

This report summarizes all unintentional illicit drug overdose deaths in British Columbia (accidental and undetermined) that occurred between January 1, 2007 and December 31, 2016, inclusive. It includes confirmed and suspected illicit overdose deaths. *Please note that data is subject to change as investigations are concluded.*

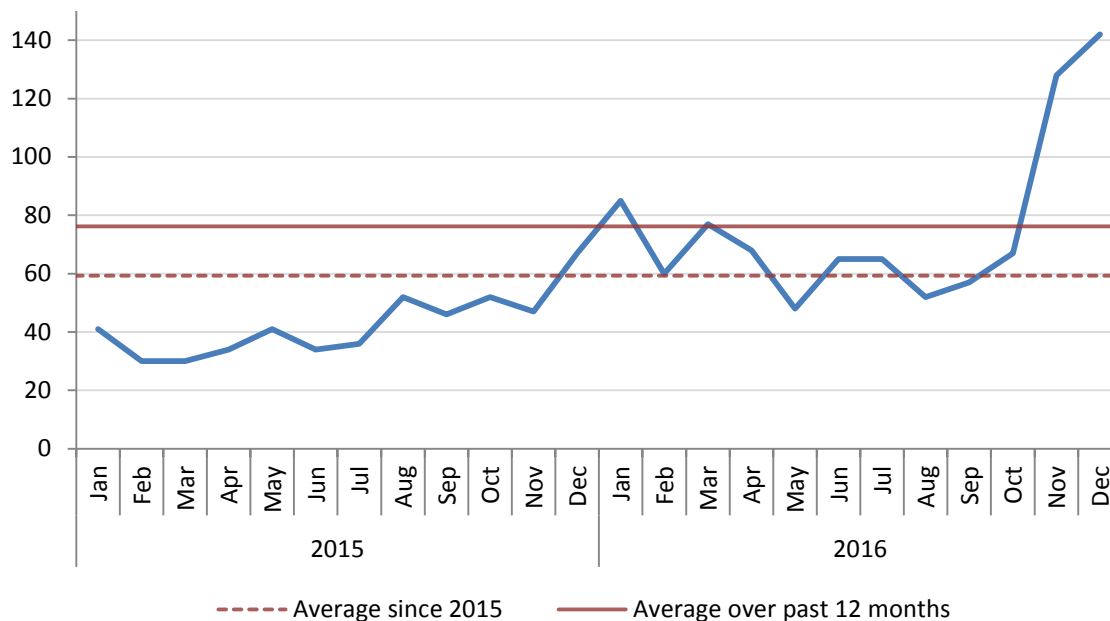
Inclusion Criteria: The illicit drug overdose category includes the following:

