

Provincial Overdose Emergency Monthly Situational Report – November 2016

This report covers Fraser Health region, with data up to the end of November 30, 2016.

During November, there was a sharp increase in the number of overdose deaths and number of overdose events in Fraser Health and other health regions in British Columbia (B.C.).

Illicit Drug Overdose Deaths: The number overdose deaths in November (n=44) increased by 193% compared to October. This was the highest number of overdose deaths recorded in a month in the Fraser Health region.

Suspected Overdose Events: In November, compared to October, the number of suspected overdose events seen by Fraser Health Emergency Departments and BC Ambulance Service increased by 61% and 28%, respectively.

Take Home Naloxone (THN): 37 new sites have joined since April 2016, bringing the total THN sites in Fraser Health to 59. A total of 2,781 THN kits were dispensed from January to October 2016.

Please visit fraserhealth.ca/overdose to find out more about the Overdose Public Health Emergency and find out where to obtain Naloxone.

Illicit Drug Overdose Deaths - Fraser Health Region

Data Source: BC Coroner Service, data up to the end of November 2016 (additional details below). Preliminary numbers, subject to change.

Overdose deaths within Fraser Health increased sharply in 2015 (Figure 1) and continue to be higher than historical levels. From January to November 2016, there were 259 illicit overdose deaths (Appendix-Figure 2).

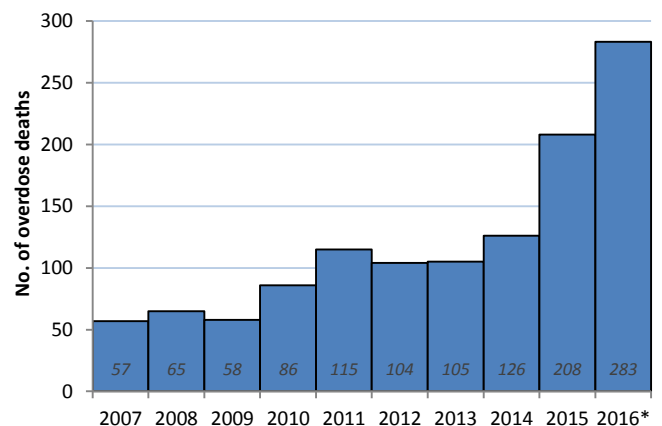
After a few months of decline, during November there was a sharp increase in overdose deaths in Fraser Health and B.C. In November 2016, there were 44 illicit drug overdose deaths in the health region, compared to 15 deaths in October, an increase of 193%.

- Surrey, Langley (City and Township), Abbotsford and Maple Ridge accounted for 68% of overdose deaths (Appendix-Table1).
- The death rate was highest among 30-39 year olds (Appendix-Figure 3). Males accounted for 82% of all overdose deaths.
- In 2016, according to the BC Coroners Service, 86% of overdose deaths happened inside (70% private residences, 16% other locations) and 13% happened outside in vehicles, sidewalks, streets, parks etc.

- The rate of overdose deaths, per 100,000 people, is lower in Fraser Health (16.0) compared to B.C. (17.4).

Fentanyl has been detected in 57% of overdose deaths in the region. Among these deaths, other substances most commonly detected include cocaine (57%), alcohol (28%), methamphetamines/amphetamines (29%) and heroin (36%).

Figure 1. Increase in number of illicit drug overdose deaths within Fraser Health (2007 to 2016*).



* Projected numbers based on data from January to November, 2016
Data Source: BC Coroner Service

Emergency Department - Suspected Overdose Events

Data Source: Fraser Health Emergency Departments, data up to the end of November 2016 (Additional details below). Preliminary numbers, subject to change.

There has been a sharp increase in the number of suspected overdose events seen at Fraser Health Emergency Departments (EDs). During November 2016, 525 suspected overdose events presented to the 12 EDs in Fraser Health, compared to 325 events in October, an increase of 61%.

