance Use: Better Care, Saving Lives" through:

- Completing the framework for establishing the substance use system of care by June 9, 2022;
- Identifying roles and responsibilities provincially with health system partners, and with the health authorities both regionally and locally, for implementing the framework by September 9, 2022 (6 months after release);
- Identifying roles and responsibilities provincially with health system partners, and with the health authorities both regionally and locally, for increasing access to evidence-based care, using data and metrics to prioritize services where there are gaps by March 9, 2023 (1 year after release);
- Developing and implementing a data driven system of monitoring, including the identification of key metrics of success to evaluate and improve where needed services that have been implemented under this framework;
- Working with evidence-based medicine organizations (e.g. the BC Centre on Substance Use and the Therapeutics Initiatives) on guidelines for safer prescribing of psychoactive medications for those with concurrent disorders, and define what medications improve rather than worsen outcomes among people who use drugs; and
- Reviewing and revising policies that discourage workers from seeking help and support for substance use disorders and address non-evidence-based guidelines precluding individuals in the trades and other safety sensitive positions from using evidence-based medications known to reduce illicit drug toxicity deaths.

(C) By September 9, 2022, the Ministry of Health and the Ministry of Mental Health and Addictions, in partnership with the Doctors of BC, the College of Physicians and Surgeons, and the College of Nurses and Midwives, will:

- Develop a practice standard to support health care providers and prescribers within emergency departments, hospitals and community settings to assess, screen and diagnose patients for substance use disorders, and develop referral mechanisms to link patients to evidence-based services.

(D) By March 9, 2023, the Ministry of Health, in partnership with health authorities, will:

- Invest in health care provider training programs with respect to assessing, screening, supporting recovery and appropriately referring persons with substance use disorders and provide adequate resources to health care providers to deliver the care.

The recommendations from the Illicit Drug Toxicity Death Review Panel in 2017 are still relevant and required. The 2017 recommendations focused on the expansion of evidence-based treatment, expansion of **harm reduction** services and options, and the need for an integrated accountable substance use system of care to reduce deaths due to illicit drug toxicity. Specifically:

1. The need to provincially regulate and appropriately oversee treatment and recovery programs and facilities to ensure that:
 - a. They provide evidence-based, quality care; and
 - b. Outcomes are closely monitored and evaluated.
2. The need to expand access to evidence-based addiction care across the continuum including improved access to Opioid Agonist Therapies (OAT) and injectable Opioid Agonist Therapies (iOAT) access as well as full spectrum of recovery supports.
3. The need to improve safer drug-use through the creation of accessible provincial drug checking services using validated technologies.

Death Review Panel

The *Coroners Act* provides the chief coroner with the discretion to establish death review panels to review the facts and circumstances of deaths to provide the chief coroner with advice on medical, legal, social welfare and other matters that may impact public health and safety and prevention of deaths. A death review panel may review one or more deaths before, during or after a coroner's investigation or inquest.

Members of the panel were appointed by the chief coroner under Section 49 of the *Coroners Act* and included professionals with expertise in public health, health services, substance use and addiction, medicine, mental health, First Nations health, education, income assistance, oversight and regulation, and policing.

Regardless of their employment or other affiliations, individual panel members were asked to exercise their mandate under the *Coroners Act* and express their personal knowledge and professional expertise. The findings and recommendations contained in this report need not reflect, or be consistent with, the policies or official position of any other organization.

In the course of reviewing illicit drug toxicity deaths that occurred in 2017-2021, the panel reviewed:

- Coroners' aggregated investigative findings;
- Information provided by panel members;
- Environmental, social and medical factors associated with the deaths;
- Possible trends or themes;
- The current state of related public policy and strategies; and
- Existing challenges.

Data Limitations and Confidentiality

The BC Coroners Service (BCCS) operates in a live database environment. The preliminary data presented within this review is based on open and closed BCCS investigations as of July 31, 2021. It includes analysis of coroners' investigative notes, toxicology results, medical records, coroner recommendation and other documents collected or protocols completed during the course of a coroner's investigation. Some of the deaths were in the early stage of investigation and, therefore, the information was incomplete. This review includes qualitative and quantitative findings in an attempt to provide a picture of deaths due to illicit drug toxicity in B.C.

Provisions under the *Coroners Act* and the *Freedom of Information and Protection of Privacy Act* allow for the BCCS to disclose information to meet its legislative mandate and support the findings and recommendations generated by the review process. For the purposes of this report, information is presented in aggregate. The BCCS is sensitive to the privacy of individuals and families that it serves and proceeds with caution when reporting findings. Details that could identify the individuals have been omitted to respect the privacy of the person who died and their families.

All **bolded terms** in this report are defined in the glossary.

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Introduction

“Despite continuous efforts in B.C. to resolve the overdose crisis, and the declaration of a public health emergency, there has been minimal success in stopping the rising death toll since the crisis started, and additional alternative solutions are warranted immediately.” (Provincial Health Officer [PHO], 2019)

In April 2016, a significant increase in illicit drug-related emergency events and deaths in British Columbia prompted the Provincial Health Officer to declare a public health emergency. Since that time, deaths due to illicit drug toxicity have continued to increase in B.C., with an average of more than six illicit drug toxicity deaths per day in 2021. Illicit drug toxicity is the leading cause of unnatural death in the province, accounting for more deaths than homicides, suicides, motor vehicle incidents (MVI), drownings, and fire-related deaths combined. Illicit drug toxicity deaths are second only to cancers in terms of potential years of life lost in B.C. These deaths are preventable.

In 2017, the chief coroner convened a death review panel to review 1,854 drug toxicity deaths that occurred between January 1, 2016 and July 31, 2017. Since then, the street drug supply has increased in toxicity, due to the increased potency of fentanyl and its analogues, and the addition of other substances such as benzodiazepines. The current panel reviewed in aggregate deaths due to illicit drug toxicity that occurred after the previous panel, specifically 6,007 deaths that occurred between August 1, 2017 and July 31, 2021.

- This equates to over 1,500 deaths a year over the four-year period.
- The average number of deaths per month more than doubled immediately after the start of COVID-19 related restrictions in March 2020 compared with the previous year.
- In 2016 the rate of illicit drug deaths was 20.4 per 100,000 population which by 2020/21 has increased to 38.4 per 100,000 population.

The BC Coroners Service is mandated to investigate and review all unnatural and unexpected deaths in the province. This includes attending the location of the death, completing a physical assessment of the decedent, conducting interviews with family, friends and persons or service providers involved in the decedent’s life, arranging necessary post-mortem testing, obtaining medical records, and documenting the investigation findings in a coroner’s report. These investigative findings provide insight into the circumstances of a decedent’s life. These findings may also identify issues or challenges, opportunities for preventing similar deaths, and areas for program or policy improvement.

The panel recognizes that deaths due to illicit drug toxicity is a complex issue which will require ongoing coordinated efforts to resolve.

Data for illicit toxicity deaths in B.C. (August 2017–July 2021) are presented with the goal of describing decedent characteristics, their health care use, and the circumstances surrounding their deaths. Where appropriate and available, comparisons are made over time or with the B.C. population.

People use psychoactive drugs for a myriad of reasons, including self-medication for pain management (including physical, mental, and emotional pain, and trauma), to deal with anxiety, to experiment, out of curiosity, or to stimulate artistic endeavours (PHO, 2019).

Although this report lists many statistics, those statistics represent individual lives. These are people who resided across British Columbia in communities large and small, people dealing with pain and trauma, people living in poverty or employed and supporting families, people young and old, healthy and unwell, people from diverse ethnic backgrounds – people just like everyone else. The continued toll of unintentional drug toxicity deaths has created devastating effects on the families, friends, and communities of the deceased and has reduced life expectancy for British Columbians.

Part One: BC Coroners Service Review Findings

Much of what is known about who is dying, where they are dying and the type of drugs involved is reported out monthly by the [BCCS](#). These reports have been produced since 2016 and many of the findings have remained consistent over time.

This review summarizes investigative findings about the deaths of 6,007 people who died as a result of illicit drug toxicity between August 1, 2017, and July 31, 2021.

Findings reviewed by the panel show:

- Deaths are increasing both in numbers and in rates;
- The drug supply has become increasingly toxic;
- More drug toxicity deaths occur among younger adults; the average age is 42 years;
- Illicit drug toxicity deaths are ranked second after cancers for potential years of life lost* (see Figure 2);
- Indigenous people are disproportionately represented in drug toxicity fatalities;
- Individuals living in poverty and with housing instability are more vulnerable;
- Persons with mental health disorders or poor mental health are disproportionately represented;
- In addition to fentanyl, other substances were also detected for most of the deaths;
- Those who died frequently accessed medical services** prior to a fatal illicit drug-related event;
- Deaths are occurring throughout the province
 - While the highest number of deaths occur in large urban centres (Vancouver, Surrey, Victoria), the death rates show this issue spans beyond urban areas; and
- Smoking is the most common mode of illicit drug consumption.

Illicit drug toxicity deaths continue to increase over time. Since March 2020, corresponding with the start of COVID-19 related restrictions, there has been another marked increase in the number of illicit drug toxicity deaths in BC (see Figure 1).

