



THE HIDDEN EPIDEMIC: The Opioid Overdose Emergency in Fraser Health

Key findings on those most impacted by the overdose crisis
January 2018

A Note from the Chief Medical Health Officer

The 2017 Chief Medical Health Officer's Report focuses on the opioid overdose emergency in Fraser Health. This report brings together findings from multiple analyses to describe the *who, what, and where* of fatal and non-fatal overdoses in our region. By better understanding the factors leading to problematic substance use and those at risk of overdose, we can both respond to and prevent overdose and save lives.

Increases in overdose deaths have accelerated as synthetic opioids such as fentanyl have entered the illicit drug supply. Nearly 1,000 people lost their lives due to illicit overdose deaths in our province in 2016 and devastatingly even more families, friends and peers have already lost their loved ones to this crisis in 2017.

Fraser Health has the highest number of illicit drug overdose deaths in the province. By the end of 2016, the number of illicit overdose deaths was 60% higher than in 2015. The total number of deaths for 2017 is estimated to be approximately 130% higher than in 2015.

When the Provincial Health Officer declared an opioid overdose public health emergency in 2016, most people thought that this crisis did not and would not affect them personally. This report highlights that overdoses are closer than we think. As is the case across British Columbia, men and women of all ages are experiencing fatal and non-fatal overdose. In fact, most overdose fatalities are not visible; they occur in private residences and involve men between 19 – 59 years of age. The primary intent of this report is to shed light on this hidden epidemic.

Many of these men suffer from mental health issues and manage these stresses with substances. What we also know is that some men would rather risk their lives than to seek help because of the stigma associated with using illicit substances. For those who experience overdose and interact with Fraser Health services, we are working on better ways to identify these people, reduce their risk of overdose, and prevent overdose and overdose deaths from occurring.

Heroic efforts have been made to mitigate the impacts of the opioid overdose crisis in our region. Extraordinary work by our frontline staff, leaders and partners have led to significant progress in immediate response measures such as improving access to life saving drugs (i.e., naloxone); reducing harms of using illicit substances with supervised consumption and overdose prevention sites; and expanding first-line treatment services. However, more work remains. Analyses like the ones in this report are critical to ensuring that our actions are evidence-based and meet the needs of the people we serve. One of the many challenges ahead is identifying supportive interventions and services for persons at risk of overdose in private residences. This is an area we need to challenge ourselves and each other to find new and different ways of thinking, of preventing, of responding to, and of treating people that use illicit substances. This work cannot occur in isolation; we need partners outside of our usual circles in the health system. The overdose crisis needs a coordinated community response. We need your help in identifying new ways to combat the hidden epidemic while enhancing the actions we are already taking. We need your help to stem the tide of overdose on our communities across the region.



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EMERGENCY

The Opioid Overdose Emergency in Fraser Health

In 2016 alone almost 1,000 British Columbians – including 330 Fraser Health residents – died from overdose.

As with the rest of the province, the opioid overdose emergency is expanding across Fraser Health. It is critical we gain a deeper understanding of some of the factors that influence the chance of overdose so we can effectively help, both in the short and the long term.

At Fraser Health, we use information from BC Emergency Health Services, the BC Coroners Service, and our Emergency Departments, clinics, hospitals, community partners and agencies, and people with lived experience to learn as much as we can about people who experience drug overdoses.

We analyzed 45,000 visits for 5,000 people who were treated for an overdose in our Emergency Departments. In addition, we held focus groups with men who reported using drugs alone, and community consultations to understand the problem.

We performed an in-depth chart review of 90 men admitted to hospital after a serious, non-fatal, residential overdose event. **We focused on men who had an overdose at a private residence because 85% of people who die from overdose in our region are men, and 70% of illicit drug overdose deaths occur in private residences.**

Background: Opioids are contaminating the illicit drug supply



over 80%
of fatal overdoses
in 2017 were
associated with
fentanyl.

