

# Response to the Opioid Overdose Crisis in Vancouver Coastal Health

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## Letter from the Chief Medical Health Officer



Since the provincial declaration of the opioid overdose public health emergency in 2016, Vancouver Coastal Health has had the highest rate of overdose deaths of any BC health region. This is not a reflection of lack of response to the crisis, but rather the higher concentration of people at risk living within the region, particularly in Vancouver. The 1,163 people who died in 2016-2018 were primarily adults in the prime of their lives, and they have left behind families, friends and communities asking what more could have been done to prevent these deaths.

Many family members and peers of those who have died are working hard to prevent more deaths, and as a health authority we must do the same. We must learn from the circumstances surrounding each death, to address the underlying causes and address gaps in our response to date. This is the primary goal of this report. The evidence presented here indicates that replacing the unregulated, illegal supply of opioids with legal alternatives must rise to the top of our priority list, and requires our urgent attention. At the same time, we must continue to build a robust system to care for those with substance use disorders, and to address the needs of those living with emotional and physical pain and the intergenerational trauma of colonialism.

I would like to thank BC's Chief Coroner Lisa Lapointe and her team for providing the data that provides the basis of this report, the community partners and peers whose expertise continues to inform the response to the crisis, and my own team for their insight and expertise in compiling the final report.

Sincerely,

A handwritten signature in black ink, which appears to read "P. Daly". The signature is fluid and cursive.

Dr. Patricia Daly, Chief Medical Health Officer

Vancouver Coastal Health

# The VCH Region

Vancouver Coastal Health (VCH) is one of five geographically distinct regional health authorities in British Columbia (BC). It is comprised of three health service delivery areas (HSDA): North Shore/Coast Garibaldi (i.e. Coastal Urban and Coastal Rural), Richmond, and Vancouver.

The Vancouver HSDA is further divided into six local health areas (LHA), and the North Shore/Coast Garibaldi HSDA is further divided into seven (two LHAs in Coastal Urban and five in Coastal Rural). VCH provides specialized care and services for more than 1.25 million people which is 25% of BC's population.

## Vancouver Coastal Health Health Service Delivery Areas and Local Health Areas

### HEALTH SERVICE DELIVERY AREA

- Coastal Rural
- Coastal Urban
- Richmond
- Vancouver



# Introduction

As the Chief Medical Health Officer, I have the responsibility to report on the health of the population living in VCH, a region on the traditional homelands of the 14 First Nations communities of Heiltsuk, Kitasoo-Xai'xais, Lil'wat, Musqueam, N'Quatqua, Nuxalk, Samahquam, Sechelt, Skatin, Squamish, Tla'amin, Tseil-Waututh, Wuikinuxv, and Xa'xtsa.

This report of the Chief Medical Health Officer focuses on the public health emergency, declared in BC in 2016 as a result of rising rates of illegal drug overdose deaths. According to data from BC Coroners Service, in 2017 and 2018, VCH had the highest rate of overdose deaths in the province. The report describes what has been learned about the determinants of the crisis in VCH over the past two years, how this knowledge has shaped the overdose emergency response, and what more must be done to reduce the rate of overdose deaths.

The overdose crisis is a result of a complex interaction between the characteristics and circumstances of people at risk of overdose,

an unregulated illegal drug supply, and the environments in which people use psychoactive substances. There is no single or simple solution. However, a better understanding of the determinants of the crisis in VCH, such as patterns of drug use, the nature of the illegal drug supply, the challenges experienced by those using substances, and evaluations of interventions that have been implemented thus far can provide a roadmap for future response.

Timely access to new and relevant data is essential for the overdose response. This report draws on data from a number of valuable sources, including: the BC Coroners Service; a detailed review of VCH health records for 424 of the 447 people who died of an overdose in VCH in 2017; a drug checking partnership with the BC Centre on Substance Use; and new analyses from the VCH Public Health Surveillance Unit (PHSU). The community has also been a crucial source of data, including information from housing providers, non-profit operators of overdose prevention sites, supervised consumption sites, supportive housing sites, and

peers working on the front lines of the crisis.

Substance use disorder is a chronic, relapsing condition, requiring a comprehensive system of care that identifies people with substance use disorder and proactively engages, retains, and re-engages them in care. To date, response to the opioid overdose emergency has focused on immediate harm reduction interventions aimed at preventing deaths, improving treatment for people with opioid use disorder, and supporting environments that foster individual and community resilience. The ongoing effort to address the overdose crisis through these interventions is a partnership between VCH, First Nations and Indigenous service organizations, community organizations, health care providers, and the local, provincial and federal governments.

In addition to sharing data on the opioid overdose emergency, this report will show how data is informing our current and future interventions and services.

## HARM REDUCTION

- Supervised consumption sites (SCS)
- Overdose prevention sites (OPS)
- Housing overdose prevention services (HOPS)
- Drug checking

## IMPROVING TREATMENT

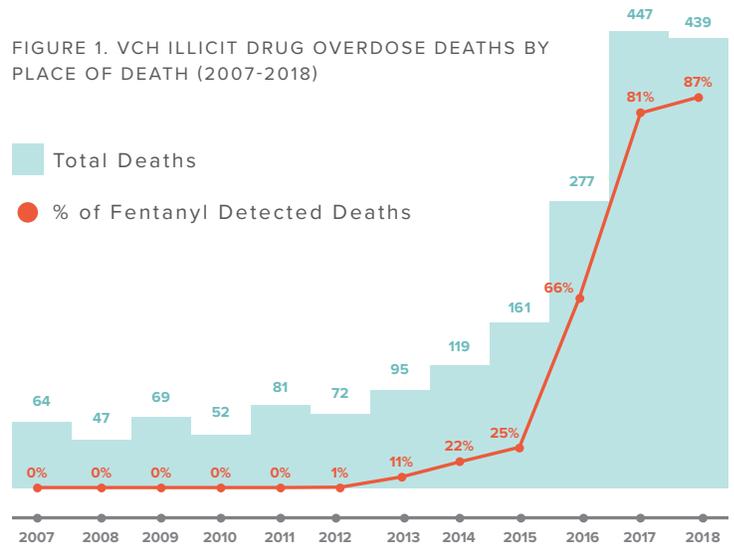
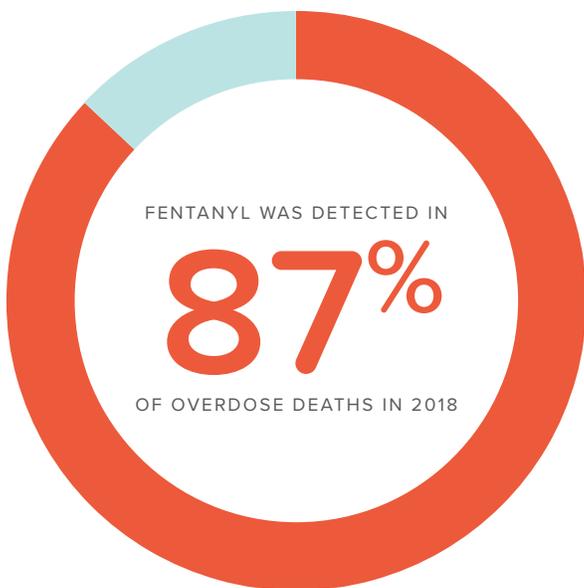
- Opioid Agonist Therapy
- Improving linkage to care
- Proactive engagement in care
- Retention in care

## STRATEGIES FOR SUPPORTIVE ENVIRONMENTS

- Peer training, empowerment and engagement
- Community Action Teams: building a local, cross-sectoral response
- Public policies that improve the social determinants of health

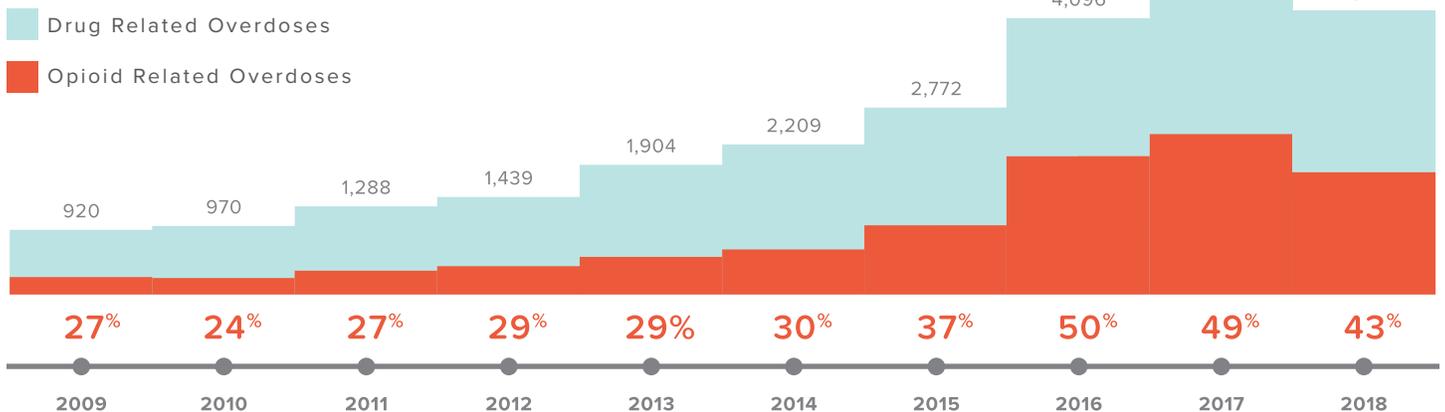
# Opioid Overdose Deaths in VCH

Illicit drug overdose deaths identified by the BC Coroners Service started to increase in 2013 after fentanyl, an opioid that is up to 50 times more toxic than heroin, was first detected in the illegal drug supply. Since 2013, overdose deaths and the proportion of overdose deaths that involve fentanyl have both been increasing, with the highest proportion seen in 2018<sup>1</sup> (Figure 1). 439 deaths were reported in VCH by the end of December of 2018, which is slightly lower than in 2017 (447 deaths).<sup>2</sup> The increase in overdoses in the community is also reflected in the number of patients treated for overdoses in emergency departments in VCH. (Figure 2).



Note: Data is subject to change as investigations are ongoing.  
 Data Source:  
 1. Fentanyl-Detected Illicit Drug Overdose Deaths (January 2012-January 2019), BC Coroners Service  
 2. Illicit Drug Overdose Deaths in BC (January 2008-January 2019), BC Coroners Service

FIGURE 2. DRUG OVERDOSES PRESENTING AT VCH EMERGENCY ROOMS (JAN 2009-DEC 2018)



Data Source: VCH PHSU Emergency Room Visit Database; alcohol overdoses are excluded from these data.

# What is Drug Checking?

Drug checking is a harm reduction service that provides clients with valuable information about the composition of their drugs, including whether they are likely to contain potent opioids, such as fentanyl. Drug checking can also provide useful information about the presence of other substances, like synthetic cannabinoids, metformin, detergent, and plaster, that can cause harm to people who unknowingly ingest them. When these substances are found in the drug supply and reported to VCH's RADAR system, alerts can be sent out to the community. Drug checking is currently offered at supervised consumption sites, overdose prevention sites, and as part of housing overdose prevention services.