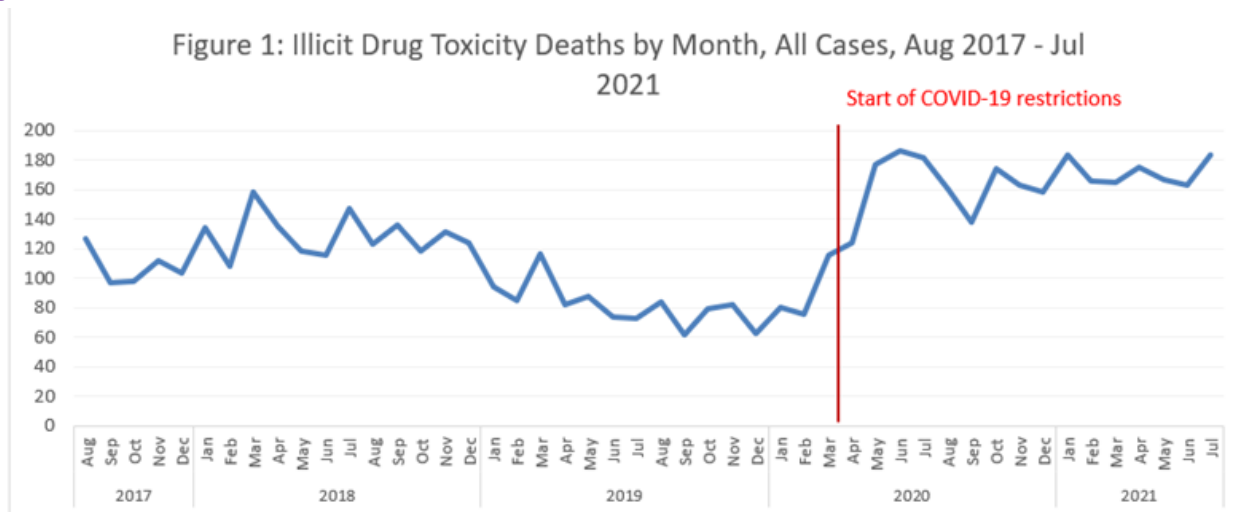
The COVID-19 pandemic and related prevention measures have resulted in:

- Reduced availability and accessibility of all substance use services (e.g. harm reduction, pharmacological treatment, and community-based services);
- Reduced access to safer drug use supplies;
- Barriers to online and in-person services;
- Interruptions to regular medical visits and access to medication-assisted treatment;
- Reduced access to informal supports and peer supports; and
- Increased isolation from job losses, restrictions on social gatherings and physical distancing.

*-Potential years of life lost (PYLL) is the number of years of potential life not lived when a person dies "prematurely", defined for this indicator as before age 75.

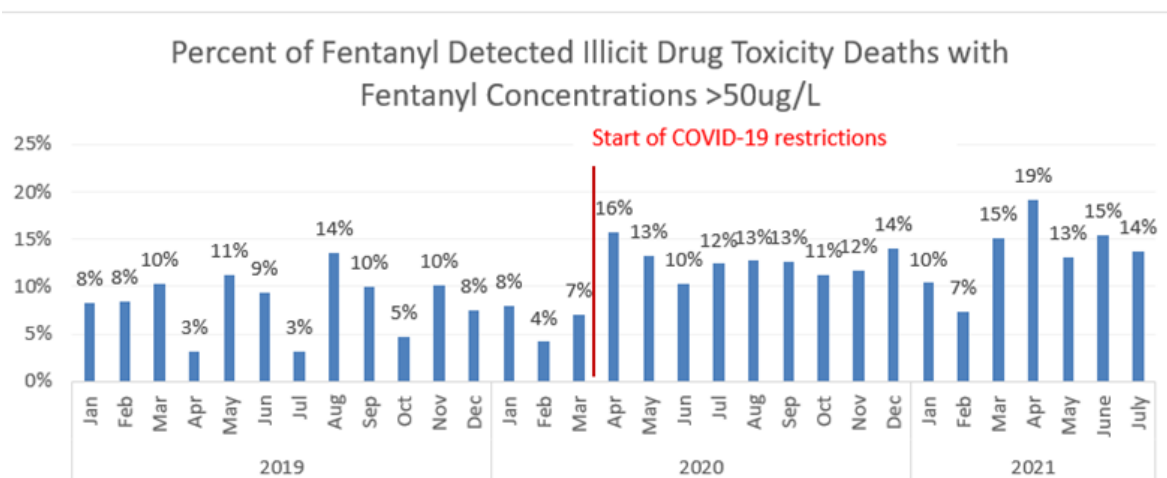
** -Medical services include emergency department, hospital, and/or community physician visits.

Figure 1



One of the primary drivers of increased deaths is the growing toxicity and unpredictability of the street supply of drugs (see Figure 2). Extreme concentrations of substances and combinations of substances have been detected making the illicit drug supply more dangerous.

Figure 2

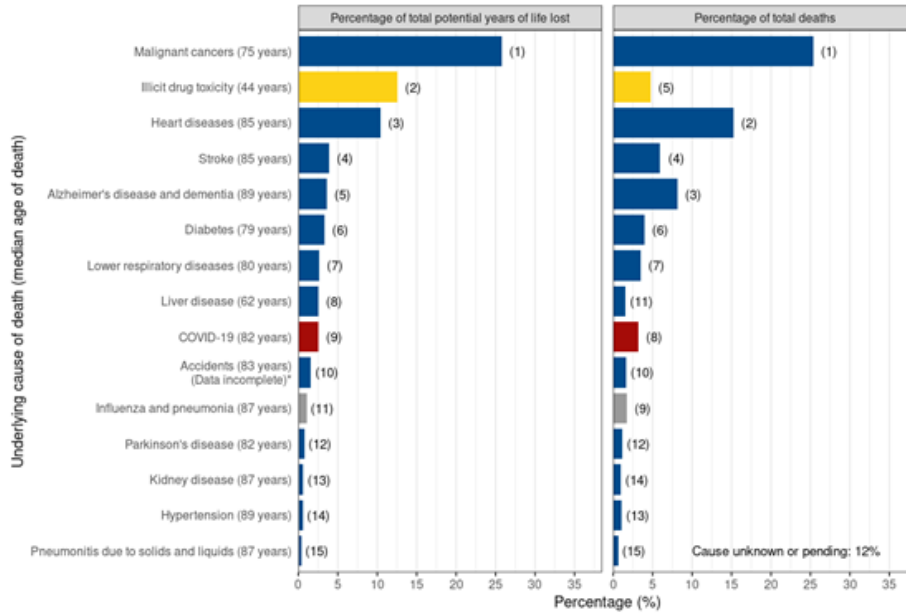


In B.C., overdose deaths have resulted in a decrease in life expectancy at birth for all British Columbians (PHO, 2019).

One indicator of premature mortality is **potential years of life lost (PYLL)**. In BC, deaths due to illicit drug toxicity have become the second leading cause of death in terms of PYLL after cancers and fifth in terms of the percentage of all deaths in BC (see Figure 3). From March 2020 to October 2021, the median age of someone dying as a result of illicit drug toxicity in BC was 44. This means half of the people who died were younger than 44 and half were older. In comparison, the median age of death for each of the remaining top 15 causes of death is 75 or older with the exception of liver disease with a median age of 62. Deaths due to illicit drug toxicity are the leading cause of death among 19 to 39-year-olds, and deaths due to drug toxicity have created a decline in life expectancy in British Columbia.

Figure 3

Top 15 causes of death (ranking) in BC for March 2020 to October 2021

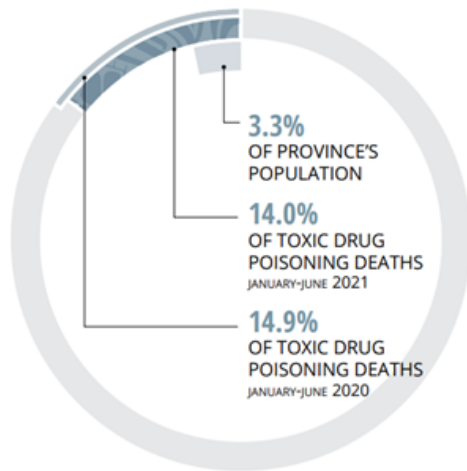


Source: [BCCDC](#), 2021

Indigenous Peoples

First Nations people are disproportionately represented in deaths due to illicit toxic drugs:

Figure 4



- 14% of overdose deaths January to June 2021 were among First Nations peoples; an overrepresentation based on population size (FNHA, 2021).
- First Nations people died at 4.8 times the rate of other BC residents in 2021 (January - June) (FNHA, 2021).

Indigenous people, comprising primarily First Nations and Métis people in B.C., are disproportionately impacted by substance use harms (Urbanoski, 2017). Health inequities experienced by Indigenous people reflect continuing structural and systemic disadvantages created through the history of colonization. Colonialism is defined within the *In Plain Sight* report (2020) as “a structured and comprehensive form of oppression that, in Canada, was justified through creating and perpetuating racist beliefs about the inherent genetic, cultural and intellectual inferiority of Indigenous peoples.” Racist beliefs and structured inequities have resulted in cumulative multigenerational, and chronic trauma, injustices, and oppression. “The effects of trauma can reverberate through individuals, families, communities and entire populations, resulting in a legacy of physical, psychological, and economic disparities that persist across generations” (National Collaborating Centre for Aboriginal Health, 2016).