From January to November 2016, Surrey, Abbotsford, Maple Ridge, City of Langley and Township of Langley accounted for 60% of all suspected overdose visits to Fraser Health EDs.

In 2016 (Jan to Nov):

- The majority of events were among males (68%), and the highest numbers of events were among those 19-29 years old (37%), followed by those 30-39 years old (26%). Males 19-39 accounted for 43% of all events.
- Opioids were associated with 69% of the suspected overdose events, which is likely an underestimate due to patients and clinicians being uncertain of the exact composition of the substances consumed.
- 11% of the patients with a suspected overdose were admitted to hospital.

BC Ambulance – Suspected Overdose Events

Data Source: Patience Care Reports, BC Ambulance, BC Emergency Health Services, data up to the end of November 2016 (Additional details below). Preliminary numbers, subject to change.

During November, there was also an increase in the number of suspected overdose events responded to by paramedics. The numbers below are likely an underestimate as B.C. Ambulance data for November is still being entered and finalized.

In November, paramedics responded to 527 events within Fraser Health, compared to 411 events during October (Appendix – Figure 5), an increase of 28%. This year they have responded to 5,258 suspected overdose events in the Fraser Health region (Appendix – Table 3).

The age and gender profile of suspected overdose events were similar to trends seen in Emergency Departments; the majority of the events were among males (68%) and those aged 19-39 years (55%).

In 2016 (Jan to Nov):

- 80% of suspected overdose events resulted in the patient being transported to a hospital.
- Paramedics administered naloxone during 1472 (28%) events; additional naloxone may have been given by other first responders and by community members.
- Home/residence (43%) and street or highway (32%) were the most common locations where paramedics responded to suspected overdose events.

Take Home Naloxone

Data Source: BC Take Home Naloxone Program, BC Centre for Disease Control, data extracted December 18, 2016

Since the declaration of the overdose emergency in April 2016, Fraser Health has worked hard to expand the number of sites distributing naloxone and the amount of naloxone distributed to the community. Thirty-seven new sites have been added since the declaration, bringing the total number of sites to 59 in the Fraser Health region.

From January to October of this year, 2,781 naloxone kits were distributed within Fraser Health. During the same time period in 2015, 360 naloxone kits were distributed in the region.

A prescription is no longer needed to obtain naloxone and individuals can directly purchase naloxone from pharmacies. Please visit fraserhealth.ca/overdose to learn more about services where kits may be obtained.

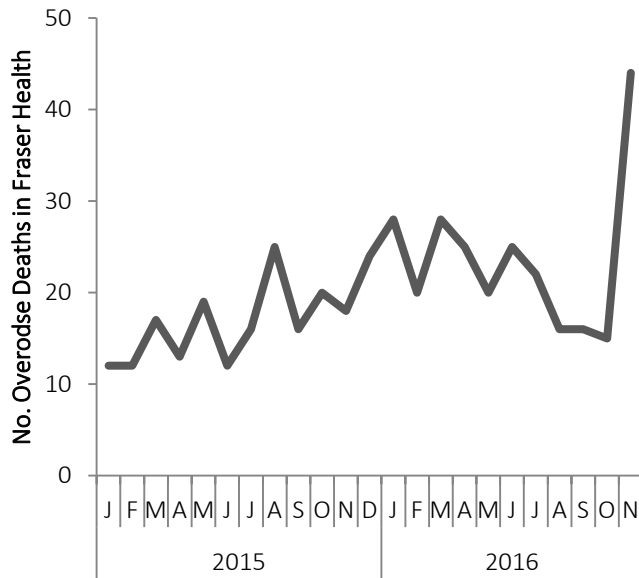
Learn More: Overdose Public Health Emergency

For more information on the Overdose Public Health Emergency, what you can do and Fraser Health's response, go to <http://www.fraserhealth.ca/overdose>

Appendix: Data

Overdose Deaths

Figure 2. Monthly illicit drug overdose deaths within Fraser Health (January 2015 to November 2016).



Data Source: BC Coroner Service. Preliminary data, numbers subject to change.

