

Provincial Overdose Emergency Monthly Situational Report – December 2016

This report covers the Fraser Health region, with data up to the end of December 31, 2016.

During December, there was a modest decrease in the number of overdose deaths and number of overdose events in Fraser Health region.

Illicit Drug Overdose Deaths: The number overdose deaths in December (n=38) decreased compared to November (n=44). During the same time, the number of overdose deaths in B.C. increased from 128 to 142.

Suspected Overdose Events: In December, compared to November, there was a decrease in the number of suspected overdose events seen by Fraser Health Emergency Departments and BC Ambulance Service.

Take Home Naloxone (THN): 45 new sites have joined since April 2016, bringing the total THN sites in Fraser Health to 66. A total of 3,463 THN kits were dispensed from January to December 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 December 2016 (additional details below). Preliminary numbers, subject to change.

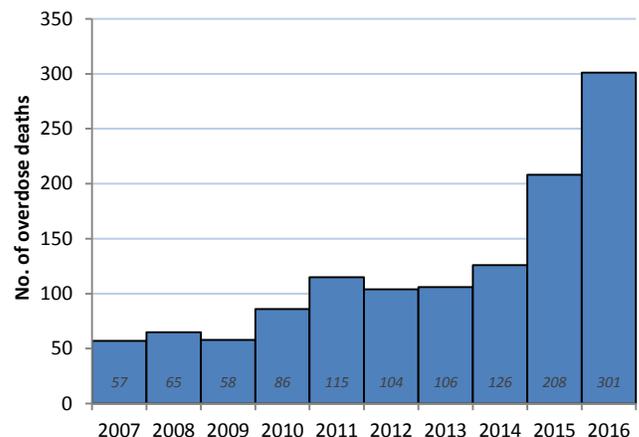
Overdose deaths within Fraser Health increased sharply in 2015 (Figure 1) and continue to be higher than historical levels. During 2016, there were 301 illicit overdose deaths.

During December 2016, there were 38 illicit drug overdose deaths in the health region, compared to 44 deaths in November (Appendix-Figure 2).

- The rate of overdose deaths, per 100,000 people, is lower in Fraser Health (17.1) compared to B.C. (19.3).
- Surrey, Langley (City and Township), Abbotsford and Maple Ridge accounted for 67% 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, 88% of overdose deaths happened inside (71% private residences, 17% other locations) and 11% happened outside in vehicles, sidewalks, streets, parks etc.

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).



Data Source: BC Coroner Service

Emergency Department - Suspected Overdose Events

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

Compared to November, there was a decrease in the number of suspected overdose events seen at Fraser Health Emergency Departments (EDs). During December 2016, 468 suspected overdose events presented to the 12 EDs in Fraser Health, compared to 520 events in November.

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

During 2016 (Jan to Dec):

- The majority of events were among males (68%), and the highest numbers of events were among those 19-29 years old (36%), followed by those 30-39 years old (26%). Males aged 19-39 accounted for 43% of all events.
- Opioids were associated with 71% 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 December 2016 (Additional details below). Preliminary numbers, subject to change.

Compared to November, there was a decrease in the number of suspected overdose events attended by paramedics in the Fraser Health region. The numbers below are likely an underestimate as BC Ambulance data for December are still being entered and finalized.

In December, paramedics responded to 500 events within Fraser Health, compared to 596 events during November (Appendix – Figure 5). This year they have responded to 5,818 suspected overdose events within 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 (69%) and those aged 19-39 years (56%).

In 2016 (Jan to Dec):

- 79% of suspected overdose events resulted in the patient being transported to a hospital.
- Paramedics administered naloxone during 1630 (28%) events; additional naloxone may have been given by other first responders and by community members.
- Home/residence (43%) and street/highway (31%) were the most common locations where paramedics responded to suspected overdose events.

Naloxone Distribution

Data Source: BC Take Home Naloxone Program, BC Centre for Disease Control, data extracted January 15, 2016

Since the declaration of the overdose emergency in April 2016, Fraser Health has worked hard to expand the number of sites distributing Take Home Naloxone kits. Since the declaration, 45 new sites were added, bringing the total number of sites to 66. In addition to these sites, 13 community sites in the region have registered to receive naloxone boxes for in-facility overdose response.

From January to December of this year, 3463 Take Home Naloxone kits were distributed within Fraser Health. During the same time period in 2015, 488 naloxone kits were distributed in the region; an increase of over 600%

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 where kits may be obtained.