Not only have Indigenous people been severely impacted by historical colonial practices, the *In Plain Sight* report (2020) confirms the prevalence of ongoing anti-Indigenous racism across the B.C. health system including the ongoing and urgent necessity for systemic change to ensure First Nations people experience equitable treatment and have access to quality, culturally safe care. (First Nations Health Authority, 2021).

Much of the existing evidence about identified health disparities experienced by Indigenous people comes from research conducted in the Downtown Eastside of Vancouver. Often not considered are the other Indigenous communities, particularly isolated and northern communities disproportionately impacted by illicit drug toxicity injuries and deaths (Urbanoski, 2017). Northern B.C. has the highest proportion of Indigenous people and communities in the province. There are additional unique challenges which northern residents face including: vast distances between communities; small service centres; the harsher climate with poorer transportation systems, remoteness and isolation; and potentially limited social, educational and employment opportunities.

The commitment for creating necessary systemic change is situated in the context of reconciliation between Indigenous and non-Indigenous peoples in B.C. and Canada. In November 2019, the B.C. government passed the *Declaration on the Rights of Indigenous Peoples Act* (DRIPA).^{*} Upholding the Indigenous right to health is the foundation for addressing discrimination and racism against Indigenous peoples in B.C.'s health care system (First Nations Health Authority, First Nations Health Council, First Nations Health Director's Association, 2021).

Upholding Indigenous self-determination within mental health and substance use care means identifying and implementing Indigenous understandings of health with full access to culturally appropriate health care services, as identified within the *Anti-Racism, Cultural Safety & Humility Framework* (2021). To achieve this, it is important that First Nations-led structures are a key driver.

Employment, Poverty and Housing Instability

This review found that 35% of those who died were employed at the time of their death, and over half of those employed worked in the trades, transport or as equipment operators (see Appendix 2, Table 1).

This review also found a high correlation between illicit drug toxicity deaths and persons living in poverty (see Appendix 2, Table 2) or experiencing housing instability (see Appendix 2, Table 3).

- 44% of all decedents received social assistance payment within a month of their death.
- 19% of decedents lived in social housing, hotels/motels, rooming houses or shelters.
- 12% were homeless at the time of their death.

Mental Health

Persons with mental health disorders or who were identified as experiencing mental health issues were disproportionately represented in illicit drug toxicity deaths.

Almost two thirds of decedents (62%) were experiencing mental health issues.

- 50% of the decedents had a mental health diagnosis.
- 12% had anecdotal evidence of a mental health disorder.
- 62% had either a mental health disorder or anecdotal evidence of a mental health disorder (see Appendix 2, Table 4).

This review found that 43% of persons who died of illicit drug toxicity had a health visit related to mental health in the year prior to their death, compared with 14% of the B.C. population (see Appendix 2, Table 5). This included 35% of decedents attending for a substance use related visit, and 20% attending for a mental health related visit, as compared with 2% and 13% of the B.C. population, respectively.

*- The *Declaration on the Rights of Indigenous Peoples Act* (DRIPA) as put forth by the *United Nations Declaration on the Rights of Indigenous Peoples* (UNDRIP). Through Bill C-15, the *United Nations Declaration on the Rights of Indigenous Peoples Act* (UNDRIPA) the federal government has also committed to pass legislation to implement the UN Declaration.

Health Services

Many decedents had recent or frequent contact with health professionals prior to their death for reasons related to substance use and/or mental health.

- Almost three quarters (72%) of persons who died had a visit with a health professional* less than three months before their death and 87% had a visit within one year prior to their death (see Appendix 2, Table 6).
- Decedents also had a high number of health visits, with almost 30% having 10 or more visits in the 3 months prior to their death compared with 6% of the random B.C. population (see Appendix 2, Table 7).
- 30% of persons who died had a previous paramedic attended non-fatal illicit drug related event (see Appendix 2, Table 8). Of those that had a previous non-fatal event, almost 50% had a non-fatal event within 3 months of their death (see Appendix 2, Table 9).

These findings highlight the importance of enhancing training and resources for health care professionals across the health care system in screening, assessment, and referral to supports and additional services, when appropriate. They also highlight the importance of having a comprehensive system of care to which people can be referred, as would be the case with other acute and chronic health conditions.

For many people at risk, a referral alone is not sufficient, as it relies on the person at risk to make an appointment and show up for a visit. Instead, outreach is needed to provide connection and establish a relationship. There needs to be a central point of referral in each region to make this connection and assess what supports/treatments are appropriate.

Access to Substance Use Treatment (Detox, Psychosocial Therapies)

This review found that few decedents were engaged with treatment services.

Information from the coroner protocol cohort found that 75% of those who died did not seek treatment (detox, psychosocial therapies, residential treatment), 9% of decedents sought and accessed a treatment program and 2% sought but did not access treatment (see Appendix 2, Table 10). These findings are similar to those of the previous death review panel cohort. Reasons for the lack of engagement with treatment/support services were not clear from the BCCS protocol findings, however, the literature points to lack of coordinated services, gaps in services delivery (e.g. stabilization and withdrawal management services), long wait times, eligibility for services inconsistent with peoples lived experiences among others. Additionally, not all of the deceased had a substance use disorder.

*- Based on MSP billings, hospital discharge data, and emergency room data.

Patterns of Illicit Drug Use

This review found that 73% of decedents were identified as using illicit drugs on a regular or chronic basis and 13% were identified as using illicit drugs occasionally/infrequently. The pattern of use remains unchanged since the last death review panel.

“Substance use occurs on a spectrum, from beneficial (e.g., social activity, cultural practices) to non-problematic (e.g. recreational or occasional use), to problematic (where negative impacts begin to occur because of use), to chronic dependence and addiction (where use is compulsive and continues to occur despite considerable negative impacts). Due to the toxicity of B.C.’s illegal drug supply, there is considerable risk of overdose and overdose death related to illegal drug use in any capacity” (PHO, 2019).

Mode of Consumption

This review found the most common mode of consumption identified among decedents was smoking (44%), followed by injection (23%) and nasal insufflation (22%) (see Appendix 2, Table 13). In comparison to the previous review, smoking has increased, and injection drug use has decreased. Many overdose prevention sites (OPS) and supervised consumption sites (SCS) services do not offer inhalation services.

Illicit Drug Use in Presence of Others

Investigative notes and case details were analyzed for evidence of drug use while others were present. The percentage of persons using drugs while alone has shifted over time.

Fewer decedents in the current review cohort used illicit drugs alone (52%) than in the 2017 panel review cohort (61%), a statistically significant decrease. However, following the introduction of COVID-19 restrictions in April 2020, the percentage of persons using illicit substances alone increased to 61%.

Toxicology Findings

Detection of substances should be interpreted with the following in mind:

1. Where multiple substances are detected, some may be more contributory to the death than others;
2. Substances detected could have been consumed separately or within other substances at different times of the day or on different days;
3. Different substances metabolize at different rates;
4. Detection of substances does not indicate what individuals may have been seeking; and
5. Combining drugs may increase toxicity and result in a higher likelihood of death.

Fentanyl

- **Fentanyl** and its analogues were detected in 85% of illicit drug toxicity deaths between August 2017 and July 2021.
- Coinciding with the emergence of COVID-19 restrictions, there was an increase in the concentration of fentanyl detected. From April 2020 to July 2021, approximately 13% of deaths had extreme fentanyl concentrations (>50µg/L) compared to 8% from January 2019 to March 2020.

Benzodiazepines

- Benzodiazepines and benzodiazepine analogues have been increasingly detected in illicit drug toxicity deaths.
- In July 2020, 15% of all drug toxicity deaths screened for the presence of a benzodiazepine which increased to a high of 59% detected in May 2021. Benzodiazepines were detected in 48% of all drug toxicity deaths in July 2021.
- The most common benzodiazepine detected, through expedited testing, was etizolam, which was detected in 40% of the deaths between July 2020 and July 2021.

Benzodiazepines increase the risk of overdose by depressing the central nervous system and can making reversal of opioid overdoses more complex (Purssell, Buxton, Godwin, & Moe, 2021).

Stimulants

- Cocaine (49%) and methamphetamine (38%) were commonly detected.

At high doses, stimulants may result in an irregular heartbeat, heart failure, seizures and death (National Institute of Health, 2021).

Polysubstance Use

- Multiple substances were often present among those who died.
- Over three quarters of decedents were determined to have more than one illicit substance detected, including fentanyl, cocaine, methamphetamine, benzodiazepine, another opioid, or another stimulant, in toxicology findings.

There is no antidote comparable to naloxone for stimulant overdoses (Toward the Heart, 2021).

Naloxone Kits and Use

Naloxone is an opioid antagonist medication that reverses the effects of an opioid drug (e.g. heroin, morphine, fentanyl or oxycodone). Its effects last 20 to 90 minutes, allowing individuals to access medical care (Government of Canada, 2019). Naloxone does not work for an illicit drug related event involving stimulants or benzodiazepines; it is only effective in countering the impacts of opioids.

