

Provincial Overdose Emergency Monthly Situational Report – February 2017

This report covers the Fraser Health region, with data up to the end of February 28, 2017.

During February 2017, there was a modest decrease in the number of overdose deaths and number of overdose events seen in the Fraser Health region.

Illicit Drug Overdose Deaths: There was a decrease in the number of overdose deaths in February (n=29) compared to January (n=30). Overdose deaths from January to February 2017 were 23% and 146% higher, compared to the first two months of 2016 and 2015, respectively.

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

Take Home Naloxone: 56 new sites have joined since April 2016, bringing the total number of Take Home Naloxone sites in Fraser Health to 78. From January to February 2017, 1237 kits were dispensed in the region.

Please visit fraserhealth.ca/overdose to learn 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 (additional details below). Preliminary numbers, subject to change.

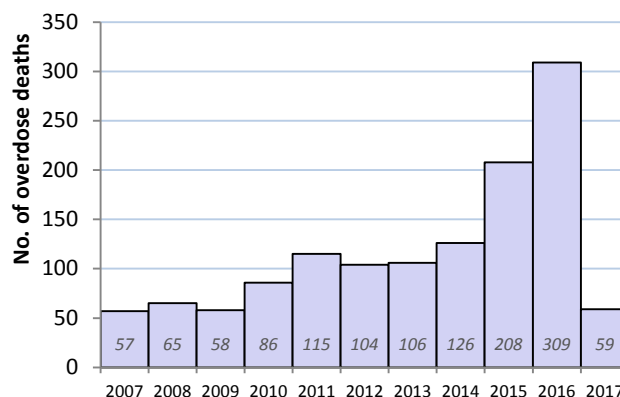
Overdose deaths within Fraser Health increased sharply in 2015 (Figure 1) and continue to be higher than historical levels. During February 2017, there were 29 illicit drug overdose deaths in Fraser Health, compared to 30 deaths during January 2017 (Appendix-Figure 2).

- From January to February 2017, the annualized rate, per 100,000, of overdose deaths was lower in Fraser Health (19.6) compared to B.C. (27.4).
- In Fraser Health, overdose deaths during the first two months of 2017 were 23% and 146% higher, compared to the first two months of 2016 and 2015, respectively.
- Surrey, Langley (City and Township), Abbotsford and Maple Ridge accounted for 67% of overdose deaths during 2016 (Appendix-Table 1).
- From January to February 2017, the overdose death rate was highest among 30-39 year olds, closely followed by 20-29 years old; this group saw the sharpest increase this year (Appendix-Figure 3). From January to February 2017, males accounted for 81% of all overdose deaths.

- In 2017, according to the BC Coroners Service, 83% of overdose deaths in Fraser Health happened inside (68% private residences, 15% other locations) and 14% happened outside on sidewalks, streets, vehicles, parks etc.

Data up to October 2016 showed that fentanyl was detected in 57% of overdose deaths in the region. Among these deaths, other substances most commonly detected include cocaine (57%), alcohol (28%), meth/amphetamines (29%) and heroin (36%).

Figure 1. Increase in number of illicit drug overdose deaths within Fraser Health.



Data Source: BC Coroner Service, 2017 data for Jan to Feb only.

Emergency Department – Suspected Overdose Events

Data Source: Fraser Health Emergency Departments (Additional details below). Preliminary numbers, subject to change.

During February 2017, there was a decrease in the number of suspected overdose events across Fraser Health Emergency Departments (EDs). During February, 337 suspected overdose events presented to the 12 EDs in the region, compared to 442 events during the preceding month (Appendix-Figure 4).

From January to February 2017, there were 779 suspected overdose events seen at Fraser Health EDs (Appendix-Table 2). Of these, Surrey, Abbotsford, Maple Ridge, City of Langley and Township of Langley accounted for 58% of all events.

During 2016 (Jan to Dec):

- The majority of events were among males (70%), 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 44% of all events.
- Opioids were associated with 78% 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.
- 9% of the patients with a suspected overdose were admitted to hospital.

BC Ambulance – Suspected Overdose Events

Data Source: Patient Care Reports, BC Ambulance, BC Emergency Health Services (Additional details below). Preliminary numbers, subject to change.

