

Provincial Overdose Emergency Monthly Situational Report – October 2016

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

Fraser Health and other health regions in BC had an increase in overdose visits and deaths during November. This increase will be reflected in the next report, which we hope to release in late December 2016.

Illicit Drug Overdose Deaths: Numbers continue to be well above historical levels throughout Fraser Health region.

Suspected Overdose Events: Large numbers of suspected overdose events continued to be seen at Emergency Departments in Fraser Health and by BC Ambulance Service.

Take Home Naloxone (THN): 34 news sites added since April 2016, bringing the total THN sites in Fraser Health to 56. A total of 2,360 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

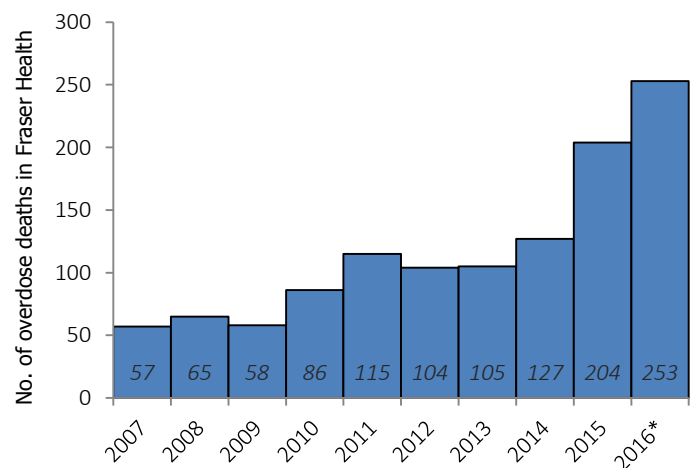
Data Source: BC Coroner Service, data up to the end of October 2016 (additional details below). Preliminary numbers, subject to change as Coroner investigations finalized.

Overdose deaths within Fraser Health increased sharply in 2015 (Figure 1) and continue to be higher than historical levels. From January to October 2016, there were 211 illicit overdose deaths (Appendix-Figure 2). In October 2016, there were 14 illicit drug overdose deaths in the health region, compared to 16 in September.

- Surrey, Langley (City and Township), Abbotsford and Maple Ridge accounted for 71% of overdose deaths (Appendix-Table1).
- Death rate was highest among 30-39 year olds (Appendix-Figure 3).
- Males accounted for 82% of all overdose deaths.
- In 2016, 85% of overdose deaths happened inside at housing, facilities, public building etc. and around 13% happened outside in vehicles, sidewalks, streets, parks etc.

Fentanyl was detected in 56% of overdose deaths in the region. Among these deaths, other most commonly detected substances were 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 October, 2016
Data Source: BC Coroner Service

Emergency Department - Suspected Overdose Events

Data Source: Fraser Health emergency departments, data up to the end of October 2016 (Additional details below). Preliminary numbers, subject to change as data are finalized and changes made to enhance the detection algorithms.

Emergency Departments (ED) across the Fraser Health region continue to treat a large number of suspected overdose events each week (Appendix - Figure 4). During October 2016, 325 suspected overdose events presented to the 12 EDs in Fraser Health.

From January to September 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:

- The majority of events were among males (67%), 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 substances consumed.
- Approximately 12% of the patients with suspected overdose were admitted to hospital.

BC Ambulance – Suspected Overdose Events

Data Source: Patient Care Reports, BC Ambulance, BC Emergency Health Services, data up to the end of October 2016 (Additional details below). Preliminary numbers, subject to change as data are finalized and changes made to enhance the detection algorithms.

Paramedics continue to respond to large numbers of overdose events. In October, paramedics responded to 376 events within Fraser Health, compared to 403 events during September (Appendix – Figure 5). This year they have responded to 4,649 suspected overdose events (Appendix – Table 3).

The age and gender profile of suspected overdose events was similar to trends seen in Emergency Departments;

majority of the events were among males (68.3%) and those aged 19-39 years (54.8%).

In 2016:

- Over 80% of suspected overdose events resulted in the patient being transported to hospital.
- Paramedics administered naloxone during 1320 (28.2%) events; additional naloxone may have been given by other first responders and by community members.
- Most common location types, where paramedics responded to suspected overdose events, were home/residence (38.3%) and street or open space (27.8%).

Take Home Naloxone

Data Source: BC Take Home Naloxone Program, BC Centre for Disease Control, latest data November 15, 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-four new sites have been added since the declaration, bringing the total number of sites to 56 in the Fraser Health region.

From January to October of this year, 2360 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 October 2016).

