

This report summarizes all unintentional illicit drug overdose deaths in British Columbia (accidental and undetermined) that occurred between January 1, 2007 and November 30, 2016, inclusive. It includes confirmed and suspected illicit overdose deaths. *Please note that data is subject to change as investigations are concluded.*

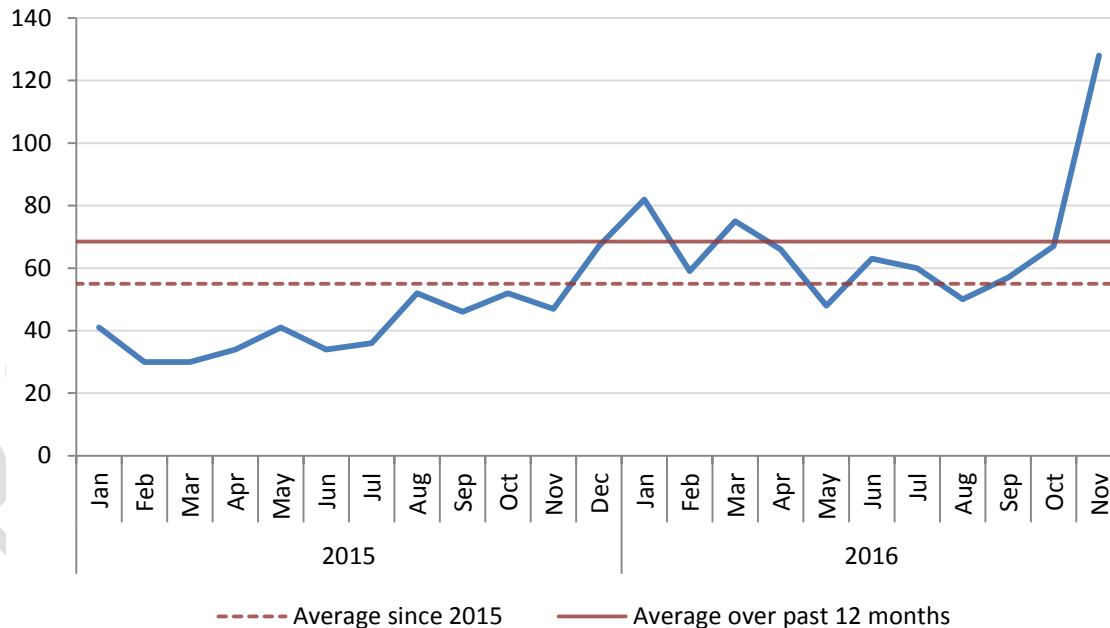
Inclusion Criteria: The illicit drug overdose category includes the following:

- Street drugs (Controlled and illegal drugs: heroin, cocaine, MDMA, methamphetamine, illicit fentanyl etc.)
- Medications not prescribed to the decedent but obtained/purchased on the street or from unknown means
- Origin of drug not known or Combinations of the above