The presence of lethal opioids such as fentanyl in the illicit drug supply is drastically increasing the risk of overdose. As a result, people are at higher risk of overdose.

A growing proportion of fatal overdoses are associated with fentanyl – from 25% in 2014 to over 80% in 2017.¹

The increase in overdose deaths is unveiling how widespread illicit substance use is in our communities. People that are using illicit drugs in private residences have often been hidden from the health system until now.

¹ Based on information from the BC Coroners Service.

How do prescriptions of opioids affect the overdose crisis?

The overdose crisis has been driven by the contamination of the illicit drug supply with opioids like fentanyl, but some of the overdoses are caused by opioids that are prescribed.



Opioids are primarily prescribed for pain. Because of their risk of abuse and addiction, opioids are often prescribed cautiously for chronic pain. Opioids can be used safely and effectively when prescribed appropriately.

Certain patterns of prescribing opioids can increase the risk overdose.

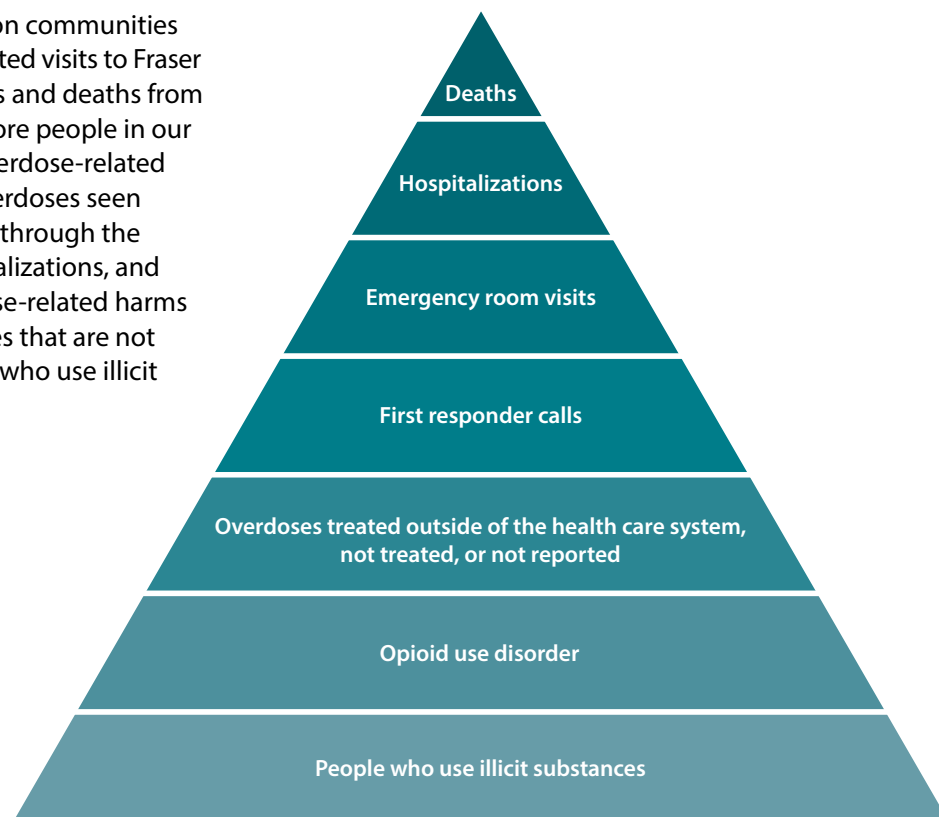
For example, the risk of overdose is increased when opioids are combined with other drugs like benzodiazepines. Benzodiazepines are medications sometimes prescribed for conditions like insomnia and anxiety.

In our settings, we have found instances where patients have

been co-prescribed benzodiazepines and opioids. Some patients come into hospital with both medications co-prescribed; however, some co-prescriptions do occur in hospital primarily on the General Medicine and Surgical units. Given the increased risk of overdose, our Pharmacy team is working with staff to identify patients who are in, and being discharged, from hospital with both opioid and benzodiazepine prescriptions to promote safer prescribing practices.