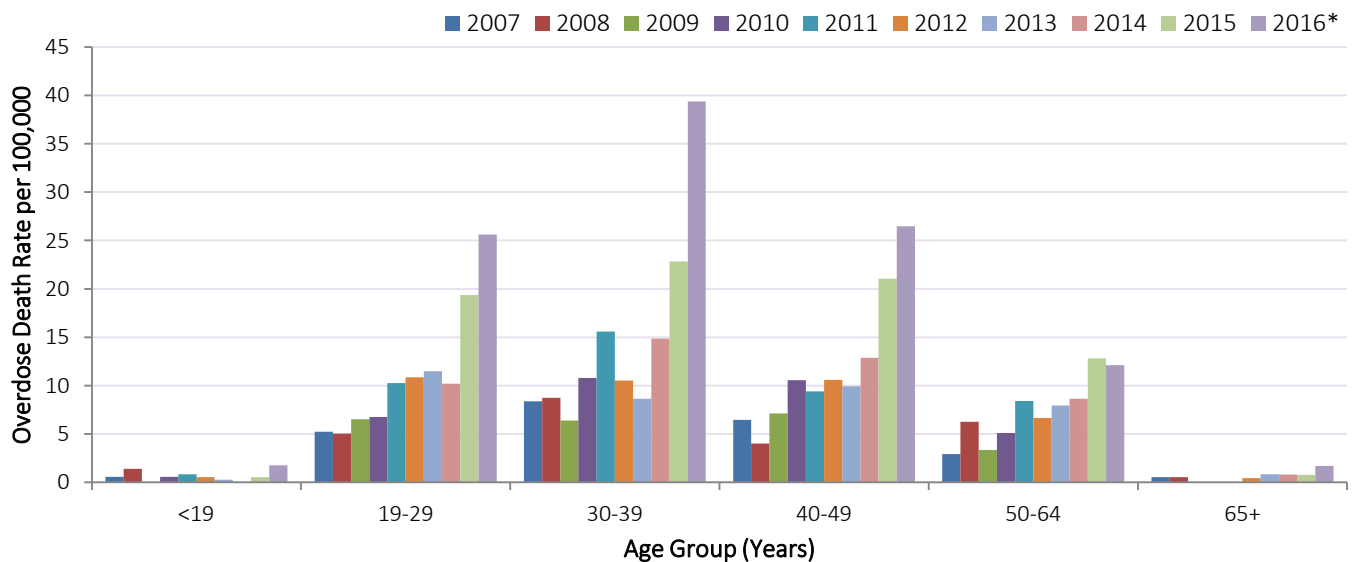
Table 1: Illicit drug overdose deaths, projected deaths in 2016 and projected increase.

	No. deaths Jan-Nov, 2016	No. projected* deaths 2016	No. deaths 2015	% Increase (2016* vs. 2015)
B.C.	755	824	505	63%
Fraser Health[^]	259	283	208	36%
Surrey	92	100	76	32%
Maple Ridge	25	27	29	-6%
Abbotsford	32	35	27	29%
Langley (City+ Township)	24	26	10	162%

* Projected counts calculated by annualizing the data available e.g. Deaths X 12 months/11 (months up to November)

[^] BC Coroner assigns location based on location of injury (i.e. overdose) and if that is missing, location of death.

Figure 3. Rate of illicit drug overdose deaths, by age group, within Fraser Health region (2007-2016*).