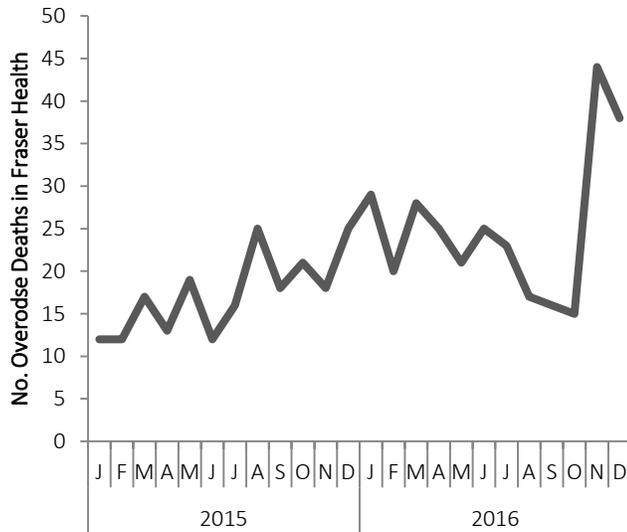
Learn More: Overdose Public Health Emergency

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 December 2016).



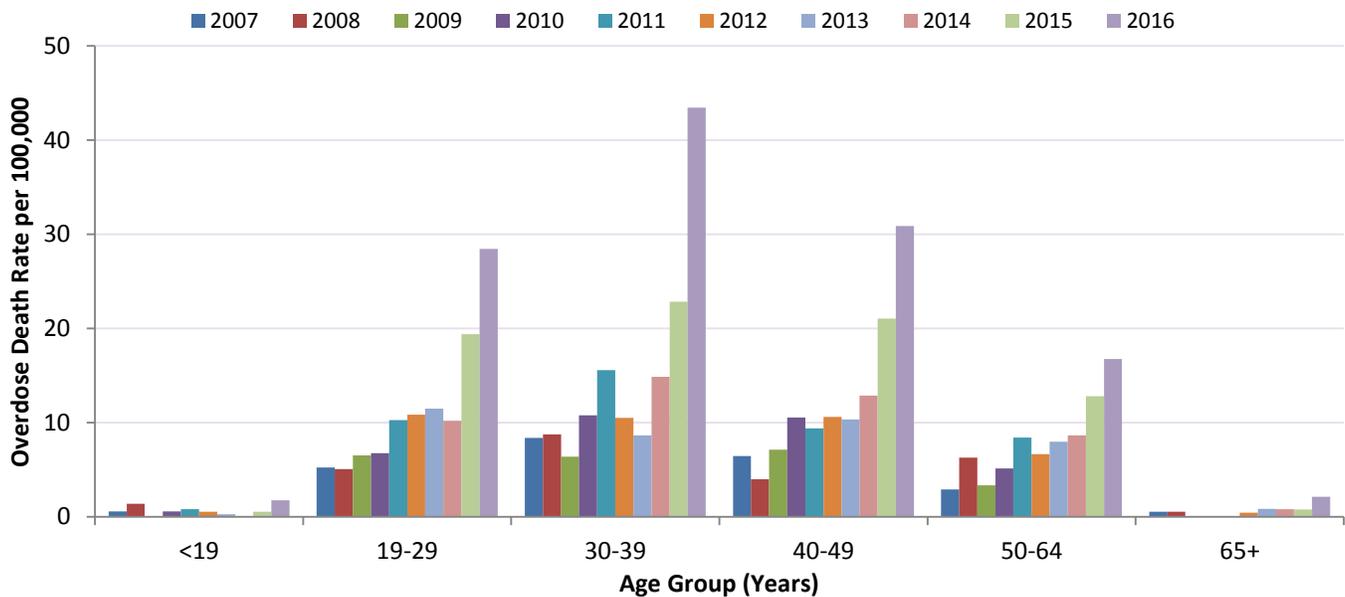
Data Source: BC Coroner Service. Preliminary data, numbers subject to change.

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

	No. deaths 2016	No. deaths 2015	No. deaths 2014	% Increase (2016 vs. 2015)	% Increase (2016 vs. 2014)
B.C.	914	510	366	79%	150%
Fraser Health[^]	301	208	126	45%	139%
Surrey	108	76	43	42%	151%
Maple Ridge	27	29	14	-7%	93%
Abbotsford	37	27	7	37%	429%
Langley (City+ Township)	30	10	10	200%	200%