- 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

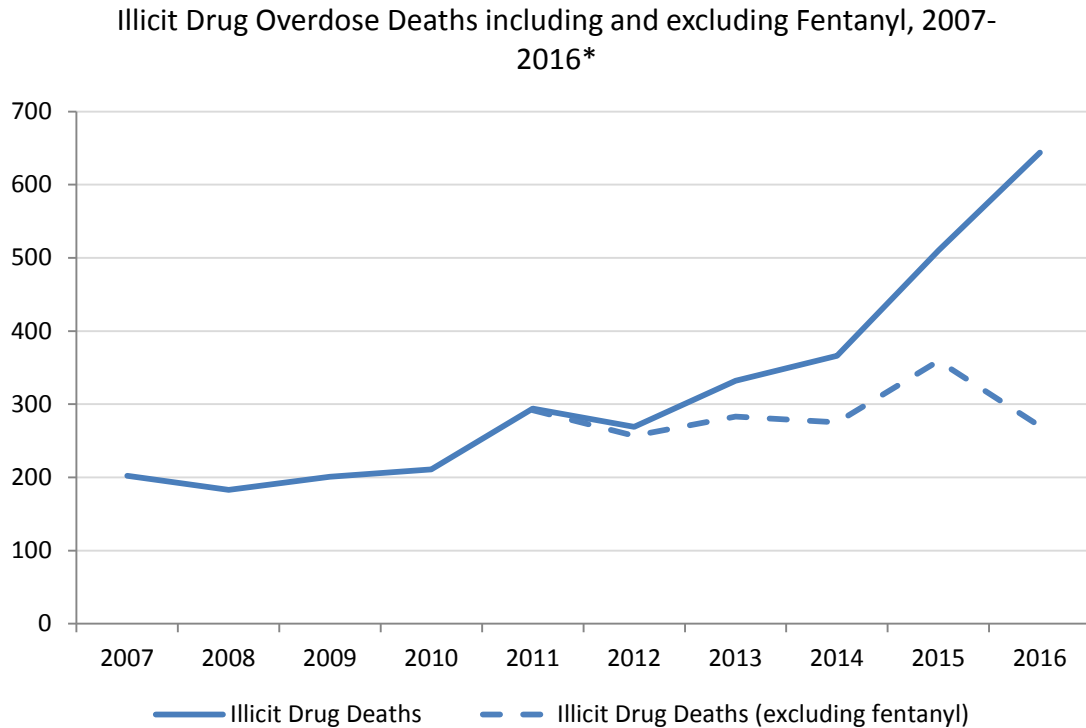
Summary

- There were 914 apparent illicit drug overdose deaths in 2016. This is a 79.2% increase over the number of death occurring in 2015 (510).
- The number of illicit drug overdose deaths in Dec 2016 (142) is the highest recorded in a month in BC and is more than double the average number of illicit drug overdose deaths since 2015 (59).

Illicit Drug Overdose Deaths by Month, 2015-2016



- 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).