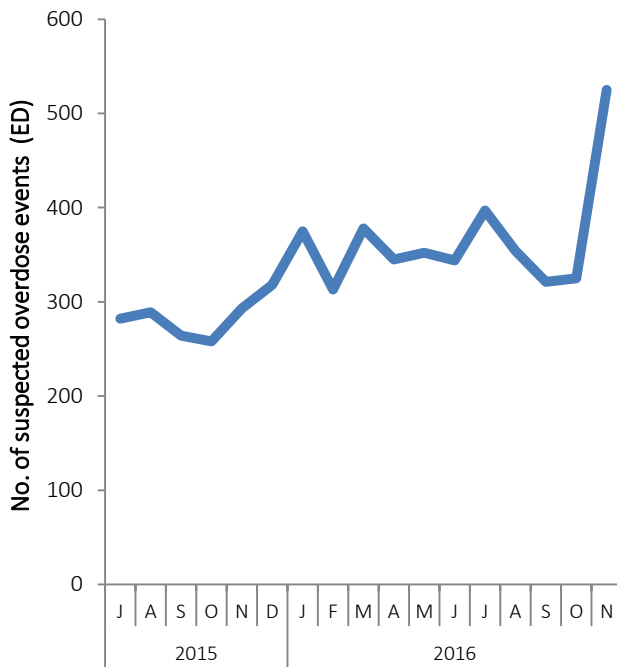


* Annualized based on data from January to November 2016

Data source: BC Coroner Service. Preliminary data, numbers subject to change.

Suspected Overdose Visits to Emergency Department

Figure 4. No. of suspected overdose events seen at Fraser Health Emergency Departments, July 2015 to November 2016.



Data Source: Fraser Health Emergency Departments

Table 2. Suspected overdose events presenting at Fraser Health Emergency Departments.

Community [^] of residence	No. events Nov 2016 (Monthly avg.~)	No. events Jan-Nov, 2016	Rate/100,000 population
Abbotsford	57 (37.4)	411	390
Agassiz-Harrison	-- (3.3)	26	357
Burnaby	30 (24.5)	269	146
Chilliwack	44 (20.4)	224	330
City of Langley	7 (10.9)	119	599
Coquitlam	23 (11.9)	130	130
Delta	11 (9.2)	101	126
Hope	5 (2.4)	19	311
Maple Ridge	26 (27.7)	304	515
Mission	17 (8.9)	97	306
New Westminster	19 (14.9)	163	297
Pitt Meadows	5 (4.5)	49	358
Port Coquitlam	16 (9.5)	104	236
Port Moody	7 (5.5)	60	236
Surrey	201 (128.9)	1417	366
Township of Langley	13 (14.5)	159	198
White Rock	7 (4.4)	39	239
Non-Fraser residents	37 (30.8)	338	n/a
Fraser Health	525 (366.3)	4029	315

[^] Community of suspected overdose events, presenting at ED, is based on reported residential address of the patients. Homeless people were assigned to the location of the Emergency Department where they presented.

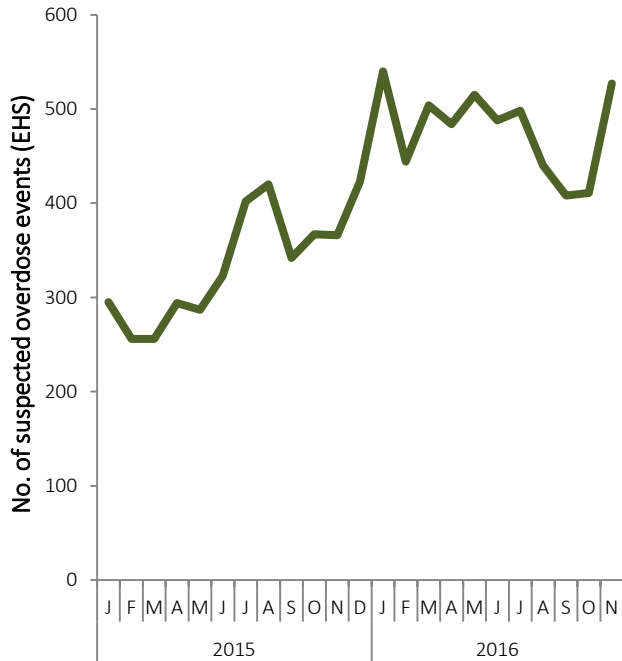
* Rates annualized based on data from January to November, 2016

~ Based on data from January to November, 2016

-- counts under 5 not reported as they are potentially identifiable

Suspected Overdose Events attended by BC Ambulance

Figure 5. No. of suspected overdose events attended by BC Ambulance service (EHS), within Fraser Health Region, January 2015 to November 2016.