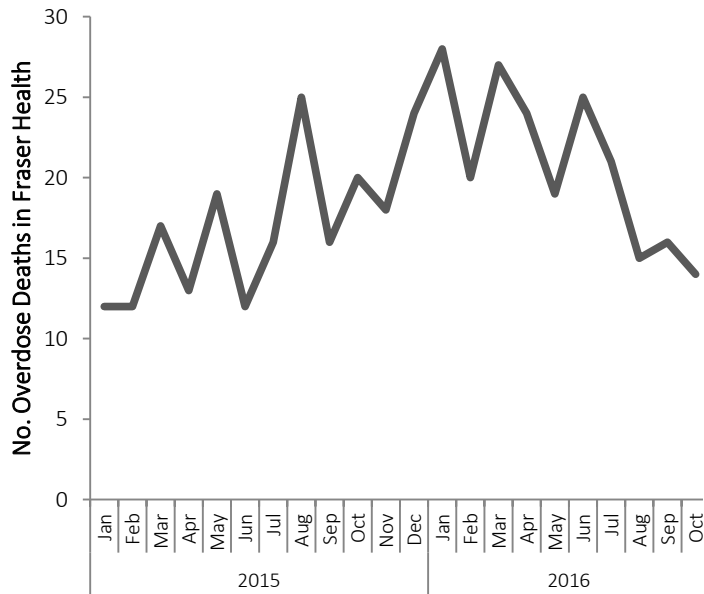


Table 1: Illicit drug overdose deaths, projected deaths in 2016 and projected increase compared to 2015.

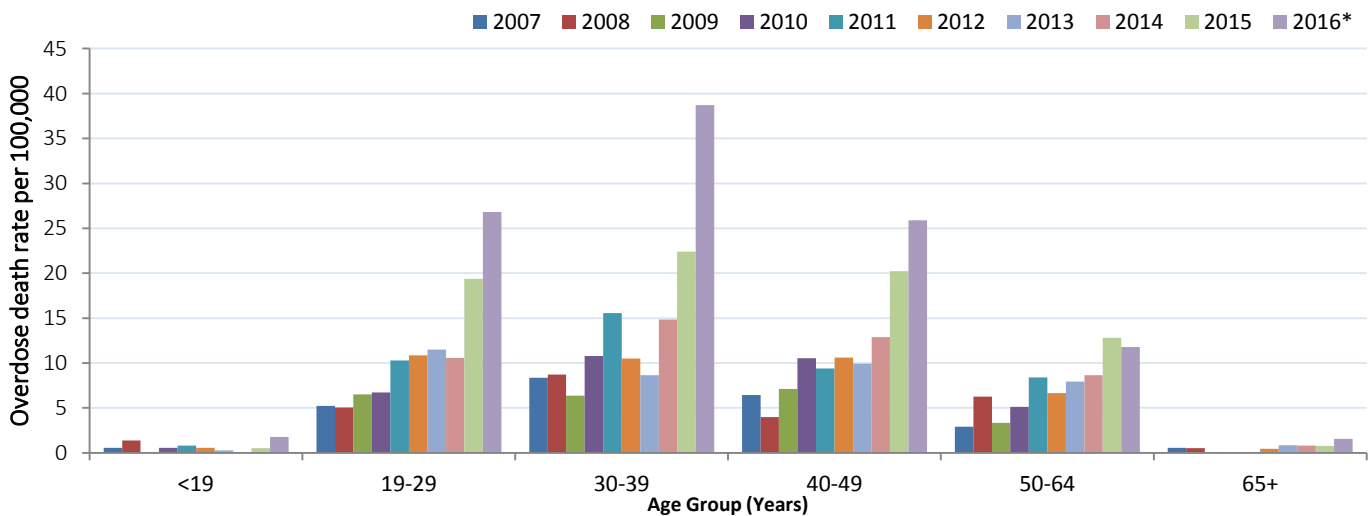
	No deaths Jan-Oct, 2016	No. projected* deaths 2016	No. deaths 2015	% Increase (2016* vs. 2015)
BC	622	746	505	48%
Fraser Health^	211	253	202	25%
Surrey	76	91	72	27%
Maple Ridge	24	29	27	7%
Abbotsford	28	34	25	34%
Langley (City+ Township)	21	25	10	152%

* Projected counts calculated by annualizing the data available e.g. Deaths X 12 months/10 (months up to October)