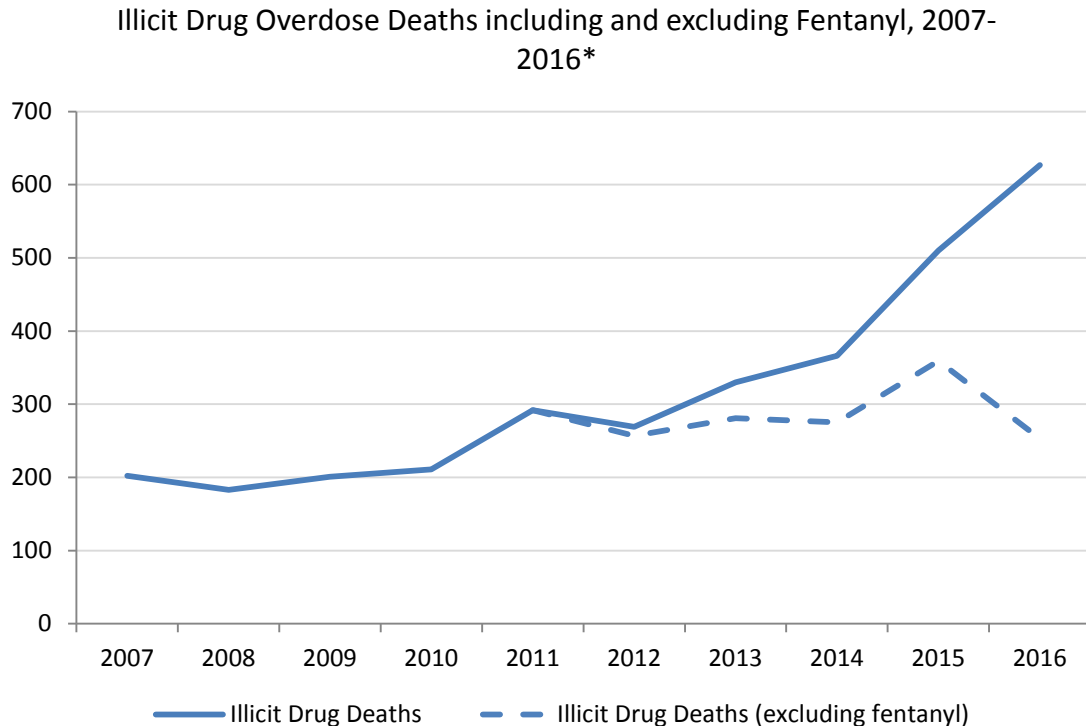
Summary

- There were 755 apparent illicit drug overdose deaths from Jan to Nov 2016. This is a 70.4% increase over the number of death occurring during the same period in 2015 (443).
- The number of illicit drug overdose deaths in Nov 2016 (128) is the highest recorded in a month in BC and is more than double the average number of illicit drug overdose deaths since 2015 (55).

Illicit Drug Overdose Deaths by Month, 2015-2016^[2]



- Illicit fentanyl-detected deaths appear to account largely for the increase in illicit drug overdose deaths since 2012 as the number of illicit drug overdose deaths excluding fentanyl-detected has remained relatively stable since 2011 (average of 293 deaths per year).