Although a small proportion of people who use drugs have chosen to check their drugs since this service started in 2016, those who did were shown to be more likely to reduce their dose of drugs following a positive fentanyl test.



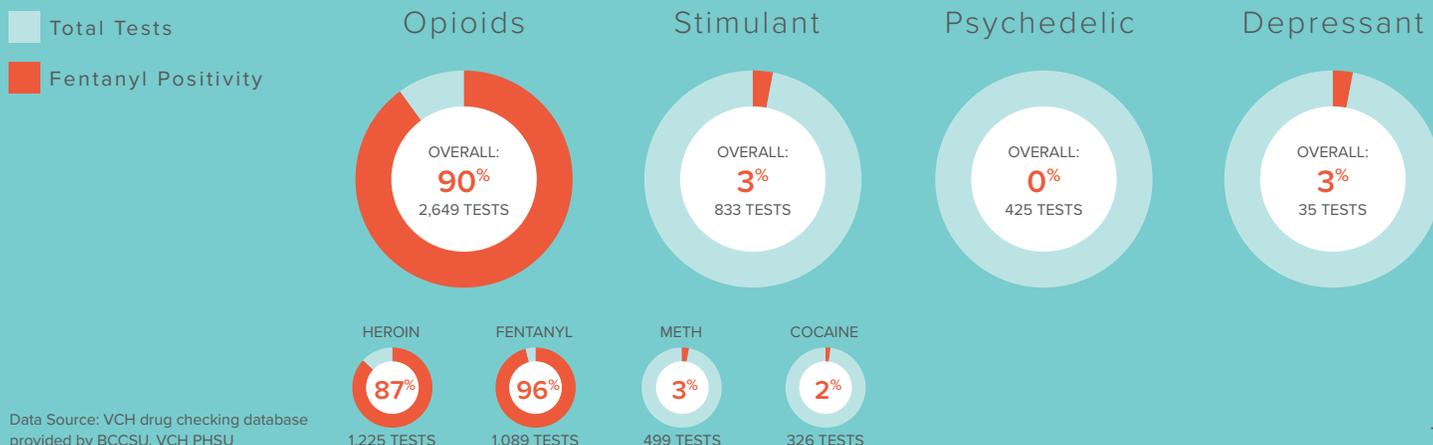
If you'd like to receive RADAR drug contamination alerts, text "alert" to **236-999-3672 (DOPE)**

If you'd like to fill out an anonymous form to inform RADAR about contaminated street drugs, please complete the **Overdose Reporting Tool** or text "bad dope" to **236-999-3672 (DOPE)**

# Fentanyl Contamination of Drug Supply

Data from drug checking services indicate that the majority of illegal opioid drugs tested in VCH contain fentanyl. Other classes of drugs such as stimulants and psychedelics are much less likely to contain fentanyl (Figure 3).

FIGURE 3. FENTANYL POSITIVITY FROM SPECTROMETER AND FENTANYL TEST STRIP DRUG CHECKING AT VCH OVERDOSE PREVENTION SITES AND INSITE (OCTOBER 31, 2017-DECEMBER 31, 2018)



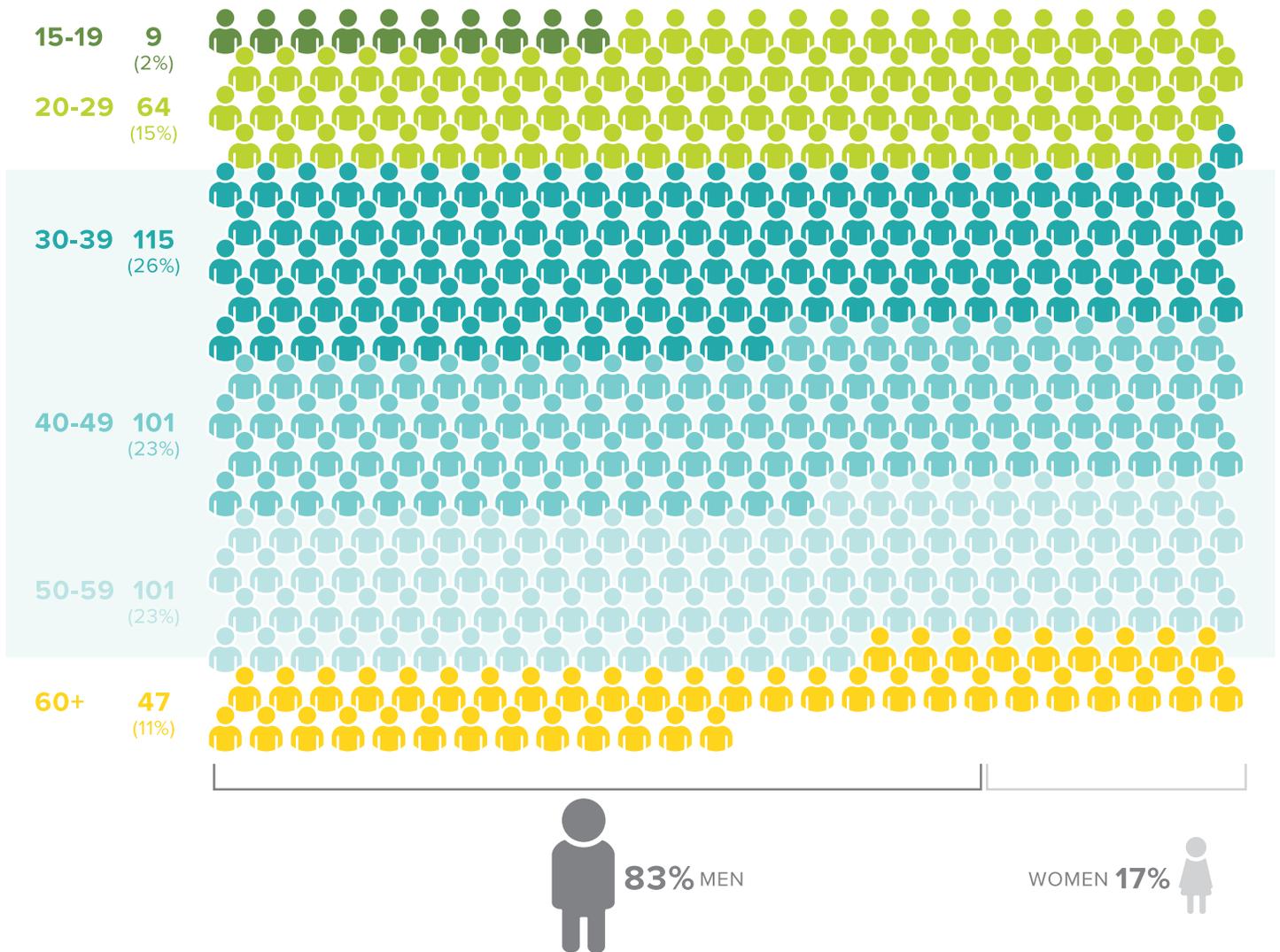
Data Source: VCH drug checking database provided by BCCSU, VCH PHSU

# Demographic Characteristics of People Dying of Overdoses in VCH

## Age and Sex

The majority of people who died of an overdose in VCH in 2017 were men between the ages of 30 and 59 years (Figure 4).

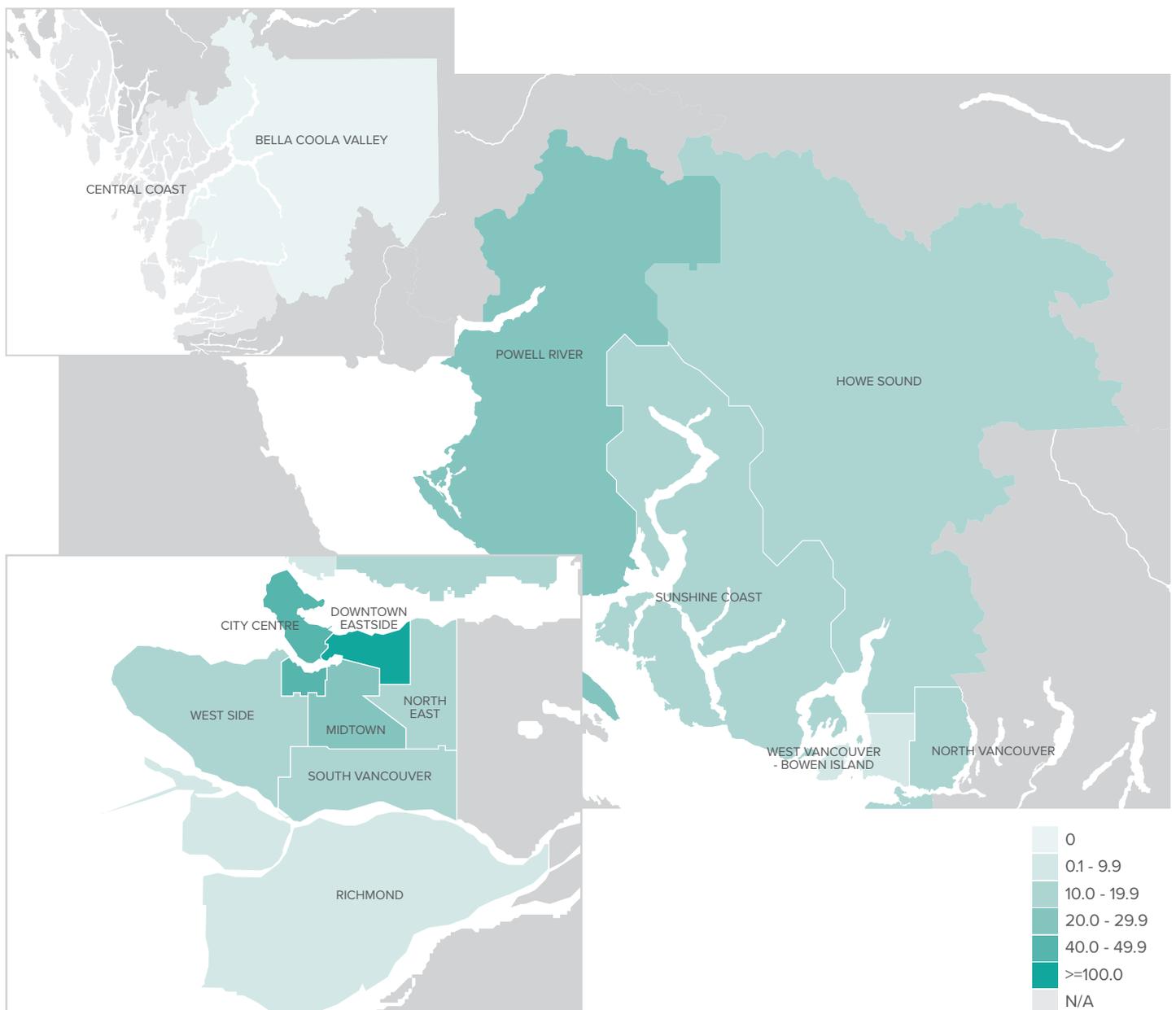
FIGURE 4. DEMOGRAPHICS OF VCH OVERDOSE DEATHS IN 2017 (N = 447)



## Location

While all communities in VCH are affected by the overdose crisis, both the number and rate of deaths are the highest in the City of Vancouver, and in particular the Downtown Eastside (Centre North Local Health Area, Map 1). Outside of Vancouver, some smaller rural communities such as Powell River and the Sunshine Coast are also disproportionately affected. Other communities including Richmond and the North Shore have lower overdose mortality.