Compared to January, during February 2017 there was a decrease in the number of suspected overdose events attended to by paramedics in the Fraser Health region. The numbers for the most recent month are likely an underestimate due to time needed to enter and finalize data.

In February 2017, paramedics attended to 356 events (Appendix – Figure 5) within Fraser Health, compared to 502 events during January.

From January to February 2017, paramedics responded to 858 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 (72%) and those aged 19-39 years (54%).

From January to February 2017:

- 74% of suspected overdose events resulted in the patient being transported to a hospital.
- Paramedics administered naloxone during 233 (27%) events; additional naloxone may have been given by other first responders and by community members before paramedics arrived at the scene.
- Home/residence (43%) and street/highway (26%) were the most common locations where paramedics attended to suspected overdose events.

Naloxone Distribution

Data Source: BC Take Home Naloxone Program, BC Centre for Disease Control, data extracted March 19, 2017.

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, 56 new sites were added, bringing the total number of sites to 78. Furthermore, 66 community sites in the region have registered to receive naloxone boxes for in-facility overdose response.

From January to February 2017, 1,237 kits were dispensed in Fraser Health; this was over 300% higher than the same period in 2016. During 2016, 4,533 Take Home Naloxone kits were dispensed within Fraser Health.

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.

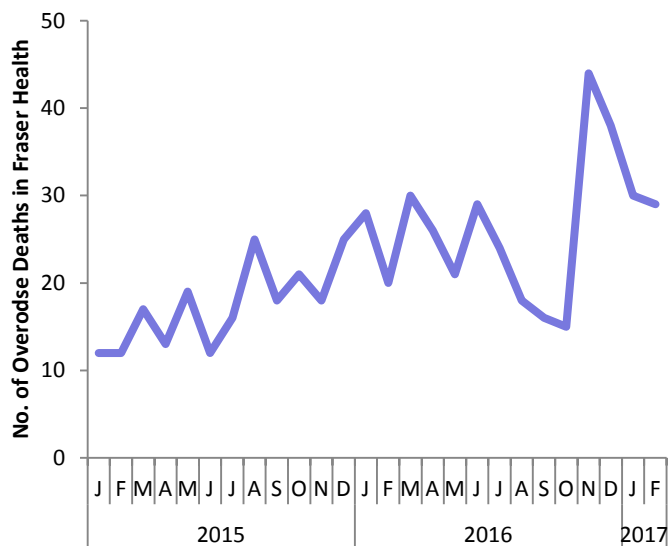
Additional Information

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.



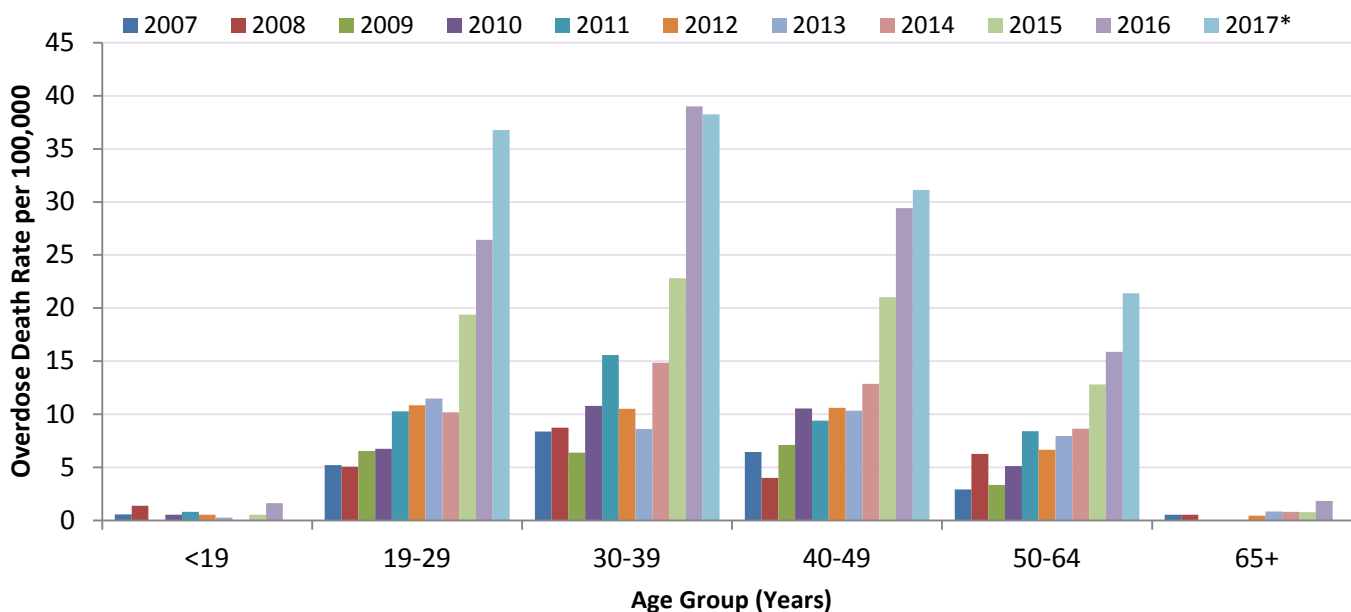
Data Source: BC Coroner Service. Preliminary data, numbers subject to change.