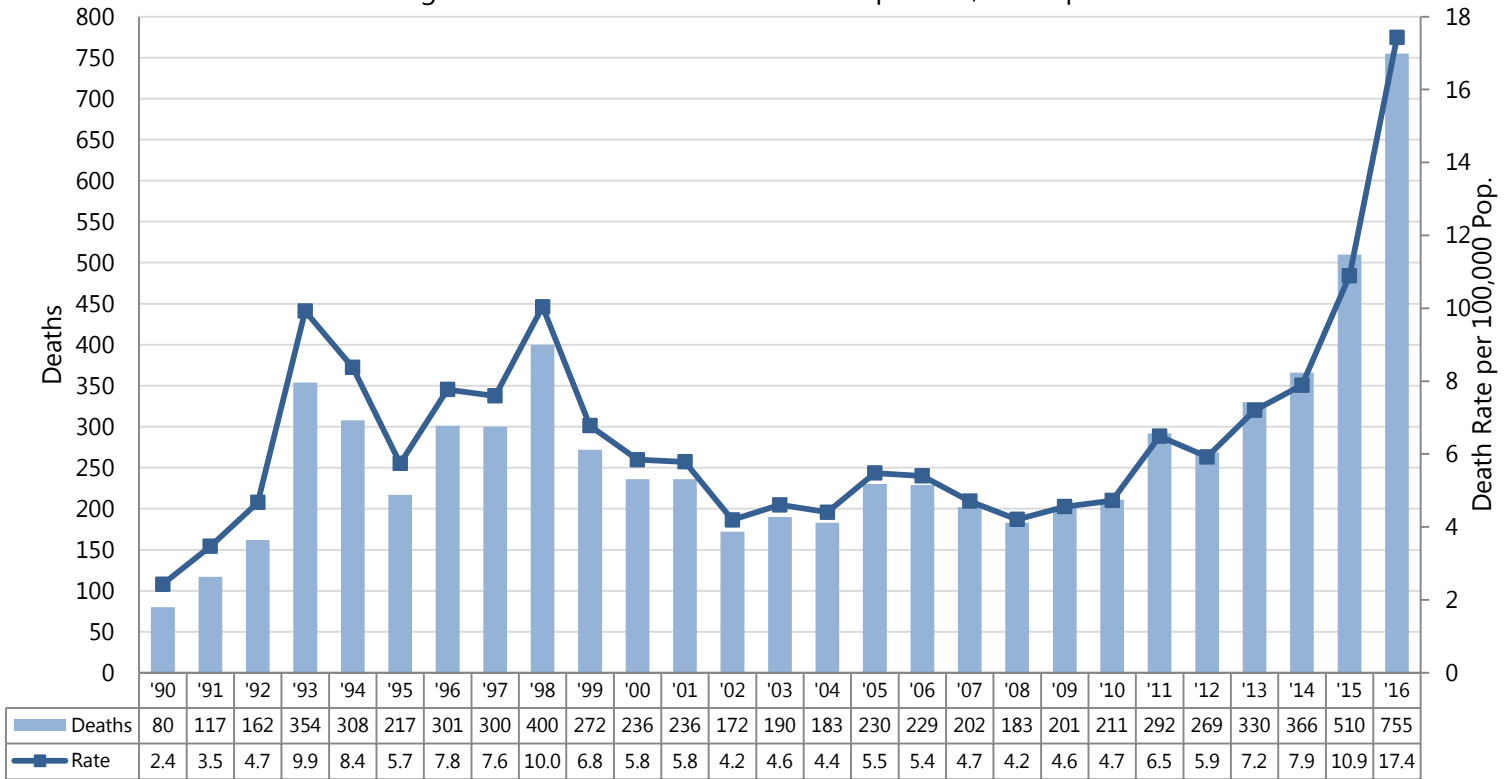
*Data to Oct 2016

- Individuals aged 30-39 and 40-49 have accounted for the largest percentage of illicit drug overdose deaths in Jan – Nov 2016 (28.3% and 23.4%, respectively). About 75% of illicit drug overdose deaths were among individuals between the ages of 19-49 years. Males accounted for 80.1% of apparent illicit drug overdose deaths in Jan – Nov 2016.
- Saturdays and Sundays were the days of the week most fatal illicit drug overdoses occurred in Jan to Nov 2016.
- Top three townships where fatal illicit drug overdoses occurred in 2007-2016, were Vancouver, Surrey, and Victoria.
- Fraser Health Authority had the highest number (259) of illicit drug overdose deaths in Jan – Nov 2016 which makes up 34.3% of all illicit drug overdose deaths during that period.
- Vancouver Island Health Authority had the highest rate of illicit drug overdose deaths (19.7 deaths per 100,000 individuals) in Jan – Nov 2016 among all health authorities and saw the largest increase in rate from 2015 (153% increase). Overall, the rate of illicit drug overdose deaths in BC increased 59.6% in Jan – Nov 2016 compared with 2015.

- The number of illicit drug overdose deaths in Fraser Health Authority almost tripled (193% increase) in November 2016 compared with the previous month and more than doubled in Vancouver Coastal Health Authority (130% increase).
- The majority of fatal illicit drug overdoses in Jan – Nov 2016 occurred inside (87.9%) while 11.1% occurred outside and 0.9% had an unknown injury location.
- Preliminary data for Jan – Oct 31, 2016, suggest that the proportion of illicit drug overdose deaths for which fentanyl was detected (alone or in combination with other drugs) increased to approximately 60% in 2016 from 30% in 2015. *This is subject to change as toxicology results are updated.*

BC Data and Rates

Illicit Drug Overdose Deaths and Death Rate per 100,000 Population^[2,5]



Illicit Drug Overdose Deaths by Month, British Columbia, 2007-2016 ^[2]										
Month	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Jan	15	18	23	16	24	20	20	22	41	82
Feb	14	8	15	14	24	17	21	39	30	59
Mar	19	17	10	15	25	25	32	28	30	75
Apr	24	18	8	9	26	31	31	29	34	66
May	10	18	19	22	21	19	28	40	41	48
Jun	18	18	16	21	22	25	25	28	34	63
Jul	11	24	19	23	33	29	37	25	36	60
Aug	21	16	27	24	22	19	21	37	52	50
Sep	14	12	16	20	22	16	28	31	46	57
Oct	15	10	13	18	23	19	19	35	52	67
Nov	19	9	18	18	26	28	31	28	47	128
Subtotal	180	168	184	200	268	248	293	342	443	755
Dec	22	15	17	11	24	21	37	24	67	
Total	202	183	201	211	292	269	330	366	510	755
Average	16.8	15.3	16.8	17.6	24.3	22.4	27.5	30.5	42.5	68.6