MAP 1. ILLICIT DRUG OVERDOSE DEATHS BY RESIDENCE PER 100,000 POPULATION, 2016-2017



Data Source: VCH Coroners Overdose Deaths Database provided by the BC Coroners Services and the BC Centre for Disease Control, VCH PHSU

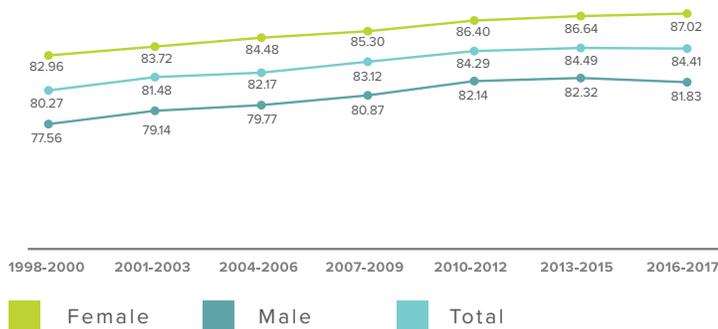
## Life Expectancy

Life expectancy at birth, an overall measure of population health, is particularly influenced by premature deaths. Life expectancy in VCH as a whole was increasing until 2015, then levelled off in 2016-17. Life expectancy of women continued to increase over this period, while male life expectancy decreased by 0.49 years from 2013-15 to 2016-17. Of particular concern is that overall life expectancy in the Downtown Eastside of Vancouver dropped sharply from 2013-15 to 2016-17 from 77.39 years to 75.02 years, likely reflecting the effect of high rates of overdose deaths in this community, with a particular decline for men from 73.62 years to 70.78 years (Figure 5). The decline in the Downtown Eastside erased the gains in life expectancy seen in the early 2000's. During the same period, life expectancy for men also decreased, to a lesser extent, in the City Centre, North East and Midtown areas of Vancouver, and very slightly on the North Shore and in Richmond. The discrepancy in life expectancy between men who live in the Downtown Eastside and those who live in Vancouver's Westside in 2016-17 was nearly 15 years.

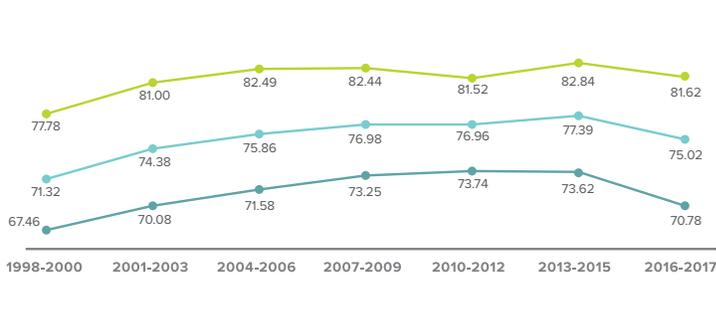
The discrepancy in life expectancy between men who live in the Downtown Eastside and those who live in Vancouver's Westside in 2016-17 was nearly 15 years

FIGURE 5. LIFE EXPECTANCY ESTIMATES

### VCH



### Vancouver – Downtown Eastside



Data Source: BC Vital Statistics from Vista Data Warehouse, MOH BC Microstrategy, VCH PHSU

## Chart Review of VCH 2017 Overdose Deaths

To learn more about the determinants of fatal overdose risk in VCH, a detailed chart review of VCH and Providence Health Care (PHC) health records was conducted for 424 of the 447 people who died of illicit drug overdoses in 2017. The review included records from VCH and PHC clinical services, including hospital admissions, emergency department visits, and VCH community health care visits (including mental health and addiction teams, homecare, public health and VCH primary care clinics). Records from non-VCH, non-PHC primary care clinics (i.e. community family physicians), BC Pharmacare (i.e. prescription drug history) and other external providers were not available for review.

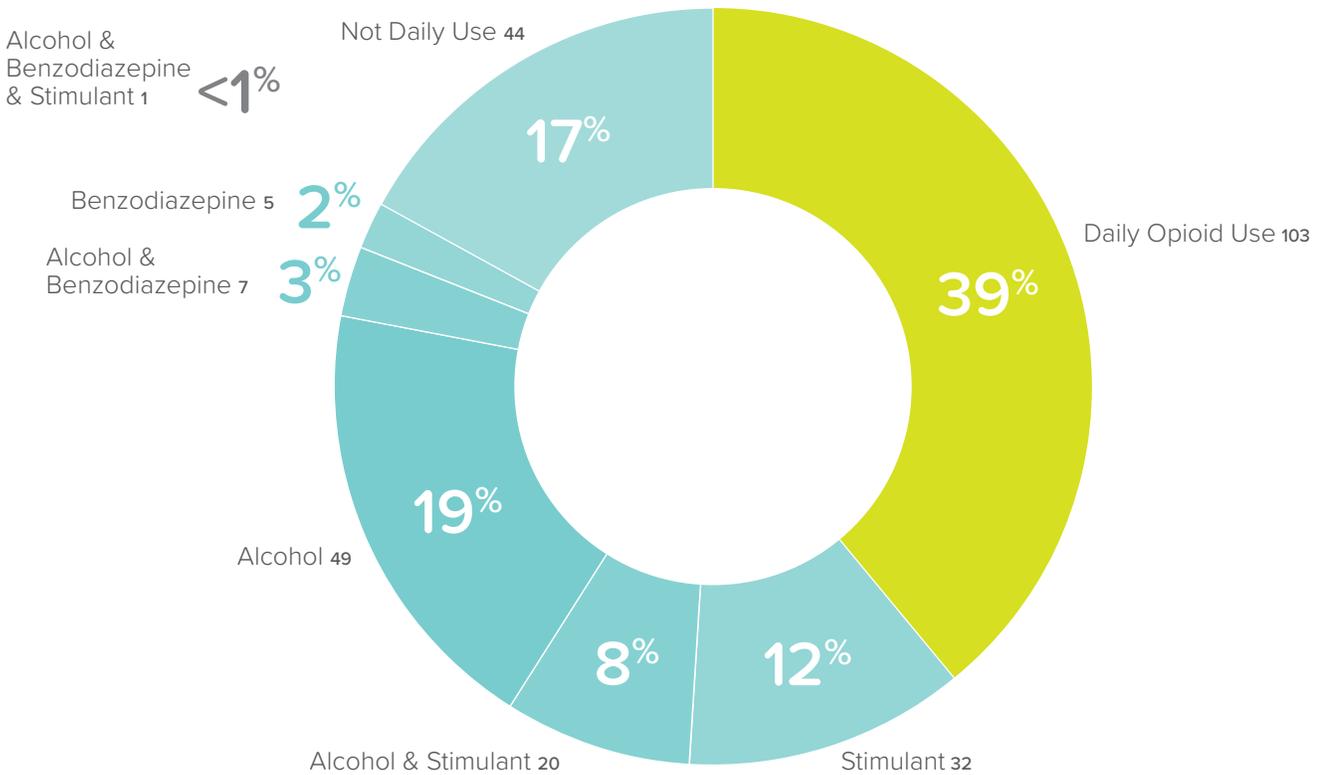
After development and piloting of a data abstraction tool, three trained data abstractors conducted the review over a three month period, with processes in place to ensure inter-rater reliability.

# Psychoactive Substance Use Pattern

The chart review of overdose deaths found that among 373 people (88% of the 424 who died) who had documented previous contact with the health care system, 87% had substance use and 84% had problematic substance use documented in their clinical record, indicating that the majority of people discussed their substance use with a health care provider. Problematic substance use included daily use, documentation by a physician of a substance use disorder or dependence, or documentation of significant negative consequences of substance use such as admission for an overdose or a substance use related injury.

Among the 261 people (62% of the 424 who died) with a documented drug use pattern in their charts, 39% had documented daily use of opioids alone or with other drugs, and 44% had documentation of daily alcohol, stimulant or other drug use (Figure 6). Regardless of drug use pattern, almost all died of an opioid overdose.

FIGURE 6: DAILY SUBSTANCE USE AMONG THOSE WITH DOCUMENTED DRUG USE PATTERN (N=261)



Data Source: Medical Chart Review Database, VCH PHSU

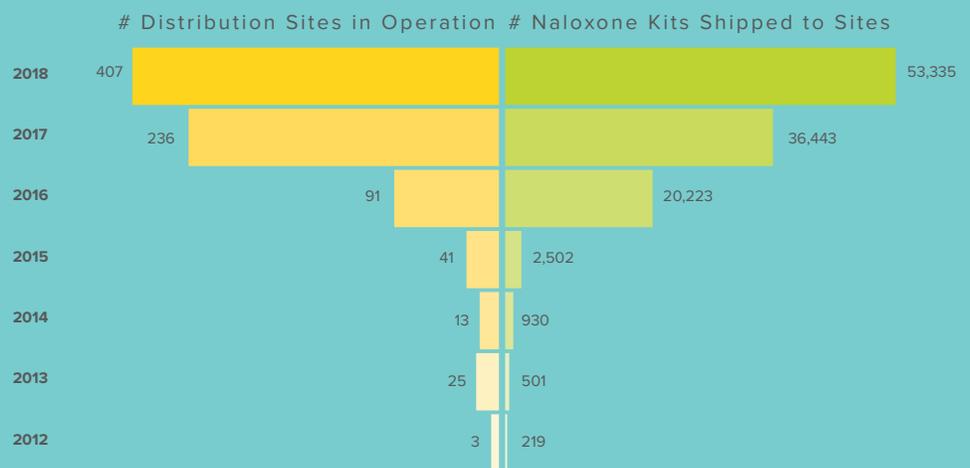
## Harm Reduction Services

In response to the overdose crisis, VCH scaled up existing harm reduction services and is developing and evaluating new harm reduction models. Harm reduction services are evidence-based, practical strategies which aim to reduce the negative health and social consequences of substance use.

### Naloxone Distribution Programs:

Supported by the BC Centre for Disease Control Harm Reduction Program, VCH provides training and distributes naloxone kits to people who are at risk of or are likely to witness an overdose. Naloxone kit distribution expanded throughout 2018, with 53,335 kits (36,443 in 2017) distributed from 407 sites (236 in 2017) (Figure 7).

FIGURE 7: NUMBER OF NALOXONE DISTRIBUTION SITES IN OPERATION AND KITS SHIPPED TO SITES



Data Source: BC Take Home Naloxone Program Data provided by BCCDC, VCH PHSU

### Supervised Consumption Sites (SCS)

When it opened in 2003, Insite was the first SCS in North America. The site is co-managed by VCH and the PHS Community Services Society in the Downtown Eastside of Vancouver. At Insite people can consume substances under supervision of staff who are trained to respond to overdoses. Insite also provides nursing support and opportunities to link to services including addictions care. Insite has been extensively evaluated and demonstrated to reduce harms associated with injection drug use. In 2017 VCH partnered with Lookout Housing and Health Society to open an additional SCS, the Powell Street Getaway. Dr. Peter Centre in Vancouver's West End also operates a small SCS serving its clients but is not open to the public. These SCSs are exempted from federal drug laws under section 56.1 of the Controlled Drugs and Substances Act (CDSA).