Data Source: Patient Care Records data from BC Emergency Service.
Preliminary data, numbers subject to change.

Table 3: Suspected overdose events attended by BC Ambulance service, within Fraser Health Region.

Community of event	No. events Nov 2016 (Monthly avg.~)	No. events Jan-Nov, 2016	Rate/100,000 population
Abbotsford	60 (46.3)	509	482
Agassiz-Harrison	5 (3.3)	36	494
Burnaby	42 (40.8)	448	242
Chilliwack	51 (28.8)	316	465
City of Langley	12 (21)	230	1158
Coquitlam	19 (22.6)	248	248
Delta	11 (12.7)	139	173
Hope	5 (2.5)	27	441
Maple Ridge	18 (33.8)	371	627
Mission	14 (9.8)	107	337
New Westminster	23 (21)	231	420
Pitt Meadows	-- (4.1)	45	329
Port Coquitlam	22 (12.3)	135	305
Port Moody	-- (3.2)	35	138
Surrey	214 (194.5)	2139	551
Township of Langley	18 (18.6)	204	253
White Rock	8 (3.5)	38	232
Fraser Health	527 (478)	5258	410

Please note: November numbers likely an underestimate and will increase as entry of BC Ambulance Patient Care Forms is finalized.

^ Community based on location where the paramedics attended to the suspected overdose event

* Rates annualized based on data from January to November, 2016

~ Based on data from January to November, 2016

-- counts under 5 not reported as they are potentially identifiable

Notes on Data Sources

Please note that numbers in this report are likely an underestimate. This is because first responders (fire, police or paramedics) are not called to all overdose events, not all events are seen at emergency departments and the algorithms used to detected events, do not capture all the overdoses.

BC Coroner Service

Coroner numbers are preliminary and subject to change as investigations are finalized. Coroner assigns location to events based on location of overdose and location of death. The Coroner's fentanyl overdose report is one month behind overdose deaths reports due to additional time needed for fentanyl testing. Currently, the BC Coroner service combines numbers for City of Langley and Township of Langley.

The coroner illicit drug category includes street drugs (heroin, cocaine, MDMA, methamphetamine, etc.), medications that may not have been prescribed to the deceased, combinations of the above, with prescribed medications, and origin of drug not known. Additional information can be found in BC Coroner reports <http://www2.gov.bc.ca/gov/content/safety/public-safety/death-investigation/statistical-reports>.

Fraser Health Emergency Department Data

Fraser Health Overdose Surveillance system is a dynamic syndromic surveillance system which captures suspected overdose events among those 13 years of age or older. These are suspected events and not confirmed cases. These numbers may change as data entry is finalized. The suspected overdose events include those associated with opioids, stimulants, hallucinogens, and unspecified substances. Events were identified based on physician's discharge diagnosis, patient's stated complaint, chief complaint code assigned at triage and nursing notes associated with the chief complaint. Locations are assigned based on reported residential postal code.

BC Ambulance

Fraser Health receives weekly data from BC Ambulance, BC Emergency Health Services (EHS) via BC Centre for Disease Control. Data are based on Patient Care Forms completed by paramedics for each event they attend. The data on latest cases is delayed by a few weeks due to time needed for collection, transmission and entry of the information. Patient Care Forms are completed for more than 90% of the events attended by paramedics. These are suspected overdose vents and not confirmed cases. These numbers many change as data entry is finalized.

The suspected overdoses events are identified based on naloxone administration, provisional impression of 911 dispatch and provisional impression of the paramedics. We remove events suspected of not being overdose events and those associated primarily with alcohol. Locations are assigned based on latitude and longitude of the location where ambulance was dispatched. In addition to ambulance, other services (police, fire, community organizations etc.) may also be present during an overdose response in the community.