BC Data by Place of Injury

Illicit Drug Overdose Deaths by Place of Injury, 2016 ^[2]	
	Place of Injury
Inside	664
Outside	84
Unknown	7
Total	755

Preliminary circumstances suggest that the majority of fatal illicit drug overdoses in Jan – Oct 2016 occurred inside (87.1%) while 11.4% occurred outside and 1.4% had an unknown injury location.

Inside - includes all housing (temporary or permanent), facilities, occupational sites, public buildings, and businesses.

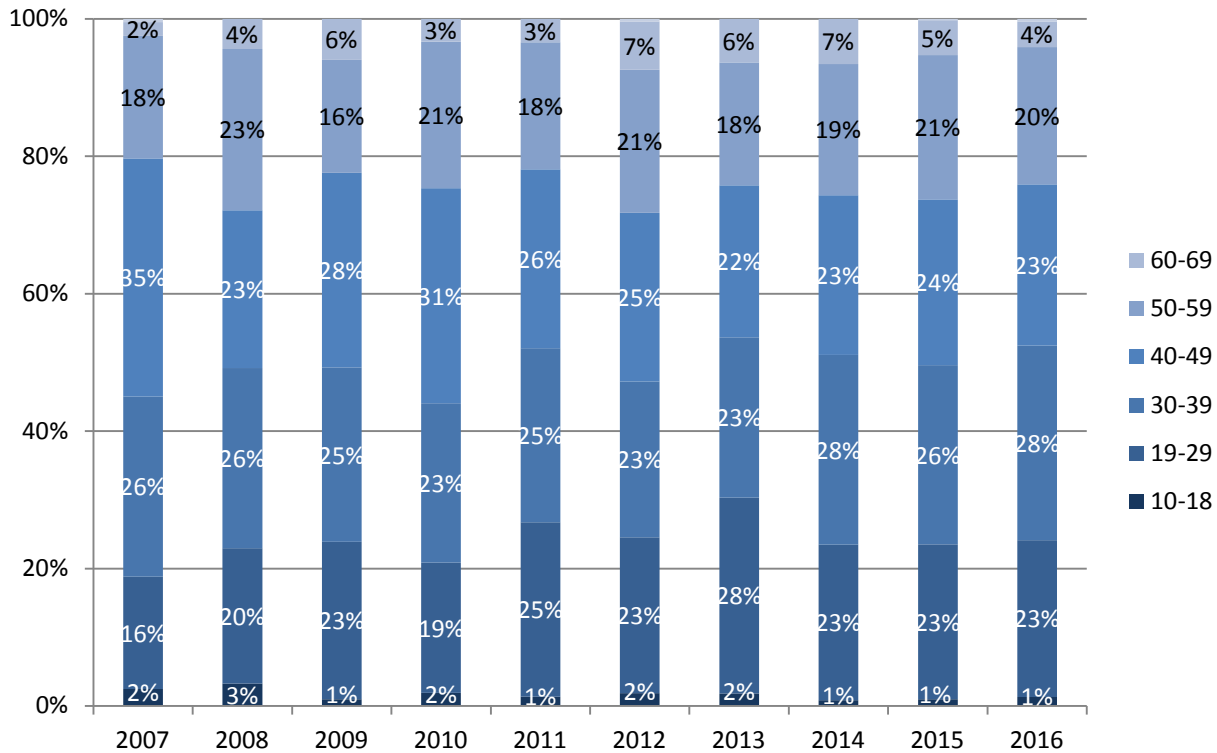
Outside – includes vehicles, streets, sidewalks, parking lots, public parks, wooded areas, and campgrounds

BC Data by Gender/Age:

Illicit Drug Overdose Deaths by Gender, 2007-2016 ^[2]										
Gender	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Female	47	49	55	49	81	75	78	86	99	150
Male	155	134	146	162	211	194	252	280	411	605
Total	202	183	201	211	292	269	330	366	510	755

Illicit Drug Overdose Deaths by Age Group, 2007-2016 ^[2]										
Age Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
10-18	5	6	2	4	4	5	6	3	5	10
19-29	33	36	46	40	74	61	94	83	115	172
30-39	53	48	51	49	74	61	77	101	133	214
40-49	70	42	57	66	76	66	73	85	123	177
50-59	36	43	33	45	54	56	59	70	107	151
60-69	4	8	12	7	10	19	21	24	26	28
70-79	1	0	0	0	0	1	0	0	1	3
Total	202	183	201	211	292	269	330	366	510	755

Illicit Drug Overdose Deaths by Age Group, 2007-2016



Age-Specific Illicit Drug Overdose Death Rates per 100,000, 2007-2016 ^[2,5]

Age Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
10-18	1.0	1.3	0.4	0.9	0.9	1.1	1.3	0.7	1.1	2.5
19-29	5.2	5.5	6.9	5.9	10.9	8.9	13.7	11.9	16.5	26.7
30-39	9.1	8.2	8.6	8.3	12.5	10.2	12.7	16.4	21.3	37.0
40-49	10.1	6.1	8.3	9.7	11.3	9.9	11.2	13.3	19.4	31.0
50-59	5.8	6.8	5.1	6.8	8.0	8.2	8.5	10.0	15.2	23.1
60-69	1.0	1.8	2.6	1.5	2.0	3.7	3.9	4.3	4.5	5.1
70-79	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	0.9
Total	4.7	4.2	4.6	4.7	6.5	5.9	7.2	7.9	10.9	17.4

2016 age-specific population was estimated by adding the average population change over the past 5 years to the 2015 population estimate for each age group. 2016 age-specific rates were calculated by dividing the number of deaths by the estimated 2016 population multiplied by the fraction of months that have passed in the year for this reporting period for each age group.

BC Data by Day of Week:

Illicit Drug Overdose Deaths by Day of Week of Injury, British Columbia, 2007-2016(YTD) ^[2,3]										
Day	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Monday	25	21	15	29	39	32	33	38	68	82
Tuesday	23	24	24	26	26	35	42	37	61	88
Wednesday	24	25	31	30	34	37	35	48	65	103
Thursday	24	25	27	33	51	34	41	59	72	115
Friday	38	31	28	33	42	32	55	60	79	101
Saturday	34	34	34	35	53	46	73	72	86	136
Sunday	34	23	42	25	47	53	51	52	79	130
Total	202	183	201	211	292	269	330	366	510	755

BC Data by Township of Injury:

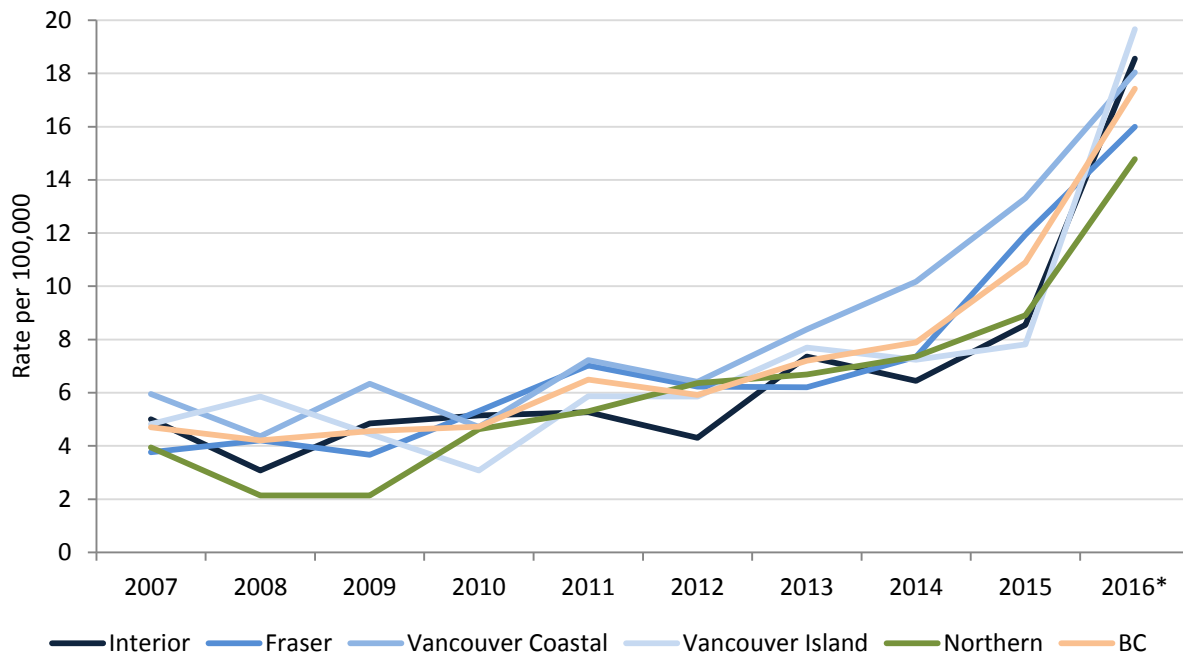
Illicit Drug Overdose Deaths by Top Townships of Injury, 2007-2016 ^[2,4]										
Township	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Vancouver	59	38	60	42	68	65	80	99	134	164
Surrey	22	20	23	32	42	44	36	43	76	92
Victoria	19	29	13	13	17	17	25	20	18	60
Kelowna	6	2	5	9	14	8	12	12	19	40
Burnaby	9	12	8	9	10	10	13	11	16	29
Abbotsford	3	4	4	10	16	7	9	7	27	32
Nanaimo	2	2	6	4	8	6	20	16	19	25
Maple Ridge	5	2	6	4	4	5	10	14	29	25
Kamloops	11	7	7	10	2	5	8	7	7	32
Langley	3	5	2	3	9	5	10	10	10	24
Other Township	63	62	67	75	102	97	107	127	155	232
Total	202	183	201	211	292	269	330	366	510	755

Health Authority Data:

Illicit Drug Overdose Deaths by Health Authority, 2007-2016 ^[2,4,6]										
HA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Interior	35	22	35	37	38	31	53	47	63	126
Fraser	57	65	58	86	115	104	105	126	208	259
Vancouver Coastal	64	47	69	52	80	72	95	117	154	193
Vancouver Island	35	43	33	23	44	44	58	55	60	139
Northern	11	6	6	13	15	18	19	21	25	38
BC	202	183	201	211	292	269	330	366	510	755

Illicit Drug Overdose Death Rates by Health Authority per 100,000, 2007-2016 ^[2,4-6]										
HA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Interior	5.0	3.1	4.9	5.2	5.3	4.3	7.4	6.4	8.5	18.6
Fraser	3.8	4.2	3.7	5.3	7.0	6.2	6.2	7.3	11.9	16.0
Vancouver Coastal	6.0	4.4	6.3	4.7	7.2	6.4	8.4	10.2	13.3	18.0
Vancouver Island	4.8	5.9	4.5	3.1	5.9	5.9	7.7	7.2	7.8	19.7
Northern	3.9	2.1	2.1	4.6	5.3	6.4	6.7	7.4	8.9	14.8
BC	4.7	4.2	4.6	4.7	6.5	5.9	7.2	7.9	10.9	17.4

Illicit Drug Overdose Death Rates by Health Authority, 2007-2016



2016 population was estimated by adding the average population change over the past 5 years to the 2015 population estimate. 2016 rates were calculated by dividing the number of deaths by the estimated 2016 population multiplied by the fraction of months that have passed in the year for this reporting period.