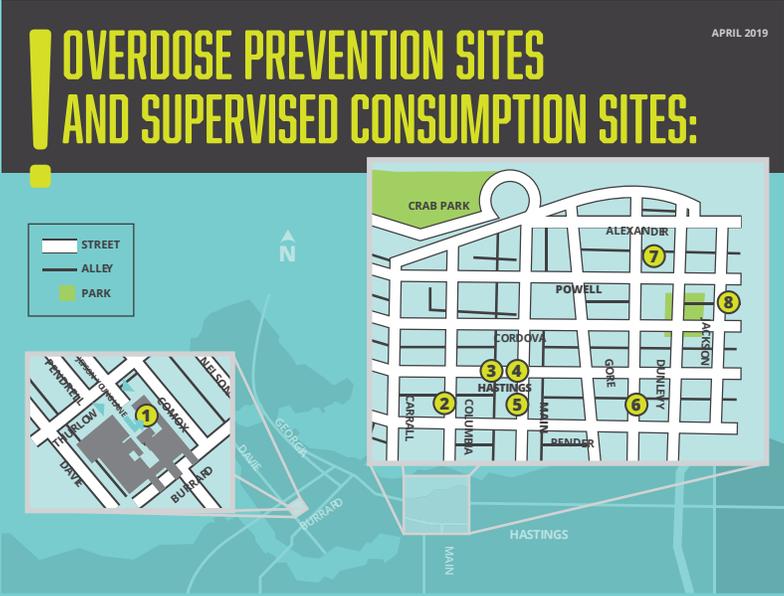
### Overdose Prevention Sites (OPS)

The continuing rise in overdose deaths in 2016 required rapid expansion of options for people who use drugs to do so under observation. Starting in December 2016, a number of Overdose Prevention Sites opened under a ministerial order enacted by BC Health Minister Terry Lake. In the context of the public health emergency, the ministerial order enabled these sites to operate without an exemption under Section 56.1 of the CDSA. OPSs are nimble, low barrier models run by non-profit organizations and peers.

Operated in partnership with key community organizations, both SCSs and OPSs offer the following services:

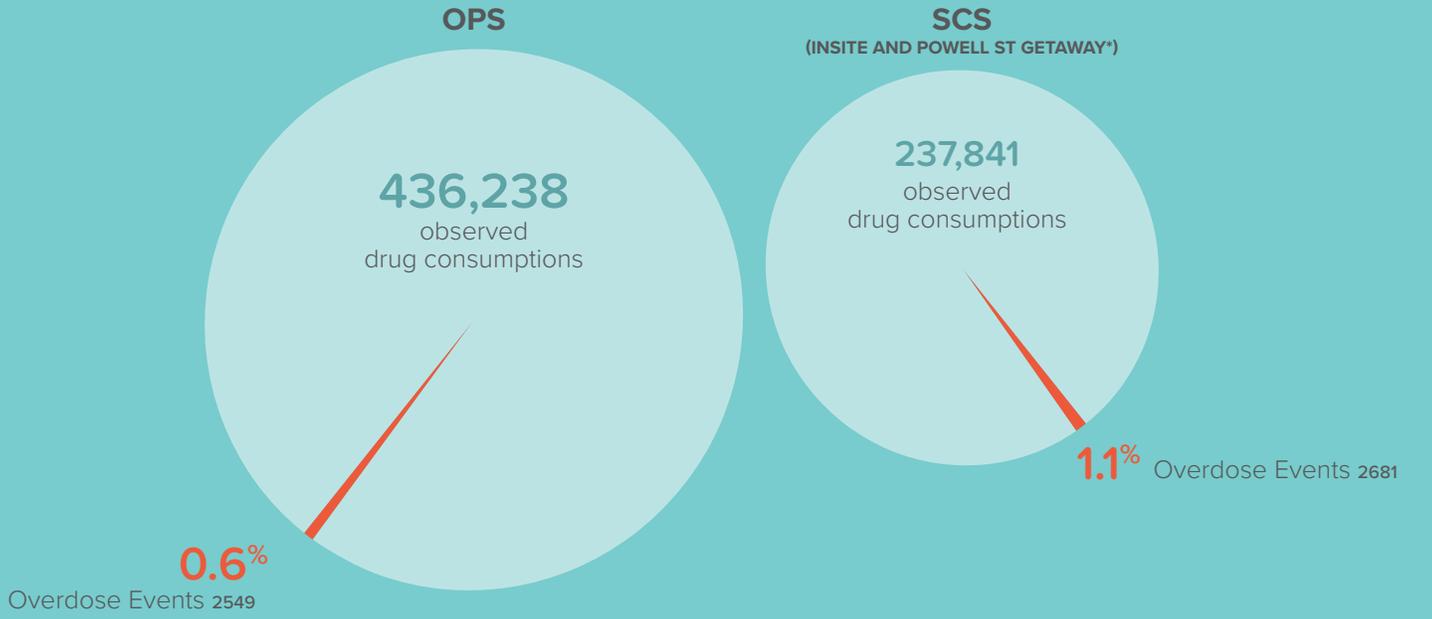
- Supervised consumption and overdose intervention
- Distribution of harm reduction supplies
- Distribution of naloxone kits
- Referrals to treatment and other services
- Drug checking (see Drug Checking, page 7)

Figure 8 shows the number of visits to SCSs and OPSs since the opening of the first OPS in December 2016. The reported rate of overdoses is higher at the SCSs than the combined average of OPSs, suggesting that either people who use at SCSs are at a higher risk of overdose, or clinical staff at the SCS recognize and report overdoses differently than non-clinical staff at OPSs. Please note that evaluation of OPSs is still underway and numbers may change.



- 1 ST. PAUL'S HOSPITAL**  
 (OFF THURLOW STREET ENTRANCE NEXT TO TRANSITIONAL CARE)  
 1081 BURRARD STREET  
**11AM - 10:30PM**  
 EVERY DAY
- 2 OVERDOSE PREVENTION SOCIETY**  
 58 EAST HASTINGS  
 62 EAST HASTINGS (ALLEY FOR SMOKING)  
**8AM - 10:30PM**  
 EVERY DAY
- 3 INSITE**  
 139 EAST HASTINGS  
**9AM - 2:30AM**  
 EVERY DAY
- 4 MAPLE HOTEL (ALLEY)**  
 177 EAST HASTINGS  
**7AM - 2:30PM**  
 EVERY DAY  
**\*\*11PM - 12:30PM WED/THURS/FRI OF CHEQUE WEEK\*\***
- 5 MOLSON HOTEL (ALLEY)**  
 166 EAST HASTINGS  
**1PM - 10:30PM**  
 EVERY DAY
- 6 VANDU**  
 380 EAST HASTINGS  
**10AM - 9:30PM**  
 EVERY DAY EXCEPT THURSDAY
- 7 SISTERSPACE**  
 135 DUNLEVY AVENUE  
**\*\*WOMEN ONLY\*\***  
**6AM - 11:30AM**  
 & **6PM - 11:30PM**  
 EVERY DAY
- 8 POWELL STREET GETAWAY**  
 528 POWELL STREET  
**8AM - 10:30PM**  
 EVERY DAY

FIGURE 8: NUMBER OF VISITS AND OVERDOSES AT OVERDOSE PREVENTION SITES AND SUPERVISED CONSUMPTION SITES (EXCLUDING DR. PETER CENTRE)  
 (DECEMBER 8, 2016 - AUGUST 31, 2018)

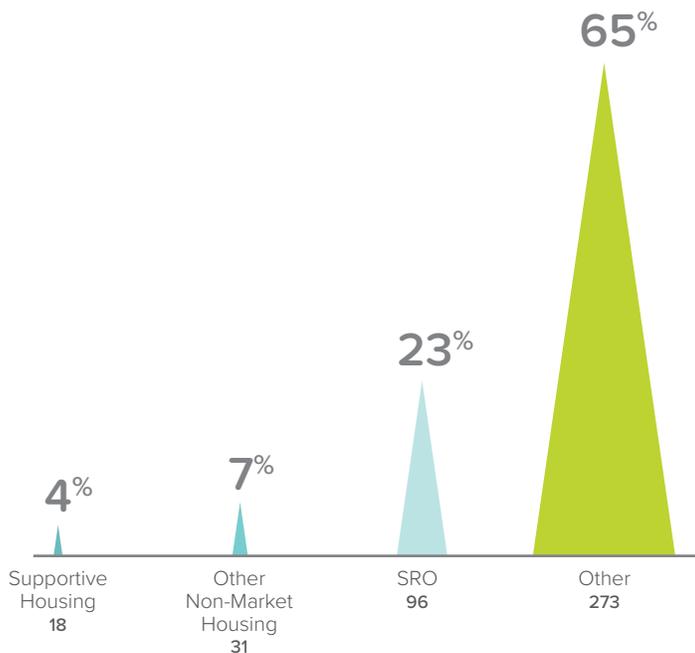


\*Powell St Getaway was transformed to SC from OPS on July 28, 2017  
 Data Source: VCH OPS Visit Reporting Data, VCH PHSU

# Housing

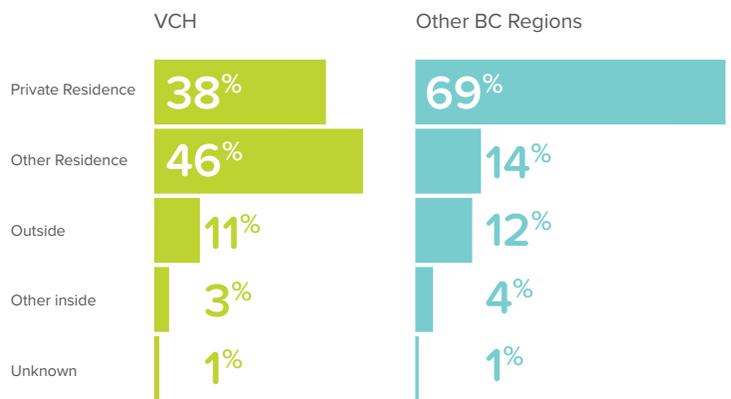
Based on information in their charts, 35% of those who died in VCH lived in either single room occupancy (SRO) hotels, supportive housing or other non-market housing at the time of their death (Figure 9) compared to 13% in the province as a whole<sup>3</sup>; this indicates that people at risk of an overdose death in VCH live with greater socioeconomic disadvantage than those in other parts of BC. Detailed investigation of BC overdose deaths in 2017 by the BC Coroners Service found that 46% of deaths in VCH occurred in “other residence” which includes hotels, motels, rooming houses and SROs, compared to only 14% of BC overdose deaths outside of VCH<sup>3</sup> (Figure 10). This finding indicates that there are important opportunities for overdose prevention services in non-market housing settings in VCH.