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

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

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

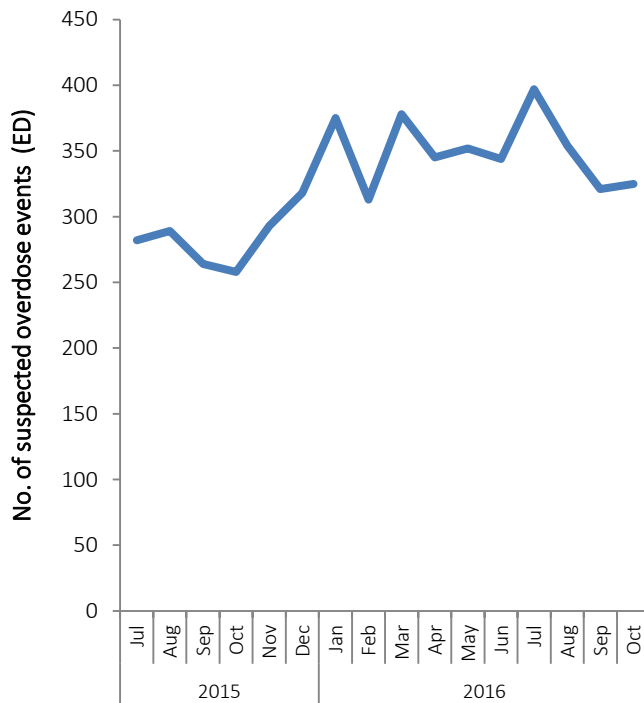


* Annualized based on data from January to October 2016

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 (ED), July 2015 to October 2016.



Data Source: Fraser Health Emergency Departments

Table 2. Suspected overdose events presenting at Fraser Health emergency departments.

Community [^] of residence	No. events Oct 2016 (Monthly avg.~)	No. events Jan-Oct, 2016	Rate/100,000 population
Abbotsford	35 (35.4)	354	369
Agassiz-Harrison	-- (3.3)	26	393
Burnaby	27 (23.9)	239	142
Chilliwack	18 (18.0)	180	292
City of Langley	22 (11.2)	112	620
Coquitlam	7 (10.7)	107	118
Delta	5 (9.0)	90	123
Hope	-- (2.0)	14	251
Maple Ridge	23 (27.8)	278	517
Mission	8 (8.0)	80	277
New Westminster	12 (14.4)	144	288
Pitt Meadows	-- (4.4)	44	353
Port Coquitlam	12 (8.8)	88	219
Port Moody	7 (5.3)	53	229
Surrey	94 (121.6)	1216	345
Township of Langley	16 (14.6)	146	199
White Rock	-- (4.0)	32	215
Non-Fraser residents	33 (30.1)	301	n/a
Fraser Health	325 (350.4)	3504	301

[^] 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.

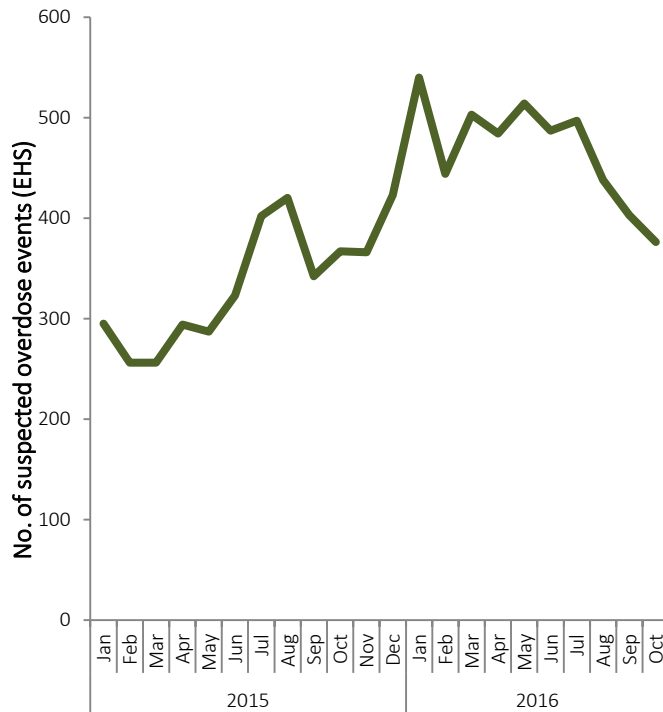
* Rates annualized based on data from January to October 2016

~ Based on data from January to October, 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 October 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 suspected OD event	No. events Oct 2016 (Monthly avg.~)	No. events Jan-Oct, 2016	Rate/100,000 population
Abbotsford	42 (44.7)	447	466
Agassiz-Harrison	-- (3.1)	31	468
Burnaby	39 (40.3)	403	239
Chilliwack	13 (25.0)	250	405
City of Langley	32 (21.5)	215	1190
Coquitlam	19 (22.8)	228	251
Delta	8 (12.8)	128	175
Hope	-- (2.2)	22	395
Maple Ridge	17 (35.1)	351	653
Mission	9 (9.3)	93	322
New Westminster	17 (20.4)	204	408
Pitt Meadows	-- (4.2)	42	337
Port Coquitlam	10 (11.0)	110	274
Port Moody	-- (3.3)	33	143
Surrey	141 (191.3)	1913	542
Township of Langley	19 (18.5)	185	253
White Rock	-- (3.0)	30	201
Fraser Health	376 (468.5)	4649	402

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

* Rates annualized based on data from January to October 2016

~ Based on data from January to October, 2016

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

Data Source: Patient Care Records data from BC Emergency Health Services. These are preliminary data and are subject to change as additional data entered in the live BC EHS database.

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 detect 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 delay in 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 events and not confirmed cases. These numbers may 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 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.