Table 1: Illicit drug overdose deaths within Fraser Health.

	No. Deaths Jan-Feb 2017	No. deaths 2016	No. deaths 2015	% Increase (2016 vs. 2015)
B.C.	219	922	513	80%
Fraser Health[^]	59	309	208	49%
Surrey	23	111	76	46%
Maple Ridge	2	27	29	-7%
Abbotsford	7	39	27	44%
Langley (City+ Township)	6	29	10	190%

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

Figure 3. Illicit drug overdose death rate per 100,000 people, by age group, within Fraser Health region (2007-2016).

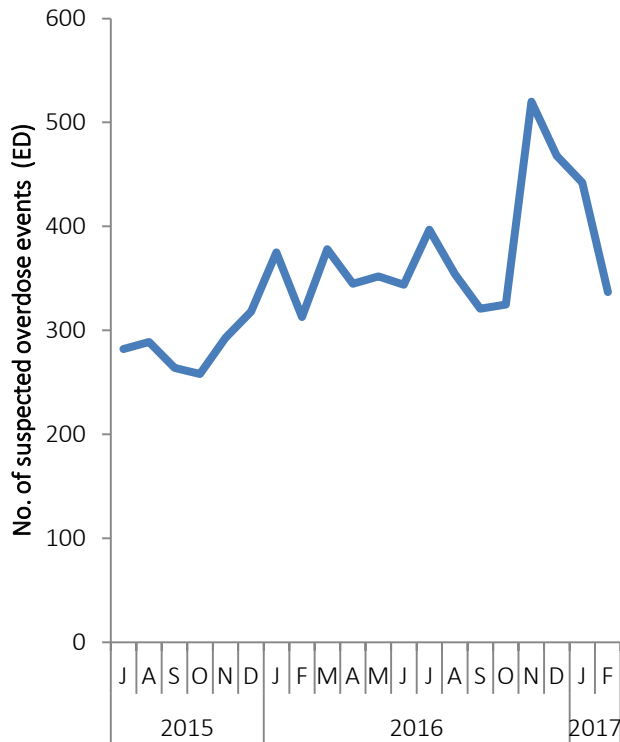


Data source: BC Coroner Service. Preliminary data, numbers subject to change.

* Annualized rate based on available months in 2017

Suspected Overdose Visits to Emergency Department

Figure 4. No. of suspected overdose events seen at Fraser Health Emergency Departments.