FIGURE 9. HOUSING STATUS OF VCH OVERDOSE DEATHS (N = 418)



Data Source:  
 1. Medical Chart Review Database, VCH PHSU  
 2. VCH Non-Marketing House Database, VCH PHSU

FIGURE 10. LOCATION OF OVERDOSE AMONG VCH OVERDOSE DEATHS IN 2017



Data Source: BC Coroners Illicit Overdose Deaths provided by the BC Coroners Services and the BC Centre for Disease Control, VCH PHSU

## Housing Overdose Prevention Services (HOPS)

Housing overdose prevention services include a range of new interventions designed to improve safety and prevent overdose deaths in non-market housing settings. After the BC Coroners Service identified that a disproportionate number of overdose deaths in VCH occurred in non-market housing, VCH conducted a detailed review and identified 25 out of 638 housing sites and several shelters as highest priority for these services, based on the number of deaths. Housing overdose prevention services are designed, implemented and evaluated in partnership with housing providers, including Atira Property Management, Lookout Housing and Health Society, PHS Community Services Society and RainCity Housing and Support Society.

### Housing Overdose Prevention Services:

**'Housing Overdose Prevention Sites'** are common areas or rooms in buildings where residents can use substances under the supervision of staff or peers trained in overdose response. Supervision is either direct or via a camera connected to a front desk.

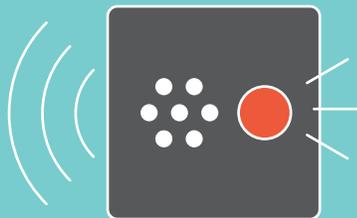
**Peer Witnessing** programs employ peers to observe people who are consuming substances in housing overdose prevention sites and in private residences. Peers are compensated and work with agency staff to promote safer use practices and reduce overdose risk.

**Smartphone Applications:** Several smartphone applications have been designed to help identify and respond to overdoses when people use substances alone. These applications enable people to set a timer just before they consume the substance, which prompts an alarm to sound after a set amount of time (i.e. 90-120 seconds). If the individual does not respond to the alarm, a notification is sent to social housing staff or directly to BC Ambulance to request emergency assistance.

**Emergency Naloxone Boxes** provide access to naloxone on each floor of a social/supportive housing building and alert staff to an overdose. When the box is opened, staff are alerted by a local light alarm which can be seen in building cameras, with or without an additional light alarm at the front desk and a two-way intercom for communication.

**Tenant Overdose Response Organizers** (TOROs), are peer residents of privately-owned single-room occupancy (SRO) hotels who are compensated to provide capacity building and safety to their neighbours. TOROs are provided with overdose response and naloxone training by the Downtown Eastside SRO Collaborative Society. TOROs distribute harm reduction supplies (sterile needles, etc.) and provide naloxone training from their own rooms.

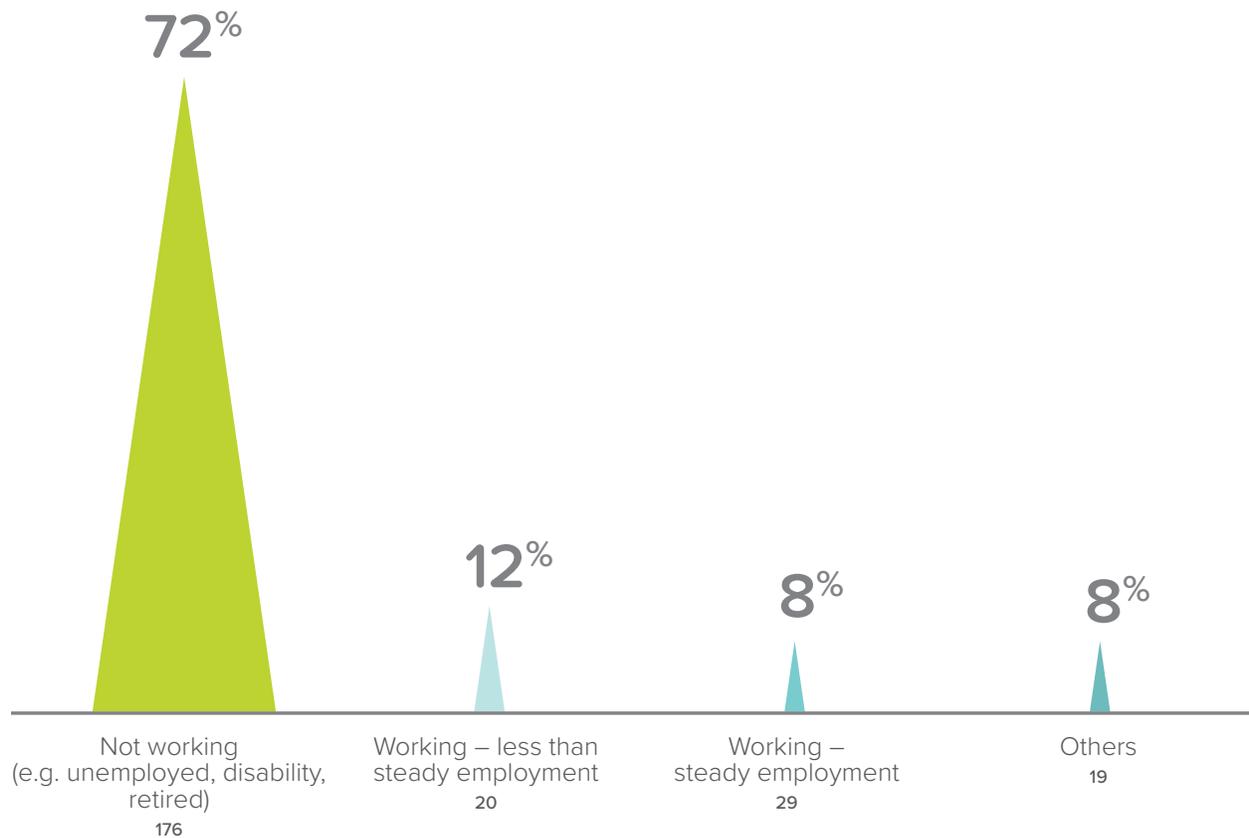
**Washroom Safety Guidelines:** Washrooms are frequently used for drug consumption for reasons of safety, privacy, access and availability. VCH has developed a washroom safety design guidelines<sup>4</sup> to improve safety.



## Employment and Income

Information on employment status was noted in the clinical record of 244 of the 424 people who died in 2017. Of these 244 decedents, 72% were unemployed at the time of their death (Figure 11). Similarly, the BC Coroners Service 2016/17 review reported that 67% of VCH decedents were unemployed at the time of death, substantially higher than the 51% in the rest of BC.<sup>3</sup>

FIGURE 11. CURRENT OR MOST RECENT OCCUPATION BEFORE DEATH (N = 244)

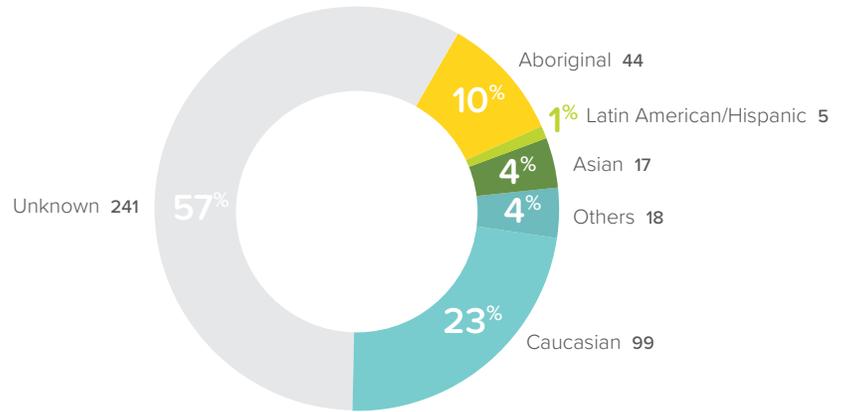


Data Source: Medical Chart Review Database, VCH PHSU

# Overdose Deaths Among Aboriginal People

According to the VCH chart review of overdose deaths, 10 percent of those who died in VCH in 2017 were identified as Aboriginal. This is much higher than the 2.8% of the population of VCH who reported having Aboriginal identity in the 2016 census.<sup>5</sup> Since ethnicity data are missing for the majority of cases reviewed, this estimate represents a lower bound, and the true proportion is likely to be higher.

FIGURE 12. ETHNICITY (2017)



Data Source: Medical Chart Review Database, VCH PHSU

## IMPROVING TREATMENT

# Integrating Indigenous Cultural Knowledge and Values

The disproportionate number of deaths (10%) among those who identified as Aboriginal in VCH (Figure 12) indicates that all of the efforts to respond to this crisis need to meet the needs of Indigenous people who live in or travel to VCH. VCH is working in partnership with the First Nations Health Authority (FNHA), the 14 First Nations located in the VCH geography, and urban Indigenous service providers in Vancouver to integrate Indigenous cultural knowledge and values across all services. This work includes:

- Indigenous Cultural Safety training for all VCH staff.
- Supporting initiatives to improve the health of the urban Indigenous population, such as the Metro Vancouver Aboriginal Executive Council's Urban Indigenous Opioid Task Force which has advocated for culture as treatment interventions and for practices of cultural humility to be integrated with substance use treatment and prevention services.
- Indigenous Harm Reduction Video Series:  
People who use drugs experience stigma in communities and in care settings. Community partners and filmmakers Asia Youngman and Damien Eagle Bear have worked with VCH and FNHA to create tools that start discussions in Indigenous communities about harm reduction, substance use and stigma from an Indigenous perspective. **Click here** for more information.

- Distribution Sites for naloxone kits in all 14 First Nations communities in the VCH region, including the Squamish Nation "Knock 4 Naloxone Program":



With funding from VCH, Squamish Nation Yúustway Health Services launched a community-driven campaign to increase access to naloxone. The event featured drumming, singing, and a walk through the Squamish nation community featuring speakers from the Western Aboriginal Harm Reduction Society (WAHRS) and Culture Saves Lives. The program dispensed naloxone kits and helped community members to identify their home as a site where naloxone is available. To date, over 25 residences have been included in the program.

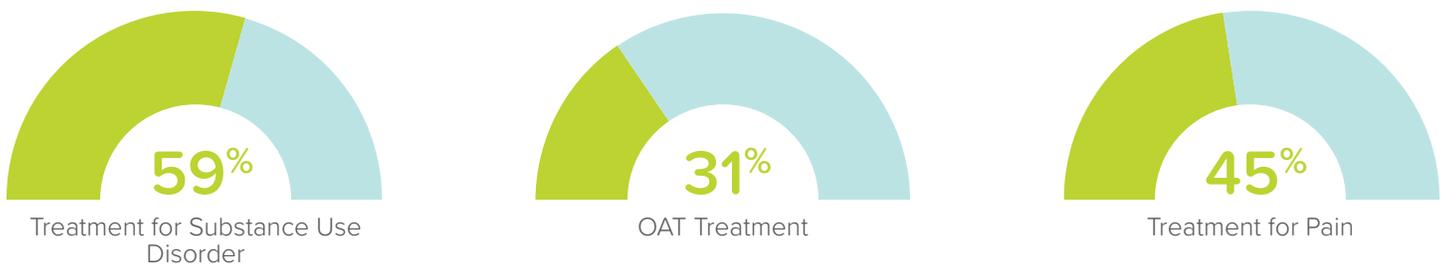
## History of Treatment for Substance Use Disorder

The VCH chart review of overdose deaths found that 59% of those who died had a documented history of treatment for substance use disorder. Treatment for substance use disorder can include counselling, withdrawal management, residential treatment, or specific medical therapy such as opioid agonist therapy (OAT). Thirty-one percent of those who died (Figure 13) and 75% of those with a documented history of daily opioid use had documentation of receiving OAT in the past. Since information on OAT was extracted from the VCH chart review and does not include data from BC Pharmacare or family physician records outside of VCH, the true proportion of those who had received OAT in the past could be higher. These data indicate that those at risk for overdose death sought care for substance use disorders. However, while the majority of those with documented daily use of opioids did have a history of initiating OAT, they were not retained on treatment.