How much does overdose affect our communities?

Overdoses have a broad effect on communities across our region. Overdose-related visits to Fraser Health Emergency Departments and deaths from overdose indicate that many more people in our community may be at risk of overdose-related harms. This report describes overdoses seen through the health care system through the Emergency department, hospitalizations, and deaths. Others at risk of overdose-related harms in the community, like overdoses that are not treated or reported and people who use illicit substances, are not as visible.





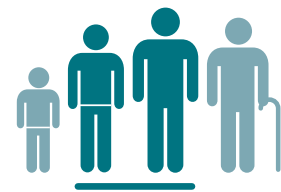
Who is dying from overdose?



The opioid crisis is heavily impacting men across Fraser Health.



85% of fatal overdoses are among men.²



19 – 59 year olds are the most impacted³ with 30 – 39 year olds having the highest number of overdose deaths.

First Nations people are heavily affected by the crisis.

Although substance use is common across BC, regardless of race, ethnicity or background, the opioid crisis is disproportionately affecting First Nations peoples and communities. According to the First Nations Health Authority⁴, Status First Nations people are five times more likely to have an overdose event and three times more likely to die than non-First Nations people. Unlike non-First Nations people, where overdoses are occurring more frequently in men, overdoses are occurring more equally among men and women in First Nations people.

² Nearly 2/3 of nonfatal overdoses are among men.

³ Fentanyl-Detected Illicit Drug Overdose Deaths January 1, 2012 to September 30, 2017 [Internet]. Burnaby, BC: Ministry of Public Safety and Solicitor General Office of the Chief Coroner; 2017 [cited 9 November 2017]. Available from: <https://www2.gov.bc.ca/assets/gov/public-safety-and-emergency-services/death-investigation/statistical/fentanyl-detected-overdose.pdf>

⁴ Overdose Data and First Nations in BC: Preliminary Findings [Internet]. West Vancouver, BC: First Nations Health Authority; 2017 [cited 9 November 2017]. Available from: http://www.fnha.ca/newsContent/Documents/FNHA_OverdoseDataAndFirstNationsInBC_PreliminaryFindings_FinalWeb_July2017.pdf



Where are people when they overdose?



70%
of overdose deaths
are in private
residences.

Of all suspected overdose deaths in Fraser Health, our analyses show that most occur in someone's home, which counters the common misconception that most overdoses are happening on the street to people who are homeless.

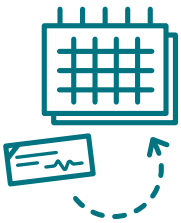


Most people overdose
in the community
they live in.

This means local community driven interventions are likely to reach those who overdose or are at risk of overdosing in the community.

While fatal and nonfatal overdoses are occurring across Fraser Health communities, **two thirds** of fatal and nonfatal overdoses were in Surrey, Abbotsford, Maple Ridge, Chilliwack, and Langley City and Township.

When do people overdose?



Income and disability assistance payments occur on the third or fourth Wednesday of every month. More overdoses occur on the Wednesday, Thursday, and Friday of cheque week compared to the rest of the month.

This "**cheque week effect**"⁵ happens across Fraser Health, but is most pronounced in Abbotsford, City of Langley, Maple Ridge, and Surrey.

It's important to remember that use of illicit substances and receiving income or disability assistance do not always go together.

Not everyone who uses illicit drugs receives income or disability assistance, and not everyone who receives income or disability assistance is at risk of overdose.

⁵ Otterstatter M, Amlani A, Guan T, Richardson L, Buxton J. Illicit drug overdose deaths resulting from income assistance payments: Analysis of the 'check effect' using daily mortality data. International Journal of Drug Policy. 2016;33(July):83-87.

How do people who overdose use health care services?