Data Source: Fraser Health Emergency Departments

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

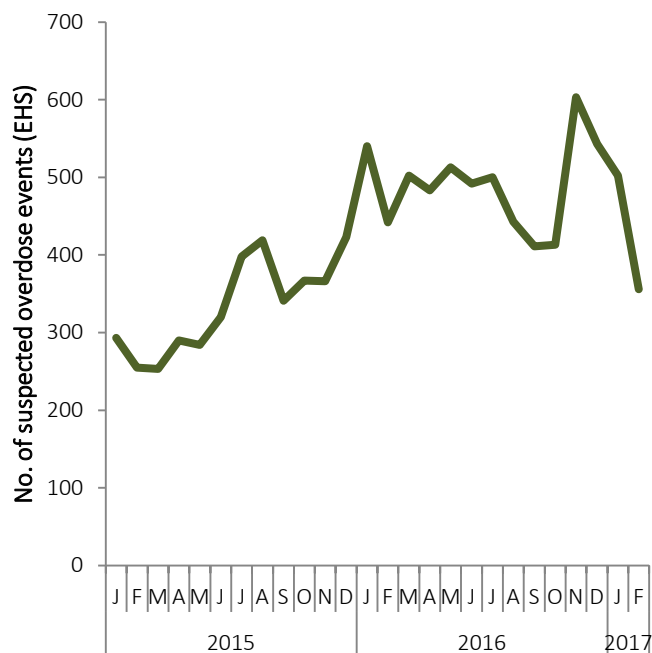
Community [^] of residence	No. events Feb 2017 (Avg. past 12 months [~])	No. events 2017 Jan-Feb (Rate per 100,000) [*]	No. events 2016 (Rate per 100,000)
Abbotsford	40 (42.7)	100 (521)	468 (407)
Agassiz-Harrison	-- (2.5)	-- (302)	29 (365)
Burnaby	24 (25.3)	47 (140)	296 (147)
Chilliwack	23 (24.5)	62 (502)	267 (361)
City of Langley	20 (13.0)	41 (1135)	133 (614)
Coquitlam	11 (12.5)	25 (137)	141 (130)
Delta	-- (8.6)	12 (82)	104 (119)
Hope	-- (2.0)	-- (90)	23 (345)
Maple Ridge	19 (27.9)	55 (512)	325 (504)
Mission	10 (9.5)	17 (294)	113 (326)
New Westminster	12 (15.2)	31 (310)	178 (297)
Pitt Meadows	-- (4.0)	6 (241)	51 (342)
Port Coquitlam	8 (10.4)	20 (249)	120 (249)
Port Moody	11 (5.9)	16 (346)	65 (235)
Surrey	114 (129.8)	240 (340)	1588 (375)
Township of Langley	5 (12.8)	17 (116)	171 (195)
White Rock	-- (2.8)	6 (201)	40 (224)
Non-Fraser residents	28 (33.4)	79 (n/a)	380 (n/a)
Fraser Health	337 (382)	779 (334)	4492 (322)

[^] Community based on reported residential address. Homeless people assigned to the community where Emergency Department was located
[~] based on average of past 12 months, including the most recent month
^{*} Rate annualized based on available months for 2017
 -- 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, within Fraser Health Region.



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 Feb 2017 (Avg. past 12 months [~])	No. events 2017 Jan-Feb (Rate per 100,000) [*]	No. events 2016 (Rate per 100,000)
Abbotsford	50 (49.5)	107 (558)	572 (497)
Agassiz-Harrison	-- (2.8)	-- (151)	37 (466)
Burnaby	30 (39.9)	68 (202)	484 (239)
Chilliwack	18 (32.4)	60 (486)	373 (503)
City of Langley	21 (21.9)	54 (1495)	255 (1176)
Coquitlam	20 (23.0)	43 (236)	281 (257)
Delta	5 (12.1)	17 (116)	152 (173)
Hope	-- (3.0)	9 (808)	31 (464)
Maple Ridge	20 (32.4)	56 (521)	408 (632)
Mission	6 (9.2)	16 (277)	124 (358)
New Westminster	12 (21.2)	33 (330)	269 (448)
Pitt Meadows	-- (3.7)	7 (281)	48 (321)
Port Coquitlam	10 (12.2)	20 (249)	149 (309)
Port Moody	-- (3)	5 (108)	37 (133)
Surrey	140 (192.5)	319 (452)	2395 (566)
Township of Langley	16 (18.8)	37 (253)	229 (260)
White Rock	-- (3.2)	5 (168)	40 (224)
Fraser Health	356 (480)	858 (368)	5884 (421)

Please note: Numbers for the most recent month are likely an underestimate and will increase as entry of BC Ambulance Patient Care Forms is completed.

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

[~] based on average of past 12 months, including the most recent month

^{*} Rate annualized based on available months for 2017

-- 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.