The VCH chart review also found that 45% of those who died had sought medical care for acute or chronic pain, illustrating that pain and substance use disorders co-exist in a substantial proportion of people.

45% of those who died had sought medical care for acute or chronic pain

FIGURE 13. DOCUMENTED TREATMENT HISTORY IN VCH OVERDOSE DEATHS



Data Source: Medical Chart Review Database, VCH PHSU

# Best Practice Treatment: Opioid Agonist Treatment (OAT)

The most effective, evidence-based treatment for opioid-use disorder is OAT. OAT uses a range of prescription opioid medications to decrease cravings and withdrawal symptoms, reduce illegal opioid use, prevent overdose and death, and improve overall health and wellness. The opioid medications can be taken orally or via injection. People respond to these opioid medications differently, and treatment needs to be individualized. Historically, methadone was the most commonly prescribed OAT. Buprenorphine/naloxone is now considered the first line treatment and is increasingly being prescribed. A small but increasing number of people are receiving sustained release oral morphine and injectable hydromorphone (Figure 15).

OAT is sometimes referred to as opioid agonist therapy (OAT), opioid substitution treatment (OST), opioid replacement treatment (ORT) or medication assisted treatment (MAT). It includes oral prescription opioid medications such as buprenorphine/naloxone (Suboxone™), methadone, and sustained release oral morphine (SROM). Injectable opioid agonist treatment (iOAT) includes hydromorphone (Dilaudid™) and diacetylmorphine (prescription heroin).

FIGURE 14: NUMBER OF PATIENTS IN VCH DISPENSED DIACETYLMORPHINE AND INJECTABLE HYDROMORPHONE AT A COMMUNITY PHARMACY

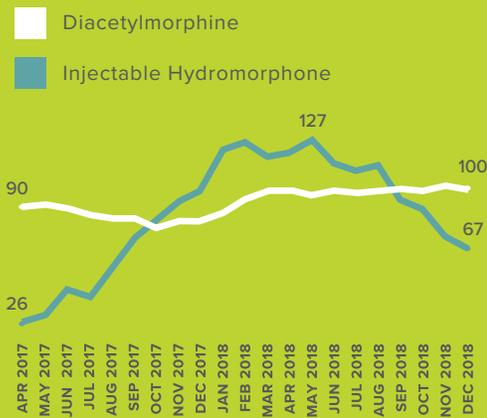
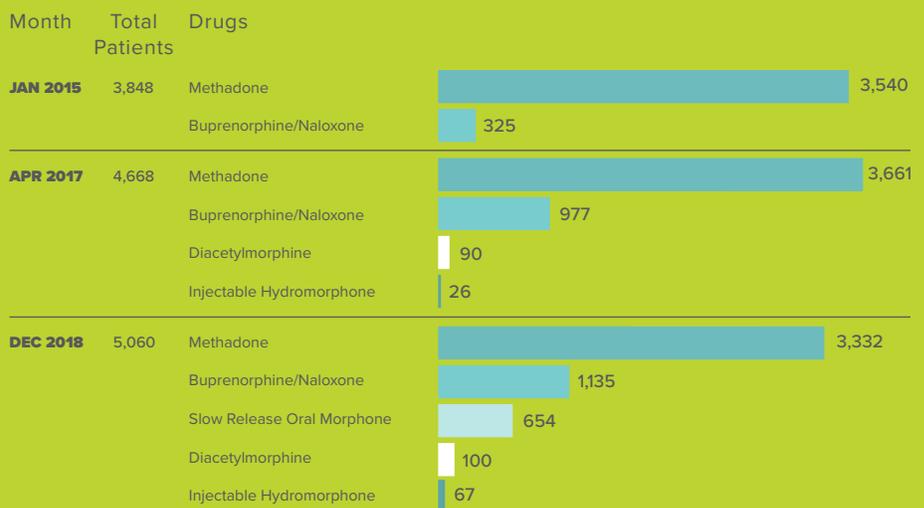


FIGURE 15: NUMBER OF PATIENTS IN VCH DISPENSED OAT AT A COMMUNITY PHARMACY BY DRUG TYPE AT THE SELECTED MONTHS



Data Source: Pharmanet data provided by Ministry of Health and BCCDC, VCH PHSU  
 Note: The count represents the unique clients/practitioners in a given month. A same client/practitioner may appear in the different months

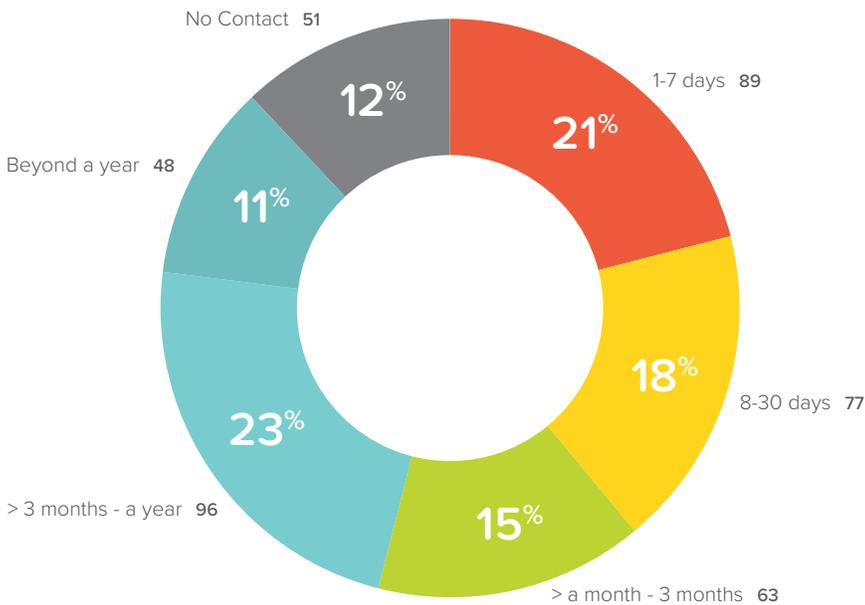
Historically, PHC's Crosstown Clinic in the downtown eastside was the only clinic in Canada offering injectable OAT: diacetylmorphine (prescription heroin) and hydromorphone.

Despite expanded access to injectable hydromorphone in 2017/18 at Crosstown Clinic, VCH's Downtown Community Health Centre and at community sites in partnership with the PHS Community Services Society, the number of patients on injectable hydromorphone has been declining (Figure 14). The reasons for lower retention on injectable hydromorphone are not fully understood, and could be related to lower efficacy of this treatment for people who use fentanyl or changes in the patient population now eligible for treatment. The number of people receiving injectable heroin has remained stable; it is currently only available at Crosstown Clinic.

# History of Contact with VCH and PHC Services

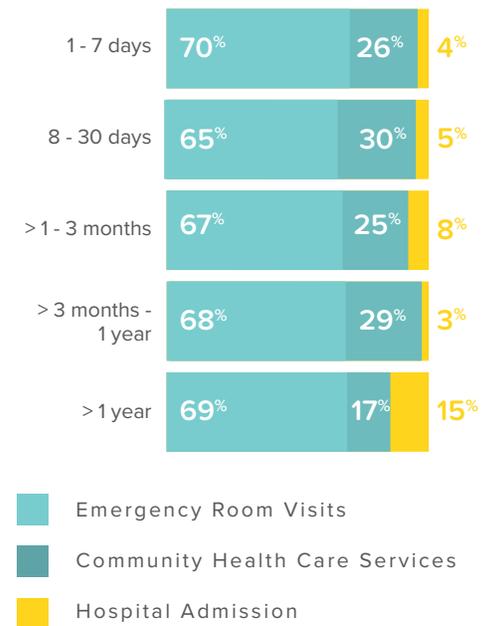
According to the VCH chart review of overdose deaths, the vast majority (77%) of those who died in 2017 had contact with VCH or PHC health care services in the year prior to death; 40% had a health care contact within one month and 21% within one week of death (Figure 16). The majority (70%) of the most recent health care contacts were emergency department visits (Figure 17). These visits may have been related to their overdose risk or to other health issues.

FIGURE 16. INTERVAL BETWEEN MOST RECENT CONTACT WITH VCH HEALTH CARE SERVICES AND DEATH



Data Source: Medical Chart Review Database, VCH PHSU

FIGURE 17. MOST RECENT CONTACT WITH VCH HEALTH CARE SERVICES



These data demonstrate that most of those who died had recent contact with VCH or PHC and their charts indicate that their substance use was usually known to their healthcare providers. This indicates that there are opportunities in health care to intervene to reduce the risk of overdose death.

In an effort to develop a coordinated and comprehensive system of care for addictions in the region, VCH and PHC established a Regional Addictions Program in 2018. The program will build on existing practices and initiatives to ensure that people with substance use disorders are proactively **linked to, engaged and retained in evidence-based care.**

## Link to Care: Overdose Outreach Team

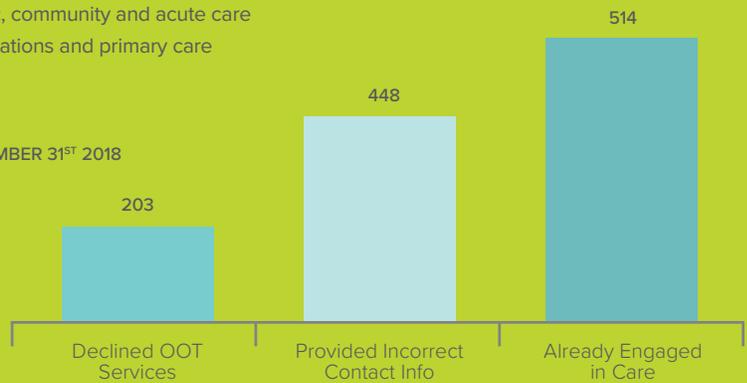
The Overdose Outreach Team includes social workers and outreach workers who connect people who have recently had an opioid overdose and/or who are at high risk for opioid overdose to addictions care. Services provided include:

- Navigation to appropriate medical and social services
- Support to access OAT
- Overdose prevention education

Access to the team is low barrier. A call to the team's phone number at 604-360-2874 from a health care provider or community member will connect them directly with an outreach team member to initiate a referral.

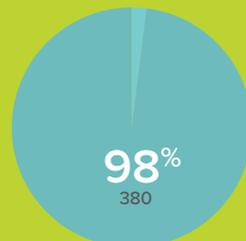
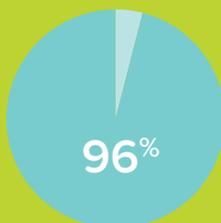
The most common referral sources are Emergency Departments, following an Order from VCH's Medical Health Officer requiring Emergency Department staff to refer all those treated for an opioid overdose to the team. Vancouver Police Department, members of the public, community and acute care based substance use services, housing and other community based organizations and primary care providers can also refer to the team.