Eighty per cent of people who died from an illicit substance overdose received care in the Emergency Department at least once in the 12 months prior to their death. Previous visits were not just for illicit drug overdose. Most sought care for injury, trauma, back pain, alcohol overdose, or mental health.

We analyzed data for over 3,800 people with a fixed address who were treated for overdose in a Fraser Health Emergency Department between June 2015 and March 2017.

There were three primary groups of people living at a fixed address who were treated for an overdose in the Emergency Department. These groups visited the Emergency Department on an i) infrequent, ii) moderate to frequent, and iii) rare but critical basis.



i) **People who visit the Emergency Department on an infrequent basis prior to their overdose event:**

This is the largest group of people making up 55% of individuals who come to the Emergency Department for overdose and live at a fixed address. The typical individual in this group is a man in his 30s. This is a hard to reach group through the health system because they infrequently use Fraser Health services prior to or after their overdose.



ii) **People who visit the Emergency Department moderately to frequently:**

This group makes up 42% of individuals who live at a fixed address and come to the Emergency Department for overdose. Many people in this group are known to Fraser Health Mental Health and Substance Use services; 94% of people in this group who visited the Emergency Department frequently had used Mental Health services in the past. In addition to Mental Health services, people in this group frequently visit the Emergency Department for other reasons like pain and injury. Because this group uses Fraser Health services more frequently, there is an opportunity to reach them more readily through our health services.



iii) **People who visit the Emergency Department rarely but in critical condition:**

This is a small group of people making up 3% of individuals who live at a fixed address and come to the Emergency Department for overdose. They are more likely to be in serious condition when they present to the Emergency Department. People in this group are at highest risk of overdose death and almost 100% were admitted to hospital. Typical characteristics for this group include men in their 30s that have not visited the Emergency Department in the past.

Based on this review, most people were being treated for their first overdose event; however, this does not mean they were using drugs for the first time. Based on our in-depth review of men experiencing a severe overdose, many used illicit drugs on a frequent basis



How are mental health and overdose connected?

Mental health is a significant issue for people experiencing opioid overdose. As described in our analysis, many of the people who came to a Fraser Health Emergency Department for overdose treatment have a significant mental health burden. Over half have used mental health services provided by Fraser Health in the community, in hospital, or both.

Depression, anxiety, and suicidal thoughts are the most common reasons for seeking care, but some individuals are also receiving treatment for serious mental illness, including bipolar disorder, schizophrenia, and psychosis.

While not everyone who experiences overdose has mental health issues, it is also possible that some individuals who experience overdose have undiagnosed mental health conditions.

Others may receive care from health professionals in private practice (psychologist, counsellor, etc.). Previous treatment for alcohol or other substance use is also common.



Mental health and substance use disorders are often treated as moral or criminal issues rather than health concerns, and are therefore some of the most highly stigmatized medical conditions.

Stigma has a major impact on mental and physical health outcomes, and is a barrier for individuals accessing needed health and substance use services.

Men with serious non-fatal overdoses



While we know that most overdoses in Fraser Health are among men, this is still a diverse group that requires further analyses. As a result, we looked at the medical charts of 90 men admitted to hospital following serious non-fatal overdoses in private residences in order to better understand this hard-hit demographic.

From this we were able to pull common themes:



They often **live with someone else and identify relatively high levels of social support.**



There are **higher rates of mental health concerns compared to the general population.** Several had suicidal thoughts at the time of their non-fatal overdose.



A partner, friend, or other household member frequently found these men after their overdose, which likely contributed to their survival.



Physical trauma or pain was the most frequently noted stressor, with especially high rates among older men (49% overall, 82% for men aged 50 years and over).



Nearly 75% had a diagnosed alcohol or substance use disorder, and half had previously participated in substance use treatment. Most used drugs on a frequent basis – only 16% used occasionally or for the first time.



The men were relatively un- or underemployed. **When current or past industry was noted, the most common industry they worked in was the building trades.**

Men who overdose are a diverse group

There were three primary groups of men who had serious non-fatal overdoses in private residences:



Men who use illicit substances infrequently.