Illicit Drug Overdose Deaths by Month of Death and Health Authority, 2016 ^[2,4,6]						
Month	Interior	Fraser	Vancouver Coastal	Vancouver Island	Northern	Total
Jan	16	28	20	14	4	82
Feb	10	20	15	12	2	59
Mar	12	28	13	15	7	75
Apr	8	25	14	14	5	66
May	9	20	6	9	4	48
Jun	9	25	18	7	4	63
Jul	8	22	12	15	3	60
Aug	6	16	16	10	2	50
Sep	14	16	13	12	2	57
Oct	15	15	20	13	4	67
Nov	19	44	46	18	1	128
Total	126	259	193	139	38	755

Illicit Drug Overdose Deaths by Health Services Delivery Area, 2007-2016 ^[2,4,6]										
HSDA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
East Kootenay	2	2	1	0	1	2	4	4	2	7
Kootenay Boundary	4	0	2	3	4	4	2	3	6	6
Okanagan	13	9	15	18	28	16	32	27	42	65
Thompson Cariboo	16	11	17	16	5	9	15	13	13	48
Fraser East	9	14	9	22	31	20	19	16	41	48
Fraser North	19	22	23	26	25	30	35	51	74	83
Fraser South	29	29	26	38	59	54	51	59	93	128
Richmond	0	1	3	4	4	1	3	3	5	10
Vancouver	59	38	60	42	68	65	80	99	134	164
North Shore/Coast Garibaldi	5	8	6	6	8	6	12	15	15	19
South Vancouver Island	21	31	15	13	17	20	26	23	22	69
Central Vancouver Island	8	6	13	6	17	20	24	25	30	49
North Vancouver Island	6	6	5	4	10	4	8	7	8	21
Northwest	2	2	0	3	1	0	6	2	6	8
Northern Interior	7	3	5	7	8	12	8	11	15	15
Northeast	2	1	1	3	6	6	5	8	4	15
Total	202	183	201	211	292	269	330	366	510	755

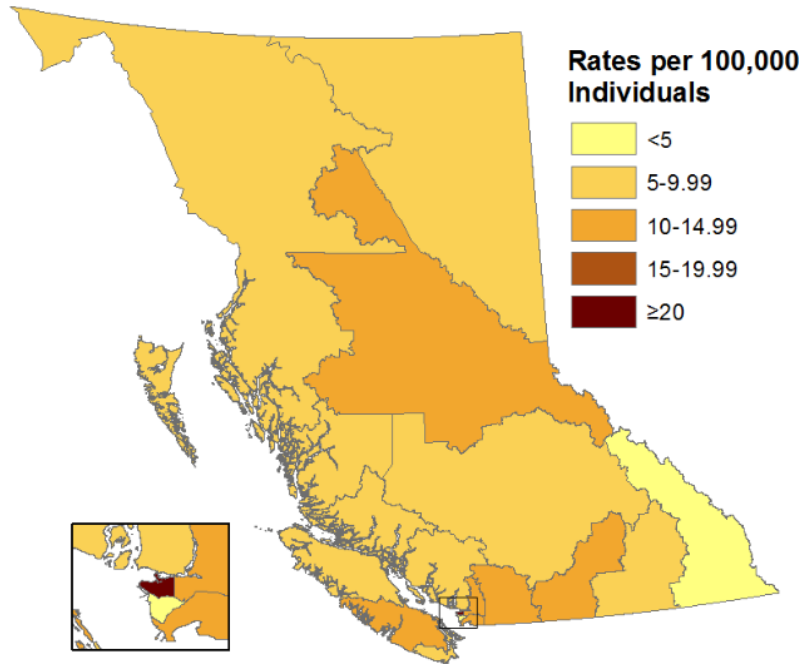
Illicit Drug Overdose Death Rates by Health Services Delivery Area per 100,000, 2007-2016^[2,4-6]										
HSDA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
East Kootenay	2.7	2.6	1.3	0.0	1.3	2.6	5.3	5.2	2.6	9.9
Kootenay Boundary	5.2	0.0	2.6	3.9	5.1	5.2	2.6	3.9	7.8	8.5
Okanagan	3.9	2.6	4.3	5.2	8.1	4.6	9.2	7.6	11.6	19.4
Thompson Cariboo	7.5	5.1	7.8	7.4	2.3	4.1	6.9	5.9	5.9	23.7
Fraser East	3.3	5.1	3.2	7.8	10.9	7.0	6.6	5.5	13.9	17.5
Fraser North	3.3	3.8	3.8	4.2	4.0	4.8	5.5	7.9	11.3	13.7
Fraser South	4.3	4.2	3.7	5.3	8.0	7.2	6.6	7.6	11.7	17.3
Richmond	0.0	0.5	1.6	2.0	2.0	0.5	1.5	1.5	2.4	5.2
Vancouver	9.5	6.1	9.6	6.6	10.7	10.1	12.2	15.0	20.1	26.5
North Shore/Coast Garibaldi	1.9	3.0	2.2	2.2	2.9	2.2	4.3	5.3	5.3	7.3
South Vancouver Island	5.9	8.6	4.1	3.5	4.6	5.4	7.0	6.2	5.8	19.8
Central Vancouver Island	3.2	2.3	5.0	2.3	6.5	7.6	9.1	9.4	11.2	19.8
North Vancouver Island	5.2	5.1	4.2	3.4	8.3	3.4	6.7	5.8	6.6	18.8
Northwest	2.7	2.7	0.0	4.1	1.4	0.0	8.2	2.7	8.3	12.1
Northern Interior	5.0	2.1	3.6	5.0	5.6	8.5	5.7	7.8	10.8	11.9
Northeast	3.1	1.5	1.5	4.5	8.9	8.8	7.2	11.3	5.7	23.3
Total	4.7	4.2	4.6	4.7	6.5	5.9	7.2	7.9	10.9	17.4