Providing free naloxone has averted hundreds of deaths (PHO, 2019).

B.C.'s Take Home Naloxone (THN) program began in late 2012 and provides free personal THN kits to people at risk of an opioid related-emergency event or likely to witness and respond to an opioid-related emergency event. Information about the availability and use of naloxone kits was provided through the BCCS protocol cohort:

This review found that only one in five persons who died of drug toxicity had a naloxone kit present and that, for 45% of those with a kit who died, the kit was used.

- Among all decedents in the current protocol cohort, 31% had naloxone administered. This would include naloxone being administered when it wasn't clear that a person was already deceased.
- Naloxone was most commonly administered by Emergency Health Services (EHS) (73%), friends/family (21%), and bystanders (11%). Note that percentages may add to more than 100% due to multiple people administering naloxone.

There is no evidence that THN provision is associated with increased opioid use or overdose (Tse, Djordjevic, Borja, Picco, Lam, Olsen, Larney, Dietze, Nielsen, 2021).

Provincial Response to the Emergency

Following the declaration of a public health emergency, a B.C. Task Force was convened in 2016 to address the rising number of illicit drug-related harms and deaths and to focus and take action on key areas with respect to prevention, treatment, harm reduction, enforcement, monitoring and surveillance.

In 2016, a Ministerial Order was enacted to:

- Designate overdose prevention sites as medically necessary health services; and
- Expand the list of health professionals who are able to provide safer, accessible alternatives to the toxic street drug supply.
- In 2017, the Province created a separate Ministry of Mental Health and Addictions, which in December of that year, launched the Overdose Emergency Response Centre (OERC) to coordinate and support immediate response to the opioid crisis.

In 2020, in response to the risks presented by the dual health emergency, the Provincial Health Officer issued an order permitting Registered Nurses (RNs) and Nurse Practitioners and Registered Psychiatric Nurses (RPNs) to prescribe pharmaceutical alternatives to street drugs.

Risk Mitigation Interim Clinical Guidance (RMG) for the prescribing of pharmaceutical alternatives to the toxic drug supply was also implemented in March 2020.

In response to the illicit drug toxicity crisis, the Province has confirmed its focus on:

1. *Harm reduction activities and interventions* (e.g. distribute publicly funded naloxone, establish overdose prevention sites and new supervised consumption sites, and offer drug checking for people who use drugs);
2. *Evidence-based treatment* (e.g. rapid access clinics that can initiate people onto opioid agonist therapy, clinical guidance for providers on how to best manage **opioid use disorder**, and treatment options for people living with opioid addiction);
3. *Public awareness and education* (e.g. Apps to provide information and intervention for illicit drug-related emergency events, access to information and addressing stigma);
4. *Data collection* for monitoring, surveillance, and applied research to better understand the characteristics of people who are at risk of an illegal drug-related emergency;
5. *Enforcement of drugs illegally produced or imported* into the province (intercept, detect and investigate); and
6. *Capacity of police to support harm reduction* efforts related to street drugs.

Additionally, *A Pathway to Hope*, the Ministry of Mental Health and Addictions roadmap for improving mental health and addictions care, identifies a number of priority actions to improve services for people needing treatment. These include:

- Developing a framework for improving the substance use system of care;
- Ensuring best evidence guides care; and
- Increasing access to evidence-based care.

Part Two: Discussion

The panel considered the investigative findings, a review of the literature and the experiences of the panel members and represented agencies in its discussions. The panel recognized that addressing illicit drug toxicity deaths is a complex problem, and that an urgent response is required commensurate with the magnitude of the current crisis. The panel identified that immediate action was needed in three specific areas – safer supply, a coordinated, goal driven provincial strategy, and a continuum of treatment and support services.

Substance use disorders arise from a combination of personal and environmental factors including trauma, mental health, pain, colonization, and poverty. Substance use disorder is a chronic health condition and needs to be treated as such. The stigma associated with illicit substance use creates both societal, institutional and personal barriers to obtaining the services people require to stay safe.

There has been ongoing recognition, support and repeated calls for action towards developing a public health regulatory framework for currently illegal drugs. This includes recommendations by the Health Officers Council of BC in 2011, the Canadian Public Health Association in 2015, Vancouver Coastal Health in 2018 and most recently by the Expert Task Force on Substance Use convened by the Federal Minister of Health in January 2021. These reports identify that the current drug policy approach has not kept pace with current scientific knowledge or established public health best practices and needs to change to align with current evidence.

Although a number of provincial initiatives have been undertaken in an attempt to address the drug toxicity crisis, including the expansion of supervised consumption sites and overdose prevention sites, delivery of treatment Opioid Agonist Therapy (OAT) and injectable Opioid Agonist Therapy (iOAT), and expansion of naloxone and drug checking, the scale of these initiatives have not been sufficient to stop the rising death toll. Moreover, these initiatives do not address the underlying toxic drug supply.

Not all of the deceased had a substance use disorder, and a variety of responses are required to meet the needs of those at risk of dying. Although there is a need to develop and implement longer term solutions, the first and immediate priority is to significantly reduce the number of people dying from the toxic drug supply. Reducing deaths resulting from illicit drug toxicity will require a focused and expanded provincial strategy.

There are a number of lessons that can be learned from the evidence-based provincial response to the COVID-19 public health emergency and should be used to address the illicit drug toxicity public health emergency. In addressing the COVID-19 crisis new approaches were required and implemented. Where rules needed to be changed in order to address the crisis, emergency powers were enacted. Vaccine approval began with an interim order to ensure public access as quickly as possible. Public health orders were implemented quickly and province-wide. Professional scopes of practice were changed in order to accommodate vaccination requirements. Priorities for vaccinations were established and vaccination clinics were set up across the province in communities large and small to ensure the population could be reached.

Rules were changed and outcomes were established for businesses, schools and gatherings. The public was kept informed daily and, as new information or challenges arose, new responses were quickly developed and implemented – time was not a luxury to be afforded. In short, desperate times required doing things differently and quickly in order to protect the health and well-being of British Columbians. The COVID-19 response was coordinated using an emergency management structure, with Emergency Operation Centres (EOCs) established in each health region. Through the EOC structure, all health authority resources were deployed to address the response. This same approach is required to address the illicit drug toxicity crisis.

Stigmatization

Stigmatization of people who use illicit drugs is rooted in drug policy, criminalization, racism, prejudice and discrimination. Removing the stigma related to substance use and substance use disorders is important to increase the likelihood people will seek out services. Although public education campaigns can play a role, until the root causes of stigma are addressed, stigma will remain a significant barrier to people accessing services. Criminalizing drug use behaviour ensures an ongoing public perception that it is deviant and shameful, creating a barrier to people seeking the support they need as well as requiring people to hide their needs for fear of criminal sanctions. Separating out treatment and support for drug use behaviour and the way people who use drugs are treated within the health care system further ensures ongoing stigma. Meaningful action towards supporting the **destigmatization** of drug use behaviour will require both decriminalizing that behaviour and incorporating support for people who use drugs through mainstream health services and public health supports.

There is widespread global recognition that the failed “war on drugs” and the resulting criminalization and stigmatization of people who use drugs has not reduced drug use but instead has increased health harms (PHO, 2019).

Decriminalization

The **decriminalization** of people who use drugs for personal consumption is urgently needed to address the illicit drug toxicity crisis. Decriminalization is an evidence-based policy strategy (PHO, 2019) to reduce the harms* associated with the criminalization of illicit substances by removing mandatory criminal sanctions, replacing them with access to prevention, harm reduction and treatment services.

Decriminalization is a drug policy approach existing on a continuum between criminalization and full legalization and as such receives support from both law enforcement and health and social systems. Decriminalization is supported by the Canadian Association of Chiefs of Police (2021), the Canadian Society of Addiction Medicine and the B.C. Office of the Provincial Health Officer (2021) who, along with others (researchers, addiction specialists, and the Health Canada Expert Task Force on Substance Use, 2021), have publicly called for decriminalization of people who possess controlled substances for personal use.

*-Substance use harms include stigma and shame associated with substance use, criminal justice system involvement, using alone and high-risk consumption patterns, the transmission of blood-borne disease, and drug toxicity injuries and death.

There are differences of opinion on the appropriate amounts of what constitutes personal use. A PHO (2019) report found there is no ideal threshold for a given substance. What is a typical quantity for personal use varies by the substance and the person. Drug availability will also have an impact upon defining personal use. Where drugs are harder to obtain people may feel the need to obtain larger quantities in case they are unable to obtain the drugs at a later time.

Decriminalization and legalization can be implemented using two different regulatory approaches. *De jure* (by law) involves changes to public policy and legislation requiring changes to the federal *Controlled Drugs and Substances Act (CDSA)*. In pursuit of this option, in October 2021 the B.C. Ministry of Mental Health and Addictions submitted a request to Health Canada for an exemption from *Section 56(1) CDSA* to allow personal possession of illicit substances for personal use, at identified threshold levels, in British Columbia. To date, the federal government has not provided a decision on the request.