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

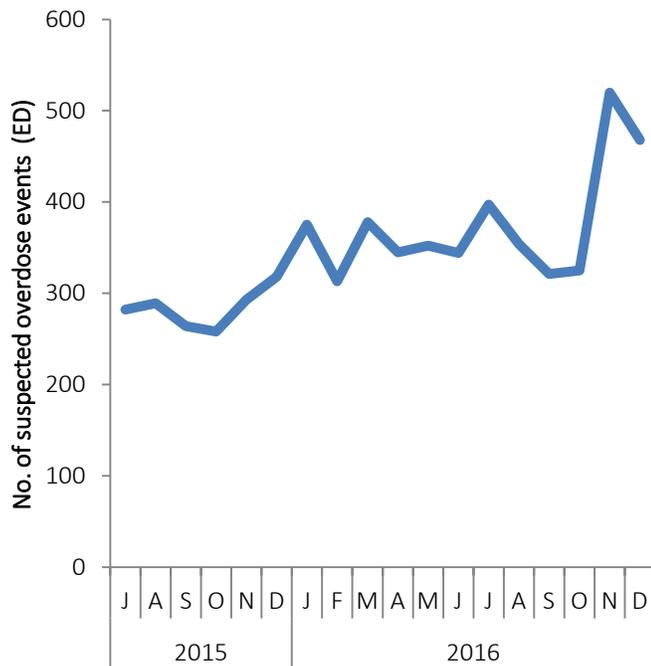
Figure 3. Rate of illicit drug overdose deaths, by age group, within Fraser Health region (2007-2016).



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 December 2016.



Data Source: Fraser Health Emergency Departments

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

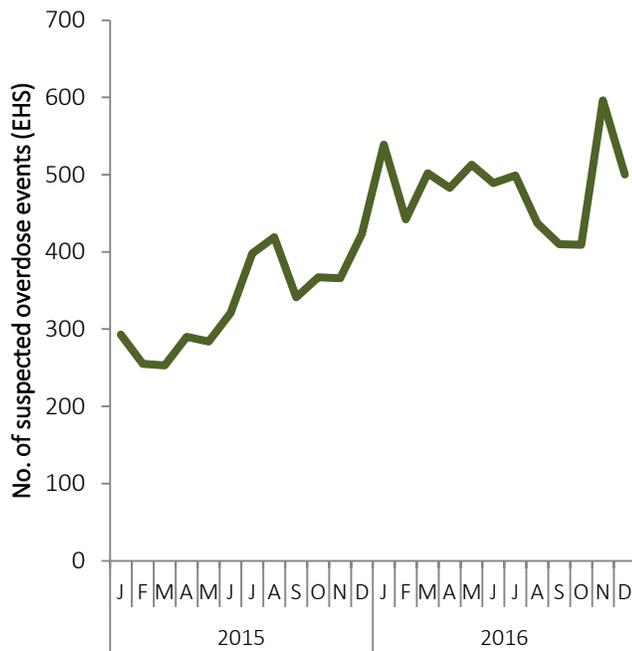
Community [^] of residence	No. events Dec 2016 (Monthly avg.)	No. events 2016	Rate/100,000 population
Abbotsford	57 (39.0)	468	407
Agassiz-Harrison	-- (2.5)	29	365
Burnaby	27 (24.7)	296	147
Chilliwack	44 (22.3)	267	361
City of Langley	14 (11.1)	133	614
Coquitlam	11 (11.8)	141	130
Delta	-- (8.7)	104	119
Hope	-- (2.0)	23	345
Maple Ridge	21 (27.1)	325	504
Mission	16 (9.5)	113	326
New Westminster	17 (14.9)	178	297
Pitt Meadows	-- (4.3)	51	342
Port Coquitlam	16 (10)	120	249
Port Moody	5 (5.5)	65	235
Surrey	172 (132.4)	1588	375
Township of Langley	12 (14.3)	171	195
White Rock	-- (3.4)	40	224
Non-Fraser residents	42 (31.7)	380	n/a
Fraser Health	468 (374.4)	4492	322

[^] 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.

-- counts under 5 not reported as they are potentially identifiable
Restricted to those 13 years of age or older

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 December 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 Dec 2016 (Monthly avg. [~])	No. events 2016	Rate/100,000 population
Abbotsford	53 (47.5)	569	494
Agassiz-Harrison	-- (3.1)	37	466
Burnaby	28 (39.8)	477	236
Chilliwack	39 (30.1)	361	487
City of Langley	22 (21.1)	253	1167
Coquitlam	22 (23.0)	276	253
Delta	7 (12.5)	149	170
Hope	-- (2.6)	31	464
Maple Ridge	33 (33.9)	406	629
Mission	14 (10.4)	124	358
New Westminster	34 (22.1)	265	442
Pitt Meadows	-- (4.0)	48	321
Port Coquitlam	10 (12.4)	148	307
Port Moody	-- (3.1)	37	133
Surrey	203 (197.7)	2372	560
Township of Langley	23 (18.9)	226	257
White Rock	-- (3.3)	39	218
Fraser Health	500 (484.9)	5818	416

Please note: December 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

-- counts under 5 not reported as they are potentially identifiable
Restricted to those 13 years of age or older

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.