Notes:

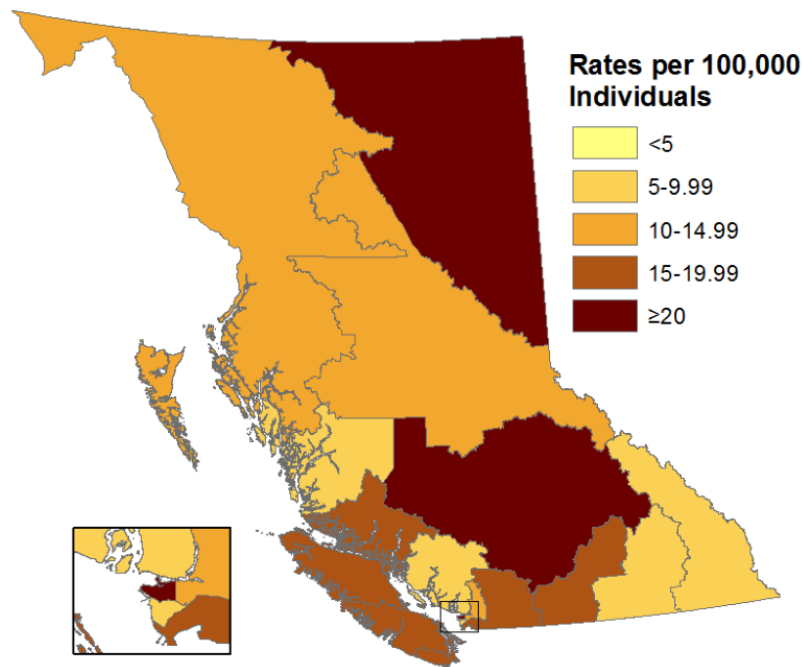
1. The BCCS operates in a live database environment. Some data for more recent years is based on preliminary circumstances and is subject to change as investigations are concluded. Data are not directly comparable to published counts from previous years.
2. 2016 data includes January 1, 2016 to November 31, 2016.
3. Date of death was used in tables where date of injury was unknown.
4. Death township was used in 5 cases of unknown or out of province injury township.
5. 2016 population was estimated by adding the average population change over the past 5 years to the 2015 population estimate. 2016 rates were calculated by dividing the number of deaths by the estimated 2016 population multiplied by the fraction of months that have passed in the year for this reporting period.
6. Health Region breakdowns can be found at:
<http://www.bcstats.gov.ca/statisticsbysubject/geography/referencemaps/health.aspx>

Illicit Drug Overdose Death Rate Maps by Health Services Delivery Area

2015 Illicit Drug Overdose Death Rates by Health Services Delivery Area



2016 Illicit Drug Overdose Death Rates by Health Services Delivery Area^[2]



References for health regions can be found at:

<http://www.bcstats.gov.bc.ca/statisticsbysubject/geography/referencemaps/health.aspx>.