In the absence of federal government support, the Provincial Health Officer (2021) outlines a *de facto* (in effect) approach, implementing informal guidelines and options for how BC could proceed with decriminalization of people who use drugs through provincial mechanisms by:

- “Amending the *Police Act* to declaring a public health and harm reduction approach to guide law enforcement in decriminalizing and de-stigmatizing people who use drugs. This type of approach would provide pathways for police to link people to health and social services and would support the use of administrative penalties rather than criminal charges for simple possession.
- Develop a new regulation under the *Police Act* to include a provision that prevents any member of a police force in BC from expending resources on the enforcement of simple possession offences under *Section 4(1) of the CDSA*” (PHO, 2021, p.37).

In August 2020, the federal Director of Public Prosecutions issued a guideline that directed prosecutors to focus upon the most serious cases raising public safety concerns and to otherwise pursue suitable alternative measures and diversion from the criminal justice system for simple possession cases. This does not impact the discretion of police, who still may confiscate illicit drugs, creating additional health and safety concerns for the person using drugs needing to obtain an alternate supply.

Decriminalization is an important strategy to support people using illicit drugs to access services and begin to reduce stigma around drug use.

Lived Experience

Meaningful changes to legislation, regulation and policy pertaining to drug use requires the engagement of people with lived experience. “Evidence supporting the engagement of people with lived experience or ‘peers’ at different stages of policy, program and research development shows positive health outcomes for populations. In order for decision makers to improve the health of individuals and make services more relevant to the target population, policies and practices must be based on the needs of that population. Allowing the voices of peers to be heard is crucial for developing a deeper understanding of complex health problems. By doing so, initiatives to tackle these health issues will have a greater impact on the target population by improving the acceptability and utilization of programs for these individuals and by extension, increase accessibility to these services” (Ti, Tzemis, Buxton, 2012).

Safer Supply

Since the public health emergency was declared more than 8,700 British Columbians have died because of an increasingly toxic illicit drug supply. It is estimated that more than 100,000 people in B.C. have an opioid use disorder (Nosyk, 2021).

The most urgent priority identified by the panel is to make a safer supply of non-toxic drugs available to people who are at risk of death due to dependence on the illegal drug supply. A safer drug supply on its own will not resolve this public health emergency, but it is urgently needed to reduce the number of people dying at unprecedented numbers. Safer supply is a broad concept that exists on a spectrum from a medicalized model treating people with a substance use disorder to a non-prescriber public health model that provides a safer supply of regulated drugs to people. As people use drugs for a variety of reasons, a variety of approaches will be required to provide a safer drug supply to those who need it in the communities where they live. A medicalized model on its own is not sufficient to deliver safer supply to all who need it.

For some, **Opioid Agonist Therapy (OAT)** (buprenorphine-naloxone [Suboxone], methadone, slow-release oral morphine) or **Injectable Opioid Agonist Therapy (iOAT)** (prescription diacetylmorphine, injectable hydromorphone) may be effective and can be provided in parallel with other harm reduction interventions, such as safer supply, psychosocial treatment interventions and/or recovery-oriented care, where appropriate.

OAT (methadone and buprenorphine) is the 'gold standard' treatment for opioid dependence while injectable Opioid Agonist Therapy (prescription diacetylmorphine, injectable hydromorphone) is an evidence-based alternative for persons with severe opioid dependence (BC Centre on Substance Use, 2017), (Fischer, Lee, Vojtila, 2020).

In essence, safer supply is a harm reduction approach that provides pharmaceutical alternatives to street drugs for people at high risk of an illicit drug-related death (PHO, 2019). Safer supply does not mean all risk is eliminated, but it does mean that the risk of a death due to illicit drug toxicity is greatly reduced. Not all people are ready or interested in seeking treatment, for those persons a safer, non-toxic supply of drugs is also required.

The Government of Canada indicates that safer supply services should offer:

- A range of medication options that reflect the needs and substance use patterns of those at risk;
- Accessible locations, including medical clinics, supervised consumption sites, community pharmacies, community health centres, other public health and substance use treatment services and supportive housing;
- Connections to health and social services where possible and appropriate;
- Flexible eligibility requirements;
- Flexible dosing conditions and carrying rules (for example, clients may be able to pick up their supply and use as needed); and
- Flexible client goals (for example, focusing on global improving health and social functioning and not requiring that clients stop using illegal drugs) (Government of Canada, July 22, 2021).

“While the evidence base for safer supply services is still developing, early research findings are promising and show that these services contribute to:

- Reduced infections;
- Decreased crime activity;
- Lower rates of overdose deaths;
- Reduced hospital admissions and emergency room visits;
- Improved connections to general medical care;
- Improved connections to housing and social supports; and
- Improved connections to care and treatment for people who have not had support services in the past” (Government of Canada, July 22, 2021).

Barriers to Safer Supply

There currently exist a number of barriers to providing a safer drug supply to those at risk of death from the toxic illicit drug supply. One barrier is the *Controlled Drugs and Substances Act (CDSA)* which regulates the importation, production, exportation, distribution, and use of scheduled substances. Currently, under the *Act* there is no ability to distribute, transport safer supply drugs to overdose prevention or supervised consumption sites (PHO, 2019). This also creates a significant barrier in Indigenous and remote communities that need a safer drug supply but are unable to meet the transportation, storage and distribution requirements. There is a need for a safer drug supply beyond urban areas, and universally providing access to a safer supply will need to address the systemic barriers faced by Indigenous and rural communities.

To address the urgent need to reduce **overdose** deaths, Overdose Prevention Sites were designated as medically necessary health services by Ministerial Order under the declared emergency in B.C., and Health Canada temporarily granted B.C. an exemption under “Section 56 of the *Controlled Drugs and Substances Act* for people who use drugs to be in possession of drugs for their personal use at overdose prevention site locations without the fear of being arrested” (PHO, 2019, p.35).

The COVID-19 Risk Mitigation Interim Clinical Guidance (RMG) for the prescribing of pharmaceutical alternatives to the toxic drug supply was implemented in March 2020. The RMG provided clinical guidance to physicians on how prescribing pharmaceutical alternatives could reduce the risk of deaths due to illicit drug toxicity and withdrawal symptoms related to opioid, stimulant, benzodiazepine and alcohol consumption.

Of the people receiving RMG, most received opioids and stimulants, and fewer received benzodiazepines or alcohol withdrawal medications. Most identified persons resided in either the Vancouver Coastal Health or Island Health regions.

Both the Risk Mitigation Evaluation Interim Report (BCCDC, 2020) and the Surveillance Update by Palis, Zhao, Nicholls & Slaunwhite (2020) describe the continued high rates of deaths due to illicit drug toxicity in the province alongside new RMG prescribing, suggesting that people potentially at the highest risk of illicit drug-related emergencies may not be reached by RMG prescriptions. The medication type and the mode of delivery via community pharmacies may not be sufficient to attract people at highest risk of death due to illicit drug toxicity (BCCDC, 2020). It is unlikely that risk mitigation prescribing will be adequate to ensure low barrier access to a safer drug supply for those in need.

Current regulatory requirements present a barrier to the provision of care to those who are at immediate risk of death from the toxic illegal drug supply. As the drug supply has become more toxic, lower barrier access to a safer supply has become more pressing.

Additionally, there are existing limitations to the current provincial approach to prescribed safer supply including:

- Limited prescriber uptake;
- Limited reach across the province (e.g. most prescribing in urban areas);
- Limited scope of available pharmacologic options, including both limits of potency (e.g., fentanyl exposure may indicate a high tolerance that cannot be matched with a less potent opioid such as hydromorphone) as well as route of administration (e.g. lack of options for those whose preferred route of consumption is smoking); and
- Clinician concerns around the potential for diversion of prescription opioids and contributing to new or worsening cases of substance use disorder.

Even with the implementation of a safer drug supply the illicit market will not disappear completely. Without broader changes to public policy, as well as increases to currently limited substance services, people who use drugs will still face harms related to criminalization and stigma which limits their ability to access already scarce treatment and recovery services. As such, wider distribution of drug checking technologies can play a role in helping people know the content of the drugs they are purchasing or selling. Wider scale drug checking can also be used as a surveillance tool to detect new analogues and toxicity levels of drugs being sold. Investing in an evidence-based continuum of substance use and social services is urgently needed.

Panel discussions concerning the current levels of safer supply in British Columbia found that the scale and breadth of these initiatives are inadequate to address the magnitude of the crisis. The panel identified the need for:

- An accessible regulated drug supply that is oriented to the diverse demographics of those at risk of death due to toxic illicit drugs and the regional differences that may inform risk;
- A safer supply that is low barrier and widely available, with a range of medical and non-medical delivery options which could include scaled up OAT/iOAT treatment; distribution through overdose prevention sites, medical clinics and community-based harm reduction services;
- Addressing the multi-substance use nature of the crisis ensuring the safety of the types of opioids, stimulants and benzodiazepines that people are consuming; and
- Addressing the support, service delivery and safer supply distribution needs of Indigenous and rural/remote communities.