Men who use illicit substances infrequently typically use cocaine or other stimulants, and were more often first-time or occasional users.



Men who use illicit opioid substances frequently.

Men who frequently used opioid-containing substances, including heroin, had prior overdose events and a history of prior substance use treatment; this group also had more overdoses than the other groups.



Men who use drugs to manage pain.

Men who use substances for managing their pain are typically older, unemployed, have a history of physical pain, and most had a prescription for opioids at the time of their overdose. The other groups both include younger men more engaged in the job market with fewer physical pain concerns.

Here's how we are linking data to action in Fraser Health:

Data	Fraser Health Actions
Men 19 – 59 years of age were most affected by overdose.	<ul style="list-style-type: none"> Men in this age group do not frequently use health care services, therefore we are engaging with groups that can reach men outside of the health care sector. These include employers, schools (universities and colleges), and sports associations. These partners may be able to assist in reaching and supporting men with substance use concerns.
A disproportionate number of men were currently or formerly employed in trade industries.	<ul style="list-style-type: none"> We hosted a workshop with trades industry employers, associations, unions, and training programs to begin to identify interventions for this population.
Living with a loved one whom individuals identify as a support may be a factor for surviving an overdose.	<ul style="list-style-type: none"> We have launched communication campaigns to engage with family members, friends, and peers to help prevent overdoses from occurring. This campaign also encourages loved ones to get a Take Home Naloxone kit so they can provide help in case of an overdose.
Eight out of 10 people who died of an illicit substance overdose presented to our Emergency Departments at least once in the 12 months prior to their death.	<ul style="list-style-type: none"> We are screening within our Emergency Departments to identify people who may be at risk of overdose. We have implemented community follow-up at Surrey Memorial Hospital to link people who experienced a non-fatal overdose to treatment and support services. This initiative will be expanded across the region in the coming months.
Mental health is a significant issue for people experiencing opioid overdose.	<ul style="list-style-type: none"> We are strengthening integration between mental health and substance use services in our acute and community services.
Combining opioids with certain types of medications can increase the risk of overdose.	<ul style="list-style-type: none"> We are implementing opioid stewardship to ensure more appropriate opioid prescribing practices. We are implementing safe prescribing practices for opioids across our hospitals and emergency departments.
There are barriers to accessing first-line treatment in our communities.	<ul style="list-style-type: none"> We are expanding access to publicly-supported first-line treatment (Suboxone® and methadone). We are making access to substance use services more timely, seamless and integrated across the region.
First Nations people are 5 times more likely to overdose and 3 times more likely to die than non-First Nations groups.	<ul style="list-style-type: none"> We are continuing to improve access to naloxone and harm reduction services in First Nations communities in partnership with First Nations Health Authority. We have expanded regional residential treatment and recovery beds for First Nations men and women at Seabird Island First Nation.
Many people who overdose have histories of injury and pain management concerns.	<ul style="list-style-type: none"> We are working with other health professionals, such as physiotherapists and chiropractors, to enhance the options for pain management available to people with chronic pain. We are expanding pain management services across the region.
In our chart review, most of the men who experienced a serious overdose leading to hospital admission listed a family physician.	<ul style="list-style-type: none"> We notify family physicians when one of their patients is treated for overdose in an Emergency Department. We have worked with family physicians to reduce barriers to accessing Take Home Naloxone for their patients. We are developing networks of community physicians and nurse practitioners who can provide first-line treatment (Suboxone®).

These are highlights of our actions based on our recent analyses. For more information and on further actions, visit fraserhealth.ca/overdose.



What else can be done?

Taking stigma out of substance use

The reasons for the current opioid crisis in Fraser Health are complex, as are the factors behind why people use substances to begin with. Most of the men experiencing the majority of overdoses in our communities are dealing with multiple stressors including unemployment or underemployment, pain, feelings of hopelessness, mental health concerns, and substance use. Some are using illicit substances to deal with pain from previous injuries, while others may be using substances to manage stresses in their life.