### VCH Overdose Outreach Team (OOT) JUNE 1<sup>ST</sup> – DECEMBER 31<sup>ST</sup> 2018



- Primary Reasons why clients are not actively involved with OOT:**
- Clients are already engaged in care or seen by another health service
  - Referrals did not contain correct contact information
  - Client declined OOT services

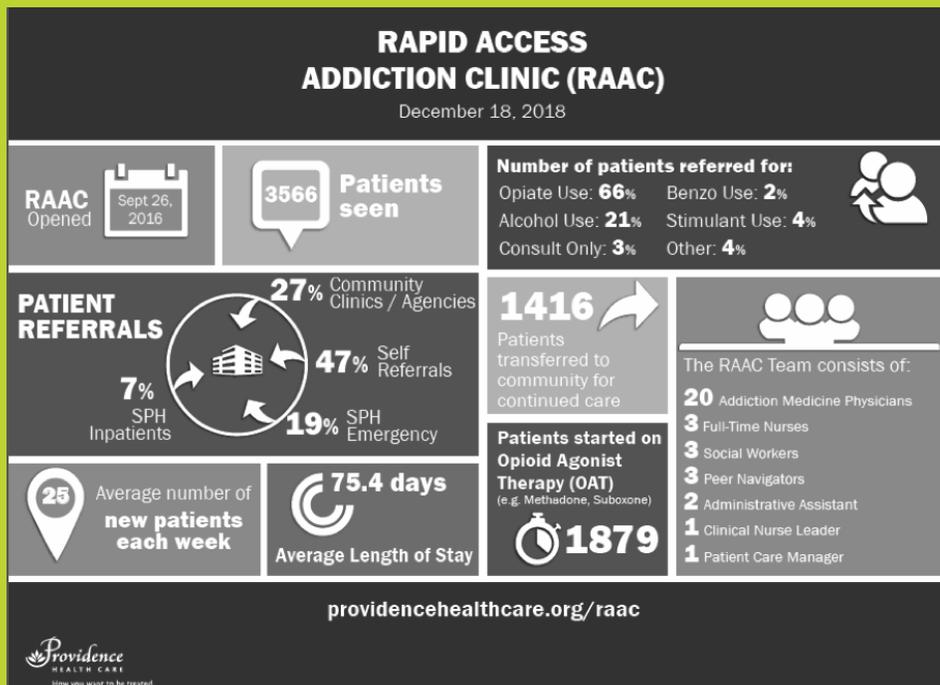
**A highly responsive service**  
96% of Referrals were contacted within 3 business days



98% (380) of Clients were re-connected or newly connected to a health, substance use (including Opiate Agonist Therapy) or social service

# Engage in Care: Improving access

- The Rapid Access Addiction Clinic is a low-barrier outpatient clinic at St. Paul's Hospital that provides short-term clinical treatment for people living with substance use disorders. The clinic aims to stabilize patients and link them to long-term treatment and primary care in the community. Addictions clinicians also support community providers to provide care for patients living with substance use disorders.



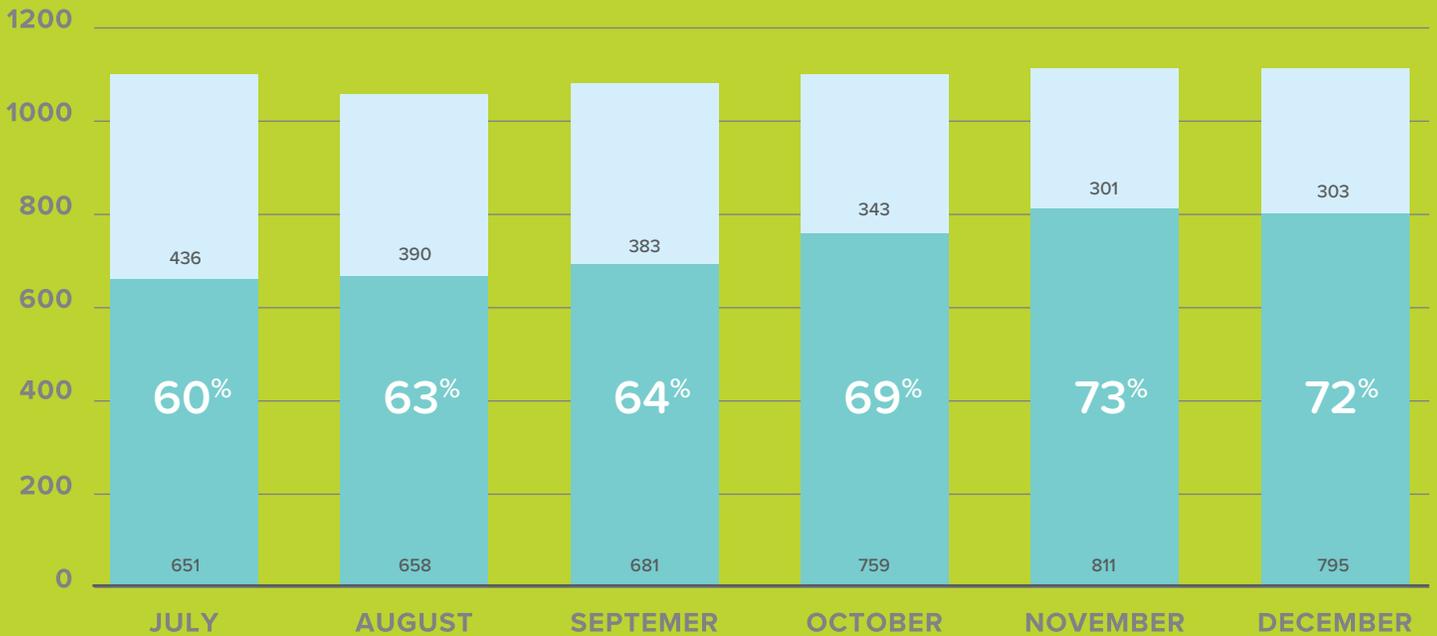
- VCH's Downtown Eastside Connections Clinic opened on March 1st, 2017. The care team of physicians, nurses, social workers, community and financial liaison workers and peers offers walk-in addictions care, with no appointment needed. The clinic provides addictions treatment to 300 patients, and drop in services to an additional 200 patients each month. An average of 42 patients are started and 64 patients are re-started on OAT each month.
- Under the direction of Dr. Christy Sutherland, the PHS Community Services Society clinics co-locate addictions care and primary care and provide the full range of OAT, with a goal of individualized treatment to improve retention in care. The full spectrum of OAT options is available, including combination treatments, and transitions between a range of treatments as appropriate. Clinic data indicate that nearly half of patients started on injectable OAT in such settings transition to oral OAT alone once stabilized.

# Retain in care: “Best Practices in Oral Opioid agonist Therapy” (BOOST) Collaborative

In 2017, the Vancouver Best Practices in Oral Opioid Agonist Therapy (BOOST) Collaborative was launched in partnership between the BC Centre for Excellence in HIV/AIDS (BC-CfE) and VCH. Twenty teams from across Vancouver, ranging from primary care, mental health/substance use, stabilization clinics, and outreach/intensive case management teams were enrolled in this quality improvement initiative designed to increase the proportion of people initiated and retained on OAT and to achieve measurable improvements in quality of life scores.

From July 2018 to December 2018, the proportion of clients retained on OAT for >3 months increased from 60% to 72% among participating primary care and addictions teams.

FIGURE 18: RETENTION ON OAT: BOOST COLLABORATIVE



# Creating Supportive Environments

Beyond harm reduction and treatment, opportunities exist to better engage and retain people with addiction in care and reduce the risk of overdoses through peer- and community-level supports and through improving the social determinants of health.

## Peer Empowerment and Engagement

Peers are at the core of VCH's overdose emergency response.

- Over 300 peers work as part of the overdose response in VCH. Peers provide naloxone training, work at overdose prevention sites and housing overdose prevention services, and with outreach services such as “Spikes on Bikes”.
- **Street Degree in Overdose Prevention** is a peer-driven education initiative offered by VCH and PHS Community Services Society that provides overdose management training and certification to community members and peers. Two-hundred peers have taken at least one, and up to thirteen courses, and six peers are Street Degree graduates.



Street Degree Graduates – Nikita Volkova & Jeremy standing alongside Sally Kupp, VCH Clinical Educator.

## Community Action Teams & Stigma Reduction

**Community Action Teams:** Peers play a critical role on the VCH region's four Community Action Teams (CATs) (in the Sunshine Coast, Powell River, Richmond, and Vancouver). CAT's are comprised of local stakeholders such as municipal governments, non-profits, first responders, First Nations and Indigenous service organizations, and public safety representatives. CATs provide valuable forums for local stakeholders to review and act on community-level overdose data, and escalate issues or policy barriers to the province's Overdose Emergency Response Centre. Peers are critical to the success of the teams by drawing on wisdom from lived experience to challenge local policies that might contribute to stigma, identify service barriers, and work collaboratively to ensure the overdose response is responsive to the diverse needs of people who use drugs.



The Sunshine Coast Community Action Team hosted a naloxone training event as a part of its anti-stigma strategy with local officials, including Chief Warren Paul from the Sechelt Nation, Gibsons Mayor Bill Beamish, and Sechelt Mayor Darnelda Siegers.

## Engaging Youth

The overdose emergency has highlighted the need for programs that can prevent problematic substance use. One such prevention program is the **Supporting And Connecting Youth (SACY)** substance use health promotion initiative of the Vancouver School Board and VCH which works with the City of Vancouver, the Vancouver Police Department, the University of British Columbia and the Canadian Institute for Substance Use Research.

**SACY** works with students, parents and teachers to prevent and delay substance use among youth and reduce substance use related problems through multi-faceted, strength based programming. Goals of the program include strengthening social connection, building resiliency, and supporting open dialogue about substance use, with a strong focus on promoting youth voices.



Youth exploring urban nature with a hike to Quarry Rock.

# Implications & Recommendations

## Key Findings Informing Recommendations

The findings described in this report, including new information from a review of the 424 people who died of an overdose in VCH in 2017, can help guide recommendations for the ongoing response to the opioid overdose crisis. Key findings include:

- The impact of the crisis has been uneven across VCH; Vancouver has had the highest overdose death rate of any area in the province, almost 10 times higher than the death rate in Richmond, which is the lowest in the province. Within Vancouver, the Downtown Eastside is the community most affected. Within the Coastal area, death rates are higher in some rural communities than in some urban centres.
- The most affected population in VCH faces greater social and economic inequalities than populations affected elsewhere. Those who died in VCH in 2017 were less likely to be employed and more likely to live in social or supportive housing than those who died outside VCH.
- Most of those who died used multiple substances including opioids, alcohol and stimulants such as cocaine and crystal meth. A significant percentage of those who died of opioid overdoses had primary alcohol use disorder and/or stimulant use disorder.
- Most of those who died had contact with VCH or PHC services in the year before death, with the Emergency Department the most common service accessed. In particular, St. Paul's Hospital Emergency Department sees the highest number of patients with overdoses of all hospitals in BC.
- Most of those who died who used opioids daily had been on opioid agonist therapy (OAT) in the past, but were not retained on treatment.