The panel further recognized the complexity of federal/provincial jurisdictional challenges including required exemptions to section 56 of the *Controlled Drugs and Substances Act* to support a safer drug supply to British Columbians. Nonetheless both levels of government have demonstrated, through the COVID-19 emergency health response, what is possible in overcoming legislative, jurisdictional and resource barriers quickly in order to prioritize public health and well being.

Provincial Strategy

The provincial response to COVID-19 has demonstrated the importance of informing the public about the magnitude of the health emergency, the actions being taken and quickly overcoming any legislative, regulatory or policy impediments through the use of provincial emergency powers and public health orders. Overcoming legislative, regulatory and policy impediments will also be required to urgently address illicit drug toxicity deaths at the necessary scale and with a timely response capable of reducing the number of people dying.

Given that Indigenous peoples are disproportionately impacted by illicit drug toxicity deaths, there is a need to recognize the ongoing impacts that systemic racism and colonial policies and systems have had on Indigenous peoples, families and communities and the legacy of intergenerational trauma. Responses to this crisis need to recognize and respect the resilience and strength of First Nations communities and culture, the work of the First Nations Health Authority to address the toxic drug supply, the principles of Indigenous self-government and the province's commitment to reconciliation. Any successful strategy will need to include the voices and needs of those utilizing the services.

In addition to longer term planning that is currently being undertaken in response to illicit drug toxicity deaths, a number of immediate actions are required, which may be best approached in terms of 30/60/90 day timeframes.

The panel identified a number of initiatives that could be implemented quickly, recognizing that people continue to die at historic levels and immediate action is required:

- First and foremost, there is an immediate need to address the issue of a safer drug supply to reduce the number of deaths resulting from illicit drug toxicity. Although the province has supported prescribed safer supply through a provincial policy, a comprehensive safer supply framework which includes non-medicalized models that do not require a prescription along with an integrated implementation plan is required with an emergent response to ensure people have access to drugs of known composition.
- An expansion of substance use services to all areas of the province. This could be done through the expansion of overdose prevention sites/supervised consumption sites, the investment in new substance use services across the continuum and the incorporation of these into existing health facilities or other services (e.g. supportive housing).
- Public reporting, as has so effectively been used in informing the public regarding COVID-19 through Minister and Provincial Health Officer updates, guidance, actions being taken, and dashboards which are updated daily identifying key metrics in addressing the problem. Importantly these communications strategies for COVID-19 communicated to the public how urgent and important this issue was to the provincial government.
- Distribution of a safer drug supply will still require monitoring, regulation and oversight, however the monitoring, regulation and oversight cannot be an impediment to ensuring persons who use drugs have access to a non-toxic supply. Current monitoring, regulating and oversight will need to adjust to the current realities faced in the provinces and will require the regulatory colleges, the ministries and Indigenous leadership to review and revise the current processes.

- Destigmatization of substance use and substance use disorders to increase the likelihood people will seek out services. Although public education campaigns can play a role, it will be important to incorporate services into mainstream health services, address stigma in health settings and address the issue of decriminalization to make meaningful inroads.

Additionally, a provincial strategy will also need to address longer term initiatives involving the development and implementation of a comprehensive continuum of services as identified through the previous Illicit Drug Toxicity Death Review Panel in 2017.

Canada's current drug policies are failing to keep people alive and must be immediately transformed through decriminalization, the development of a single public health framework which regulates all substances, and the expansion of safer supply (Health Canada Expert Task Force on Substance Use, Report 2, June 2021).

Continuum of Care

Recognizing the immediate urgency in dealing with a safer supply in order to keep people alive, there is also a need for a comprehensive continuum of care including evidence-based treatment to support those with substance use disorders. The previous panel in 2017 made a recommendation with respect to an accountable substance use system of care, identifying the need to provincially regulate and appropriately oversee treatment and recovery programs and facilities to ensure that they provide evidence-based, quality care and that outcomes are closely monitored and evaluated. The approach to screening for and treating substance use disorders should follow the same evidence-based approach that would be used in developing, monitoring and evaluating treatment for any other chronic health condition. Additionally, the continuum of care must be longitudinal, with either a primary care practitioner or team responsible for longitudinal follow-up and connection to services.

As many individuals experience varying degrees of severity of co-occurring substance use and mental health disorders, there is a need to better define and implement evidence-based care and less stigmatizing approaches to concurrent disorder care. Similar to the earlier review, many of the persons who died as a result of illicit drug toxicity had contact with multiple agencies (e.g. health care, service providers, ambulance and emergency responders or community agencies). People who use substances may have other chronic health or mental health conditions that bring them into contact with physicians, nurse practitioners, emergency room settings or clinics. These points of contact provide opportunities for further engagement, screening, support, or intervention.

Building an evidence-based continuum of care requires an expansion of existing harm reduction services; health promotion and prevention planning; addiction treatment with an increase in the number of prescribers; psychosocial treatment interventions; recovery oriented care; and an emphasis on coordination and communication across all systems and levels of care to ensure that patients transition through the system seamlessly, with limited drop out.

Treatment of substance use disorders requires better integration with primary care and adequate funding and resources to support primary care providers, as well as supporting clients longitudinally over time. Appropriate treatment and support options need to exist and be accessible when people need them.

A Pathway to Hope, the Ministry of Mental Health and Addictions roadmap for improving mental health and addictions care, identifies a number of priority actions to meet that goal. These include:

- Developing a framework for improving the substance use system of care;
- Ensuring best evidence guides care;
- Increasing access to evidence-based care; and
- Integrated team-based service delivery connecting people to treatment; supportive recovery services; and the establishment of a peer network.

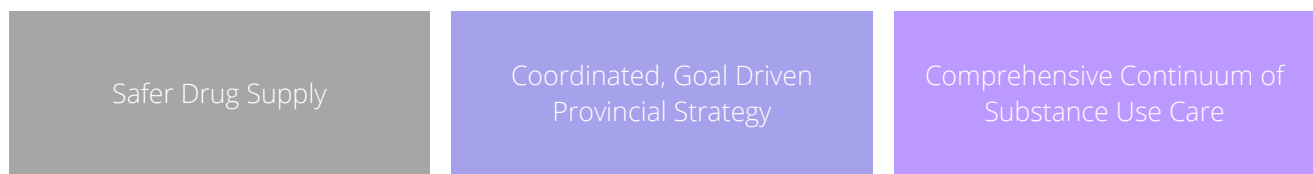
Successful public health models for addiction management focus on expanding, and improving prevention, treatment, harm reduction and through social reforms such as social reintegration programs (Murkin, 2014).

Part Three: Recommendations

This death review panel has developed a set of recommendations considering the BCCS investigative findings, current research and applying subject matter expert opinion to illicit drug toxicity deaths. The recommendations arising from the death review panel were developed in a manner that was:

- Cognizant of the scale of the emergency;
- Collaborative;
- Attributable to the deaths being reviewed;
- Focused on identifying opportunities for improving public safety and prevention of future deaths;
- Targeted to specific parties;
- Realistically and reasonably implementable; and
- Measurable.

The panel identified three key areas to reduce deaths due to illicit drug toxicity:



Panel Recommendations

Safer Drug Supply

Rationale

The first priority in addressing the illicit drug crisis is keeping people alive. One of the primary drivers of the historically high number of deaths is the growing toxicity and unpredictability of the street supply of drugs. Providing a safer drug supply of pharmaceutical alternatives is necessary to reduce the number of people from dying due to the toxicity of illicit drugs.

As the scale of current initiatives have been unsuccessful in reducing the number of deaths due to toxic illicit drugs, Provincial Emergency Powers and further legislative tools may be required to ensure immediate action commensurate with the magnitude of the crisis.

RECOMMENDATION 1:

Ensure A Safer Drug Supply To Those At Risk Of Dying From The Toxic Illicit Drug Supply

Priority actions identified by the Panel are:

On an urgent basis and by May 9, 2022, the Ministry of Mental Health and Addictions and the Ministry of Health, in collaboration with the CEOs of the Regional Health Authorities, the Provincial Health Services Authority, and the First Nations Health Authority, will develop a plan to:

- Create a provincial framework for safer supply distribution, in collaboration with the BC Centre for Disease Control and the BC Centre on Substance Use and people who use drugs, that includes both medical and non-medical models;
- Rapidly expand the safer drug supply throughout the province to ensure a safer supply is available in all communities, including rural/remote and Indigenous communities where people are at risk of dying due to toxic illicit drugs;
- Identify eligibility criteria for people at risk of death from toxic illicit drugs that lowers barriers to obtaining and continuing a safer drug supply of pharmaceutical alternatives and ensure this criterion is adopted across health authorities and practitioners in the province;
- Provide a range of medication options that reflect the needs and substance use patterns of those at risk;
- Ensure oversight, monitoring and timely evaluation of safer drug supply distribution and dissemination of preliminary findings;
- Connect more people accessing safer drug supply services with health and social services including substance use treatment where appropriate;
- Increase meaningful engagement of a diverse range of people with lived and living substance use experience in all health system planning, design and implementation to ensure the safer drug supply and distribution mechanisms address their needs; and,
- Ensure that high-quality and fast drug checking services are available and accessible across the province, so that:
 - People have better knowledge about non-pharmaceutical drugs they consume; and
 - Health authorities can establish improved illicit drug market surveillance, identify novel dangerous adulterants, and provide early warnings about changes in the illicit drug supply.