Both mental health and substance

use disorders are often treated as moral or criminal issues rather than health concerns, and are consequently some of the most highly stigmatized medical conditions. Stigma adversely impacts mental and physical health outcomes, and is a major barrier for individuals accessing needed health and substance use services.

People with substance use disorders require support, not judgment. In addition to showing compassion and kindness, a non-judgmental attitude toward individuals struggling with substance use is important

because destigmatizing substance use has been shown to save lives.

People with substance use disorders require support, not judgment.

Individuals who use drugs alone are at particularly high risk of death. While some individuals prefer the experience of using drugs alone, others use alone because of the stigma of drug use and because they are trying to cope with mental health issues or other stressors by themselves.

Social support and training



As individuals, we can all take steps to reduce the stigma around mental health and substance use, and to support our friends and family members when they're going through stressful events like the end of a relationship, the loss of a job, or completing substance use treatment.

If you think someone you care about may be using illicit drugs, reach out and talk to them, let them know you care, and pick up a free Take Home Naloxone kit and training from your local Public Health Unit or other Take Home Naloxone distribution site.

Learn how to have a conversation about substance use by visiting: fraserhealth.ca/overdose.



Acknowledgements

This information in this report was synthesized by

- Dr. Aamir Bharmal** Medical Health Officer
- Brooke Kinniburgh** Epidemiologist, Population Health Observatory

Fraser Health thanks the many dedicated people who contributed to this report, including those who collected and analyzed the data, reviewed the draft, and provided input at different stages of development:

- Christopher Buchner** Clinical Director, Population and Public Health
- Rahul Chhokar** Manager, Population Health Observatory
- Dani Chu** Research Practicum Student
- Sarah Eno** Graphics and Production Specialist
- Erin Gibson** Harm Reduction Coordinator
- Carolyn Harrison** Clinical Research Nurse, Population Health Observatory
- Yunqing (Sophia) He** Research Practicum Student
- Kimberley Huhn** Social Marketing Consultant
- Vesna Ivkov** Research Assistant, Population Health Observatory/RCH Emergency, Medicine and Trauma
- Salman Klar** Epidemiologist, Population Health Observatory
- Helen Li** Biostatistician, Population Health Observatory
- Katherine Moriarty** Harm Reduction Coordinator
- Dr. Michelle Murti** Medical Health Officer
- Alison Orth** Clinical Research Leader, Population Health Observatory
- Forrest Paton** Research Practicum Student
- Marika Sandrelli** Knowledge Exchange Leader, Mental Health & Substance Use Services
- Lori Van Der Gugten** Clinical Research Nurse, Population Health Observatory
- Greg Whalen** Regional Substance Use Leader, Mental Health & Substance Use Services
- Yifan (Lucas) Wu** Research Practicum Student
- Krystle Yeung** Senior Consultant, Communications

We acknowledge the work of those on the front lines of the opioid emergency – first responders such as paramedics, police, and fire; nurses and physicians in our Emergency Departments, hospitals, clinics; community organizations; other professionals including psychologists, pharmacists, social workers, counsellors, and harm reduction staff.

We acknowledge the residents in Fraser Health who have died from illicit substance overdose, and their family and friends who mourn their loss.

We acknowledge the support and guidance of members of our Fraser Health Overdose Emergency Operations Committee, Fraser Health Overdose Response Coordinating Committee, Dr. Perry Kendall and the Office of the Provincial Health Officer, Provincial Overdose Emergency Response Centre, Ministry of Health, and Ministry of Mental Health and Addictions.

This report is based on data and information compiled and provided by the BC Coroners Service, BC Emergency Health Services, First Nations Health Authority, and the BC Centre for Disease Control. The opinions and statements expressed herein are those of the author, and not necessarily those of these organizations.