VCH, working with partner organizations, has responded to the crisis with widespread distribution of naloxone, implementation of overdose prevention services, and expanded access to OAT. But the rate of death remains high due to the continuing contamination of the illegal drug supply with fentanyl and other contaminants. Additional actions are needed to expand evidence-based treatment for those at risk of overdose death, provide safer alternatives to the contaminated illegal drug supply, and address circumstances and environments that impact the risk of overdose.

## RECOMMENDATION

## Establish an Integrated System of Care for People with Substance Use Disorder

At a time when they are most vulnerable, people with addictions and their families must navigate a complex and fragmented system of care that includes programs that may not make use of evidence-based treatment or employ best practices. It is not currently possible to evaluate the system overall or its components, which can include outpatient or inpatient treatment, withdrawal management services and residential recovery. As an important first step in building and evaluating an integrated system of care for people with substance use disorder, a new VCH Regional Addictions Program has been established, with representation from across VCH and PHC. The initial focus of the program will be improving the system of care for opioid use disorder. As opioid use disorder is a chronic, relapsing health condition, a cascade of care model is recommended, with dual goals of tracking people longitudinally over time and retaining them in care. The cascade of care model has been successfully implemented in VCH to improve care for people with HIV, another chronic health condition.<sup>6</sup> It is recommended that the VCH Addictions Program:

1

Identify and monitor the clinical progress of people living in VCH with opioid use disorder, based on referrals and administrative data;

2

Offer and support initiation of opioid agonist therapy (OAT) to everyone identified with opioid use disorder;

3

Ensure those on OAT are connected to follow-up care as they transition across the care continuum, including withdrawal management, recovery, community and primary care services;

4

Implement standards of care with clear deliverables (e.g. targets for OAT starts and retention) in all VCH operated and funded withdrawal management, recovery, community and primary care services serving those with opioid use disorder.

Because many people dying of opioid overdoses in VCH have evidence of alcohol use disorder and/or stimulant use disorder, which can impact their risk of overdose death and their retention in care for opioid use disorder, it is recommended that the VCH Regional Addictions Program:

5

Conduct a scan of currently available services for alcohol and stimulant use disorders, and identify gaps in care;

6

Work with the BC Centre on Substance Use to establish guidelines, on an urgent basis, for management of alcohol use disorder and stimulant use disorder, with a focus on strategies to reduce the risk of opioid overdoses.

## RECOMMENDATION

## Expand Access and Remove Barriers to Opioid Agonist Therapy (OAT)

Opioid agonist treatment is effective at preventing overdose death. While provincial guidelines for the management of opioid use disorder have been developed and published by the BC Centre on Substance Use, not all physicians and health care providers who care for patients with opioid use disorder have received the training needed to provide appropriate care. Addiction experts and people living with opioid use disorder advocate for access to the widest possible array of OAT options so that treatment can be individualized for greatest success, but this is not always available. Structural barriers continue to exist that may prevent initiation or maintenance of OAT. To expand access and remove barriers to OAT, it is recommended that VCH, in partnership with the BC Centre on Substance Use:

7

Expand training of health care providers in the clinical management of opioid use disorder to all geographic areas in VCH, and track prescribing practices of those who complete training;

8

Implement expert support, including virtual support, for primary care providers caring for patients with substance use disorder;

9

Provide access to outreach and social supports for patients with substance use disorder receiving addictions care from primary care physicians;

10

Work with the College of Pharmacists and BC Pharmacare to remove access barriers for all evidence-based OAT medications e.g. remove requirements for daily witnessed ingestion;

11

Develop and implement low barrier strategies to rapidly initiate OAT or re-start OAT for those who have missed doses e.g. Emergency Department or Pharmacist dispensing;

12

Allow take home doses for stable patients currently on daily witnessed OAT or iOAT;

13

Pilot and evaluate innovative, new OAT strategies e.g. prescription fentanyl.

**Take-home Suboxone™ is a new program launched at St. Paul's Hospital Emergency Department for patients who present after an opioid overdose. Patients will receive a 3-day supply of buprenorphine/naloxone (Suboxone™), instructions on how to take the medication and receive follow-up care, education from an addiction-trained nurse, and a referral to the Overdose Outreach Team.**

## RECOMMENDATION

## Establish a Regulated Supply of Drugs as an Alternative to the Illegal Supply

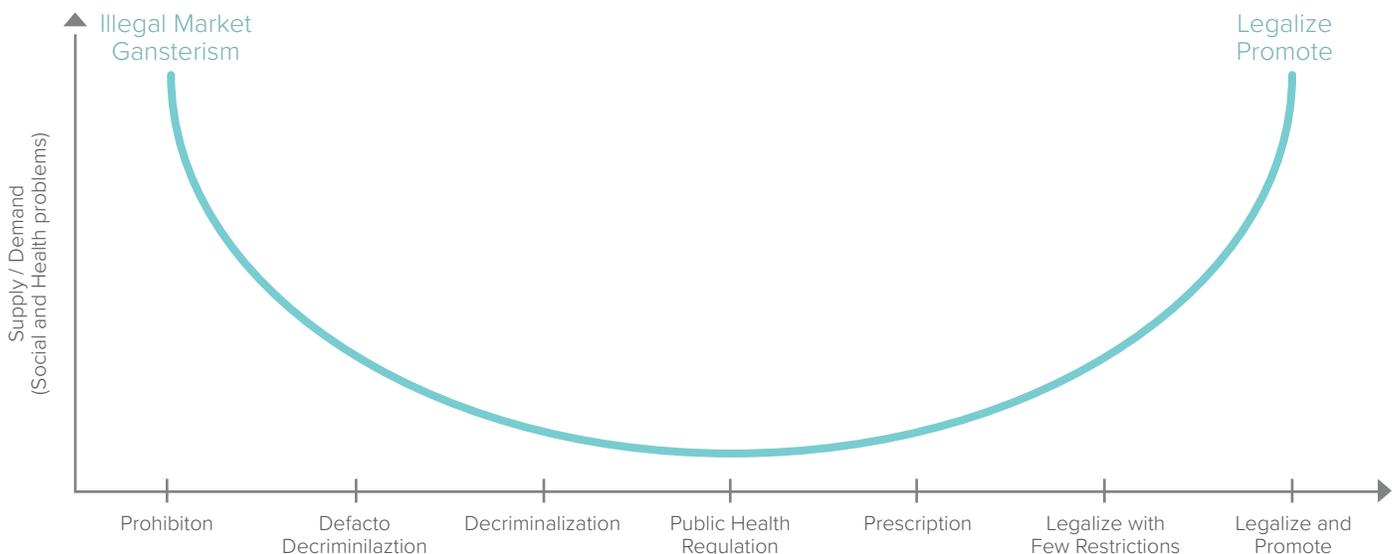
Illegal drug overdose deaths are most closely influenced by the rapidly changing composition of local illegal drug supplies, and simply expanding treatment for opioid use disorder will be insufficient to eliminate the risk of opioid overdose death. A regulated supply of pharmaceutical opioids is necessary to reduce the risk of death in a number high-risk populations, including:

- People consuming illegal opioids who are not yet known to the healthcare system, even if they might benefit from treatment for opioid use disorder;
- People who have started on treatment for opioid use disorder who have relapsed and begun using illegal opioids;
- People with primary alcohol use disorder or stimulant use disorder, for whom effective treatments may not be available, who periodically also consume illegal opioids.

Establishing a public health, regulatory approach to psychoactive substances is recommended by the Health Officers' Council of BC<sup>7</sup> to reduce the risk of harm from illegal and legal psychoactive substances. It is not an alternative to expanding prevention and treatment, but a critical additional strategy to reduce population harms. It is an acknowledgement that psychoactive substances, including opioids, will continue to be used by people for a variety of reasons, and the illegal nature of these substances is the primary risk factor for overdose death.

FIGURE 19. THE PARADOX OF PROHIBITION.

Adapted from Public Health Perspectives for Regulating Psychoactive Substances, by The Health Officers Council of British Columbia, 2011, Victoria BC and Marks J. The Paradox of Prohibition. In: Brewer C, ed. Treatment options in addiction: medical management of alcohol and opiate use. London: Gaskell; 1993. P 77-85. Adapted with permission.



A regulatory approach to opioids must be evaluated for any unintended consequences, given that the over-prescribing of legal opioids has contributed to the current opioid overdose crisis. To support a regulatory approach to psychoactive substances, it is recommended that VCH work with people who use drugs and all levels of government to:

## 14

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Decriminalize personal possession of illegal drugs, to reduce the stigma of substance use disorder and support engagement in harm reduction and treatment;

## 15

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Transition from illegal drugs to regulated drugs at supervised consumption sites. The transition can begin by allowing people who are stable on iOAT in clinical settings to consume their substances in supervised consumption sites, allowing for greater autonomy.

## 16

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Pilot and evaluate distribution of legal forms of opioids in VCH for those who have not been retained on OAT or are at high risk of overdose death (e.g. Heroin Compassion Club as described in the BC Centre on Substance Use white paper). Piloting legal access to opioids is different from OAT as treatment and would be low-barrier and flexible. Initial pilots would include observation of consumption, followed by pilots allowing distribution of opioids for people to take away for later consumption.

## RECOMMENDATION

## Expand Programs that can Prevent Problematic Substance Use

Problematic substance use is common in VCH. While the current crisis has focused most urgently on reducing the risk of overdose death, preventing development of problematic substance use must be part of the ongoing response. There are many complex, often co-existing risk factors for problematic substance use, including early childhood trauma, intergenerational trauma due to the history of colonialism among Indigenous people, and acute and chronic pain. Other social determinants, including poverty, contribute to the risk. To meaningfully address the risk factors for problematic substance use, it is recommended that VCH work with local, provincial and federal government partners, non-governmental organizations and other community partners to:

### 17

Expand support for healthy early childhood development;

### 18

Expand school-based programs that identify and engage vulnerable youth, which can reduce the risk of problematic substance use (e.g. the Vancouver School Board SACY program);

### 19

Partner with First Nations, First Nations Health Authority and Metro Vancouver Aboriginal Executive Committee on strategies to support “Culture as Treatment” for those living with or at risk for problematic substance use;

### 20

Develop and implement regional strategies to improve management of acute and chronic pain;

### 21

Enhance strategies to reduce poverty, including access to adequate housing and social enterprises that can lead to meaningful employment for those at risk of overdose death.

## What's Next?

Addressing the 21 recommendations in this report will require the leadership and partnership of people with lived experience and their family members, healthcare providers, first responders, and non-governmental organizations. Commitment and new investments from all levels of government are also required. Rapid, nimble implementation and robust evaluation of innovative strategies can generate the evidence needed to prevent deaths and support those populations at greatest risk in this crisis.

VCH, PHC, community partners and peers have demonstrated focus and commitment in addressing the opioid overdose crisis, and many deaths have been prevented as a result of these efforts. But this report demonstrates that this is not a time for complacency; our commitment and focus must continue in 2019 and beyond.

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