Coordinated, Goal Driven Provincial Strategy

Rationale

The public health crisis is now in its sixth year and continues to worsen. Public health efforts to date have not been successful in reducing the number of people dying as a result of toxic illicit drugs.

The public health response to COVID-19 has demonstrated a model of addressing a public health emergency that is urgent, evidence-based, responsive, directive and publicly transparent. The response to COVID-19 has been able to address health, economic and social needs beyond the health care sector and adjust planning and actions as the realities of COVID-19 change dictate.

RECOMMENDATION 2:

Develop A 30/60/90 Day Illicit Drug Toxicity Action Plan with Ongoing Monitoring

Priority actions identified by the Panel are:

(A) By May 9, 2022, The Ministry of Mental Health and Addictions and the Ministry of Health, in collaboration with the CEOs of the Regional Health Authorities, the Provincial Health Services Authority, and the First Nations Health Authority, will develop a 30/60/90 day action plan to:

- Develop and implement a strategic management and governance framework that sets clear goals, targets and deliverable timeframes for reducing the number of illicit drug toxicity events and deaths;
- Identify roles and responsibilities provincially with health system partners, and with the health authorities both regionally and locally, for implementing the plan;
- Develop a public health framework for the oversight, monitoring and regulation of a safer drug supply;
- Establish metrics to identify relevant needs, levels, availability, and accessibility of substance use services and treatment (e.g. harm reduction, treatment and recovery services) at the local health area level in addition to morbidity and mortality data;
- Enhance data and information sharing across sectors and programs required for data analytics to support and enable system planning, system and programmatic oversight and monitoring, tracking of patient and population-level outcomes, and for identifying and managing risks; and,
- Develop and implement a broader communications and public reporting strategy on metrics and progress similar with the COVID-19 pandemic reporting.

(B) By April 11, 2022, the federal Minister of Health will:

- Approve British Columbia's October 2021, request for a federal exemption from *Section 56(1) CDSA* to decriminalize personal possession of illicit substances in British Columbia.

Comprehensive Continuum of Substance Use Care

Rationale

This review found that the majority of those who died had accessed the health care system recently and many for a reason related to substance use and or mental health. The review also found that few of those who died had accessed non-pharmaceutical treatment. The 2017 Illicit Drug Toxicity Death Review Panel identified the need to support health care professionals assess patients for substance use disorders and develop referral mechanisms to link patients with evidence-based treatment services. This panel reiterated that need and noted that in order to make appropriate treatment referrals, appropriate treatment and support options need to exist and be accessible when people need them.

Both the 2017 panel and this panel also identified the need to consult with persons who use substances, persons in recovery and affected families in the planning, development and implementation of treatment services.

A Pathway to Hope, the Ministry of Mental Health and Addictions roadmap for improving mental health and addictions care, identifies a number of priority actions to meet that goal. These include:

- Developing a framework for improving the substance use system of care;
- Ensuring best evidence guides care; and
- Increasing access to evidence-based care.

RECOMMENDATION 3:

Establish An Evidence-Based Continuum Of Care

Priority actions identified by the Panel are:

(A) By April 11, 2022, the Ministry of Health and the Ministry of Mental Health and Addictions, and the CEOs of the Regional Health Authorities, the Provincial Health Services Authority, and the First Nations Health Authority will:

- Review the 2017 Illicit Drug Toxicity Death Review Panel Recommendation 1: "Ensure Accountability for the Substance Use System of Care."

(B) By April 11, 2022, the Ministry of Mental Health and Addictions will prioritize completion of *A Pathway to Hope* priority action "Substance Use: Better Care, Saving Lives" through:

- Completing the framework for establishing the substance use system of care by June 9, 2022;
- Identifying roles and responsibilities provincially with health system partners, and with the health authorities both regionally and locally, for implementing the framework by September 9, 2022 (6 months after release);
- Identifying roles and responsibilities provincially with health system partners, and with the health authorities both regionally and locally, for increasing access to evidence-based care, using data and metrics to prioritize services where there are gaps by March 9, 2023 (1 year after release).
- Developing and implementing a data driven system of monitoring, including the identification of key metrics of success to evaluate and improve where needed services that have been implemented under this framework;

- Working with evidence-based medicine organizations (e.g. the BC Centre on Substance Use and the Therapeutics Initiatives) on guidelines for safer prescribing of psychoactive medications for those with concurrent disorders, and define what medications improve rather than worsen outcomes among people who use drugs; and
- Reviewing and revising policies that discourage workers from seeking help and support for substance use disorders and address non-evidence-based guidelines precluding individuals in the trades and other safety sensitive positions from using evidence-based medications known to reduce illicit drug toxicity deaths.

(C) By September 9, 2022, the Ministry of Health and the Ministry of Mental Health and Addictions, in partnership with the Doctors of BC, the College of Physicians and Surgeons and the College of Nurses and Midwives, will:

- Develop a practice standard to support health care providers and prescribers within emergency departments, hospitals and community settings to assess, screen and diagnose patients for substance use disorders, and develop referral mechanisms to link patients to evidence-based services.

(D) By March 9, 2023, the Ministry of Health, in partnership with health authorities, will:

- Invest in health care provider training programs with respect to assessing, screening, supporting recovery and appropriately referring persons with substance use disorders and provide adequate resources to health care providers to deliver the care.

Appendix 1: Glossary

The following terms are used within this report to mean:

Aggregate: Presentation of individual findings as a collective sum.

Benzodiazepines ("Benzos"): Medications used for a variety of medical conditions, such as anxiety, seizures, and for alcohol withdrawal or for sleep or a muscle relaxant. Benzodiazepines appear to work by blocking excessive activity of nerves in the brain and other areas in the central nervous system. Etizolam was the most commonly identified benzodiazepine in this review. Other examples of benzodiazepines include alprazolam (brand: Xanax), diazepam (brand: Valium) and lorazepam (brand: Ativan).

Decriminalization: An evidence-based approach to drug policy that is effective in reducing harms related to substance use when reinforced with complementary measures of harm reduction, prevention, enforcement, social support, and treatment. Redirecting police time and resources away from the enforcement of simple possession offences reduces barriers, including fear and stigma, and facilitates a linkage to treatment and harm reduction services (PHO, 2019).

Destigmatization: The action or process of removing the negative connotation or social stigma manifested as prejudicial attitudes about and discriminatory practices against people with mental health and substance use disorders (<https://www.ncbi.nlm.nih.gov/books/NBK384923/>)

Drug Checking: A harm reduction service that offers a range of technologies that allow a sample of an unknown or suspected substance to be checked for the presence of one or more substances.

Fentanyl: An opioid medication that is manufactured legally for pain management (available in several formulations), and a substance that is manufactured illegally to sell for profit in the street drug supply.

Fentanyl Analogues: Substances with similar chemical structures as fentanyl. Some analogues are more toxic (e.g., Carfentanil) and others less potent.

First Nations: The term 'First Nations' has largely become the preferred terminology for Indigenous peoples of North America in what is now Canada, and their descendants, who are neither Métis or Inuit. First Nations people may be 'Status' (registered) or 'non-Status' as defined under the *Indian Act*.

Harm Reduction: An approach that uses strategies and interventions to reduce individual and community-level harm from substance use.

Illicit drugs inclusion criteria: The illicit drug overdose category includes the following:

- Street drugs (controlled and illegal drugs: heroin, cocaine, MDMA, methamphetamine, illicit fentanyl etc.);
- Medications not prescribed to the decedent but obtained/purchased on the street, from unknown means or where origin of drug not known; and
- Combinations of the above with prescribed medications.

Indigenous: 'Indigenous peoples' is a collective name for the original peoples of North America and their descendants (replacing) 'Aboriginal peoples.' The Canadian Constitution recognizes 3 groups of Aboriginal peoples: Indians (more commonly referred to as First Nations), Inuit and Métis. These are 3 distinct peoples with unique histories, languages, cultural practices and spiritual beliefs.

Injectable opioid agonist treatment (IOAT): Prescription diacetylmorphine, injectable hydromorphone.

Naloxone: An opioid antagonist that blocks opioid receptors in the brain. Naloxone reverses the effects of opioids, including opioid overdose.

Opioid: Any substance, both natural and synthetic, that bind to opioid receptors (e.g. heroin, morphine, methadone, and prescription pain relievers).

Opioid Agonist Treatment (OAT and IOAT): Evidence-based treatment for opioid use disorder, which includes the administration of opioid agonists to alleviate withdrawal symptoms. Also referred to as opioid substitution treatment. Part of a comprehensive treatment plan for opioid use disorder, which includes psychological and social supports.

Opioid Use Disorder: A clinical, chronic relapsing condition characterized by at least two symptoms listed in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) criteria for opioid use disorder, including taking opioids in amounts larger or longer than intended, craving or strong desire for opioids, and persistent desire or unsuccessful efforts to cut down or control opioid use.

Overdose: The use of any drug in such an amount that acute adverse physical or mental effects are produced. Overdose may produce transient or lasting effects, or death. The lethal dose of a particular drug varies with individuals and circumstances (WHO, 2018).

Overdose Prevention and Supervised Consumption Services: Locations where people can use illegal drugs under supervision by trained staff. As part of healthcare services, staff monitor people who are at risk of overdose and provide rapid intervention as needed. They are also able to be connected to health and social services.

Potential Years Life Lost (PYLL): A measure weighting deaths occurring at younger ages, which may be preventable.

Public health orders: The Provincial Health Officer has powers under the *Public Health Act* to issue and enforce orders in relation to infectious and hazardous agents.

Safer supply: A supply of drugs of known identity and concentration that lacks potentially hazardous adulterants or contaminants. The distribution of a safer supply is a broad concept that exists on a spectrum from a medicalized prescriber model to a non-prescriber public health model that provides a safer supply of regulated drugs to people.

Stimulants: Drugs that stimulate the brain, speeding up both mental and physical processes. They increase energy, improve attention and alertness, and elevate blood pressure, heart rate and respiratory rate. They decrease the need for sleep, reduce appetite, and lessen inhibitions. Common examples of stimulants include caffeine, amphetamine, methamphetamine, cocaine.

Appendix 2: Data Tables

Table 1: Illicit Drug Toxicity Deaths by Industry, Protocol Cohort, Aug 2017 – Jul 2021

Industry	Protocol Cohort	2018 BC Population (15+ years)*
Sales and Services	16%	26%
Trades, Transport and Equipment Operators	52%	15%
Other Industry	27%	58%
Unknown	5%	
Total	780	

*-Source: Statistics Canada. Labour force characteristics by occupation, annual.
<https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1410033501>

Table 2: Illicit Drug Toxicity Deaths by Time Since Last Payment, Linked Data Cohort, Aug 2017 – Dec 2018

Time of Last Payment	Linked Data
Less than 1 week	9%
1 week to less than 1 month	35%
1 month to less than 6 months	3%
6 months to less than 1 year	3%
1 year or greater	13%
Never received social assistance	38%
Total	1,924

Note: Social assistance records from Jan 2010 to Dec 2018.

Table 3: Illicit Drug Toxicity Deaths by Living Arrangement, Protocol Cohort, Aug 2017 – Jul 2021

Primary Living Arrangement	Protocol Cohort
Private residence or non-subsidized residence	65%
Subsidized housing (social housing, rooming houses), hotels/motels, or shelters	19%
Homeless	12%
Other/Unknown	5%
Total	2,117

Table 4: Mental Health Diagnosis or Anecdotal Evidence of Mental Health Disorders, Protocol Cohort, Aug 2017 – Jul 2021

	Protocol Cohort (Jan 2016 – Jul 2017)	Protocol Cohort (Aug 2017 – Jul 2021)
Mental health diagnosis	45%	50%
Anecdotal evidence of mental health disorder	10%	12%
Mental health diagnosis or anecdotal evidence	55%	62%

Table 5: Percentage of Illicit Drug Toxicity Deaths with a Mental Health Diagnostic Code within the Past Year, Linked Data Cohort, Aug 2017 – Dec 2018

	Linked Data Cohort	20% Random BC Population
Mental health diagnostic code (including substance use disorder)	43%	14%
Mental health diagnostics code (excluding substance use disorder)	20%	13%
Substance use disorder codes	35%	2%

Note: December 31, 2018 or date of death used as reference date for 20% random population sample.

Table 6: Time of Last MSP billing, Hospital Discharge, or Emergency Room Visit, Linked Data Cohort, Aug 2017 – Dec 2018

	Linked Data Cohort	20% Random BC Population
Less than 3 months	72%	54%
3 months to less than 6 months	10%	12%
6 months to less than 1 year	6%	11%
1 year to less than 3 years	6%	12%
3 years or more	2%	5%
No visits	5%	5%
Total	1,924	1,070,641

Note: December 31, 2018 or date of death used as reference date for 20% random population sample.

Table 7: Number of MSP billings, Hospital Discharges, or Emergency Room Visits in the Past 3 Months, Linked Data Cohort, Aug 2017 – Dec 2018

Number of Visits	Linked Data Cohort	20% Random BC Population
No visit	29%	46%
1 visit	9%	14%
2-4 visits	20%	22%
5-9 visits	13%	11%
10+ visits	29%	6%
Total	1,924	1,070,641

Note: December 31, 2018 or date of death used as reference date for 20% random population sample.

Table 8: Number of Non-Fatal Overdoses (NFOD), Linked Data Cohort, Aug 2017 – Dec 2018

Total NFODs	Linked Data Cohort
1 NFOD	17%
2 NFOD	6%
3 NFOD	3%
4 NFOD	1%
5 or more NFOD	3%
None	70%
Total	1,924

Note: Any NFODs between January 1, 2015 and December 31, 2018.

Table 9: Last Date of Non-Fatal Overdose Among people with a Record of NFOD, Linked Data Cohort, Aug 2017 – Dec 2018

Times of Last NFOD	Linked Data Cohort
Less than 3 months	49%
3 months to less than 6 months	11%
6 months to less than 1 year	16%
1 year to less than 2 years	17%
2 years or more	8%
Total	569

Note: Any NFODs between January 1, 2015 and December 31, 2018

Table 10: Access to Substance Use Treatment, Protocol Cohort, Aug 2017 – Jul 2021

	Protocol Cohort (Jan 2016 – Jul 2017)	Protocol Cohort (Aug 2017 – Jul 2021)
Sought and accessed	8%	9%
Sought but did not access	3%	2%
Did not seek	78%	75%
Unknown	11%	14%
Total	1,727	2,117

Table 11: Illicit Drug Toxicity Rates by Health Authority of Place of Injury per 100,000 population, All Cases, Aug 2017 – Jul 2021

	2017/18 (Aug-Jul)	2018/19 (Aug-Jul)	2019/20 (Aug-Jul)	2020/21 (Aug-Jul)	Average
Fraser	26	22	21	35	26
Interior	29	21	25	40	29
Island	29	23	28	33	28
Northern	29	26	30	48	33
Vancouver Coastal	34	30	29	44	34
Provincial	29	24	25	38	29

Table 12: Percent of Illicit Drug Toxicity Deaths by Community Size, All Cases, Aug 2017-Jul 2021

	2017/18 (Aug-Jul)	2018/19 (Aug-Jul)	2019/20 (Aug-Jul)	2020/21 (Aug-Jul)	Total	2016 BC Population*
Rural	8%	9%	11%	10%	10%	13.5%
Small Urban Centre (10,000-29,999 pop.)	10%	9%	10%	11%	10%	12%
Medium Urban Centre (30,000-99,999 pop.)	16%	16%	14%	15%	15%	13%
Large Urban Centre (≥100,000 pop.)	66%	66%	65%	64%	65%	62%
Deaths	1,454	1,245	1,311	1,997	6,007	

*-Source: Statistics Canada. 2016 Census. <https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=3210001201>

Table 13: Illicit Drug Toxicity Deaths by Mode of Consumption, Protocol Cohort, Aug 2017 – Jul 2021

Mode of Consumption	Protocol Cohort (Jan 2016 – Jul 2017)	Protocol Cohort (Aug 2017 – Jul 2021)
Injection	33%	23%
Oral	7%	7%
Nasal	22%	22%
Smoking	36%	44%
Transdermal	0%	0%
Unknown	18%	23%
Total	1,727	2,117

Note: Percentages may add to more than 100% due to multiple modes of consumption at time of death

Appendix 3: Data Sources

Multiple data sources were used for this review. A full description of each data source can be found below.

All Cases: Includes all suspected and confirmed unintentional illicit drug toxicity deaths in BC that occurred between August 1, 2017 and July 31, 2021, inclusive.

Closed Cases: Includes all unintentional illicit drug toxicity deaths in BC that occurred between August 1, 2017 and July 31, 2021, inclusive, where the investigation has been completed.

Protocol Cohort (2017-2021): For all unintentional illicit drug deaths, coroners complete an additional set of questions, called protocol data, that provide more insight into the decedent and the circumstances surrounding the death. At the time of writing, 35% of All Cases have had this additional set of questioning completed and available for analysis. Cases from the protocol cohort are more likely to be from earlier in the time period.

Protocol Cohort (2016-2017): Where appropriate and available, comparisons were made with the previous death review panel's protocol data which included deaths between January 1, 2016 and July 31, 2017.

Linked Data Cohort: The Provincial Overdose Cohort is a collection of linked administrative data on people who had a fatal and non-fatal overdose and a comparison group representing a 20% random sample of the BC population. Aggregate data was obtained from the Provincial Overdose Cohort for cases between August 1, 2017 and December 31, 2018 with information coming from:

- Medical Service Plan (MSP) Payment Information;
- Discharge Abstract Database (Hospital separations);
- National Ambulatory Care Reporting System (Emergency department visits);
- PharmaNet;
- BC Emergency Health Services (Ambulance);
- BC Corrections; and
- Ministry of Social Development and Poverty Reduction (Social assistance).

Data was available for 92% of All Cases between August 1, 2017 and December 31, 2018 or 32% of All Cases between August 1, 2017 and July 31, 2021.

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