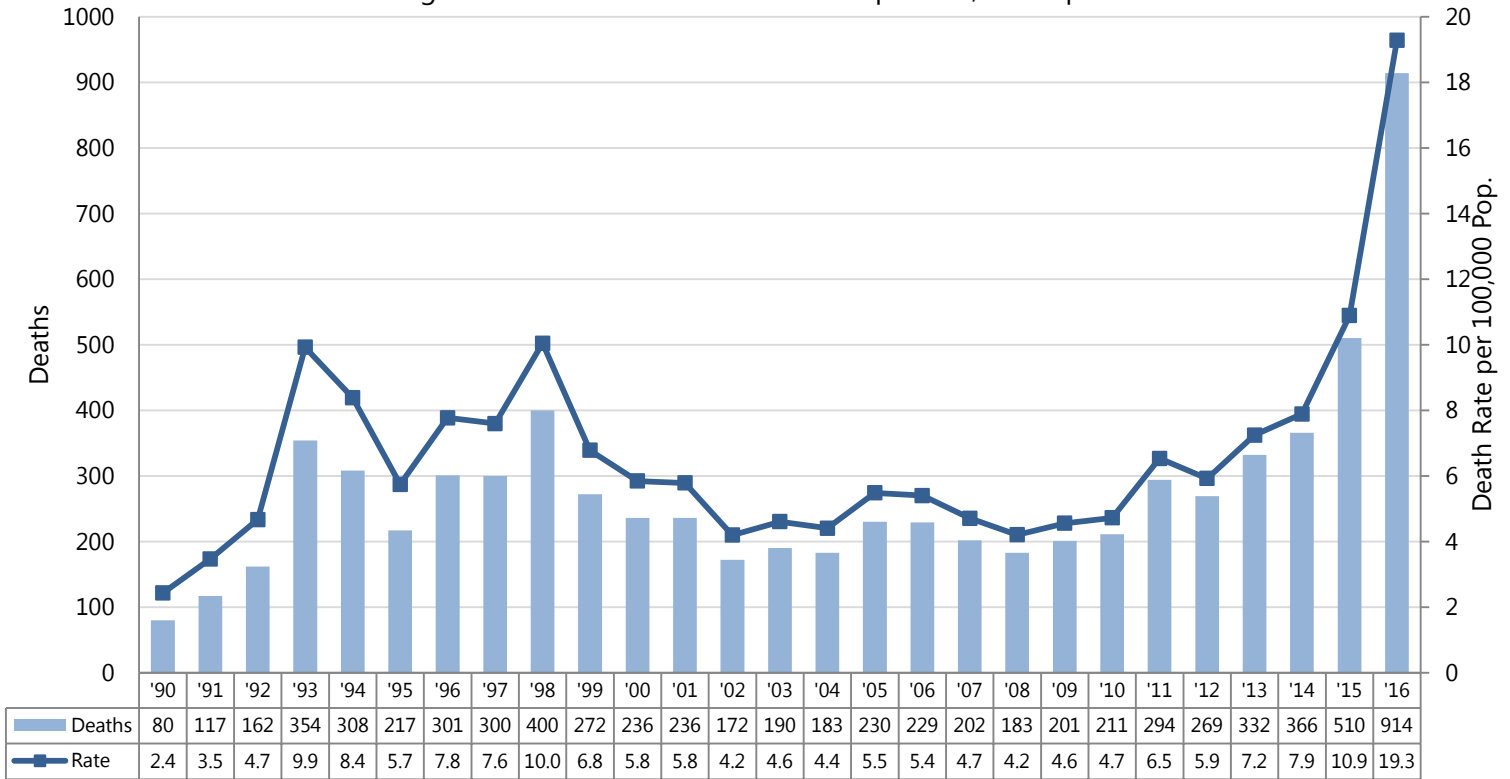
*Data to Oct 2016

- Individuals aged 30-39 and 40-49 have accounted for the largest percentage of illicit drug overdose deaths in 2016 (27.6% and 23.6%, respectively). About 73% of illicit drug overdose deaths were among individuals between the ages of 19-49 years. Males accounted for 80.7% of apparent illicit drug overdose deaths in 2016.
- Saturdays and Sundays were the days of the week most fatal illicit drug overdoses occurred in 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 (301) of illicit drug overdose deaths in 2016 which makes up 32.9% of all illicit drug overdose deaths during that period.
- Vancouver Coastal Health Authority had the highest rate of illicit drug overdose deaths (21.7 deaths per 100,000 individuals) in 2016 among all health authorities and Vancouver Island Health Authority saw the largest increase in rate from 2015 (156% increase). Overall, the rate of illicit drug overdose deaths in BC increased 77.1% in 2016 compared with 2015.

- The number of illicit drug overdose deaths in December 2016 was greater than the average monthly number of illicit drug overdose deaths for each health authority. For Interior, Vancouver Coastal, and Northern Health Authority, the number of illicit drug overdose deaths in December 2016 was more than double the monthly 2016 average for those respective health authorities.
- In 2016, 89.9% of illicit drug overdoses occurred inside (61.3% private residences, 28.7% other inside locations), 9.2% occurred outside in vehicles, sidewalks, streets, parks, etc., and 0.9% had an unknown injury location.
- There were no deaths at supervised consumption or drug overdose prevention sites.
- The data for the proportion of illicit drug overdose deaths for which fentanyl was detected will be updated in March, 2017 to allow time for toxicology tests to be completed for the 2016 year.

BC Data and Rates

Illicit Drug Overdose Deaths and Death Rate per 100,000 Population^[4]



Illicit Drug Overdose Deaths by Month, British Columbia, 2007-2016										
Month	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Jan	15	18	23	16	24	20	20	22	41	85
Feb	14	8	15	14	24	17	21	39	30	60
Mar	19	17	10	15	25	25	33	28	30	77
Apr	24	18	8	9	26	31	31	29	34	68
May	10	18	19	22	22	19	28	40	41	48
Jun	18	18	16	21	22	25	25	28	34	65
Jul	11	24	19	23	33	29	38	25	36	65
Aug	21	16	27	24	22	19	21	37	52	52
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	27	28	31	28	47	128
Dec	22	15	17	11	24	21	37	24	67	142
Total	202	183	201	211	294	269	332	366	510	914
Average	16.8	15.3	16.8	17.6	24.5	22.4	27.7	30.5	42.5	76.2

BC Data by Place of Injury**Illicit Drug Overdose Deaths by Place of Injury, BC, 2016**

	Place of Injury
Inside:	
Private Residence	560
Other Residence	221
Other Inside	41
Outside	84
Unknown	8
Total	914

Preliminary circumstances suggest that the majority of fatal illicit drug overdoses in 2016 occurred in inside locations (89.9%) while (9.2%) occurred outside.

Private Residence – includes driveways garages, trailer homes and either decedent's own or another's residence.

Other Residence - includes hotels, motels, rooming houses, shelters, etc.

Other Inside – includes facilities, occupational sites, public buildings, and businesses.

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

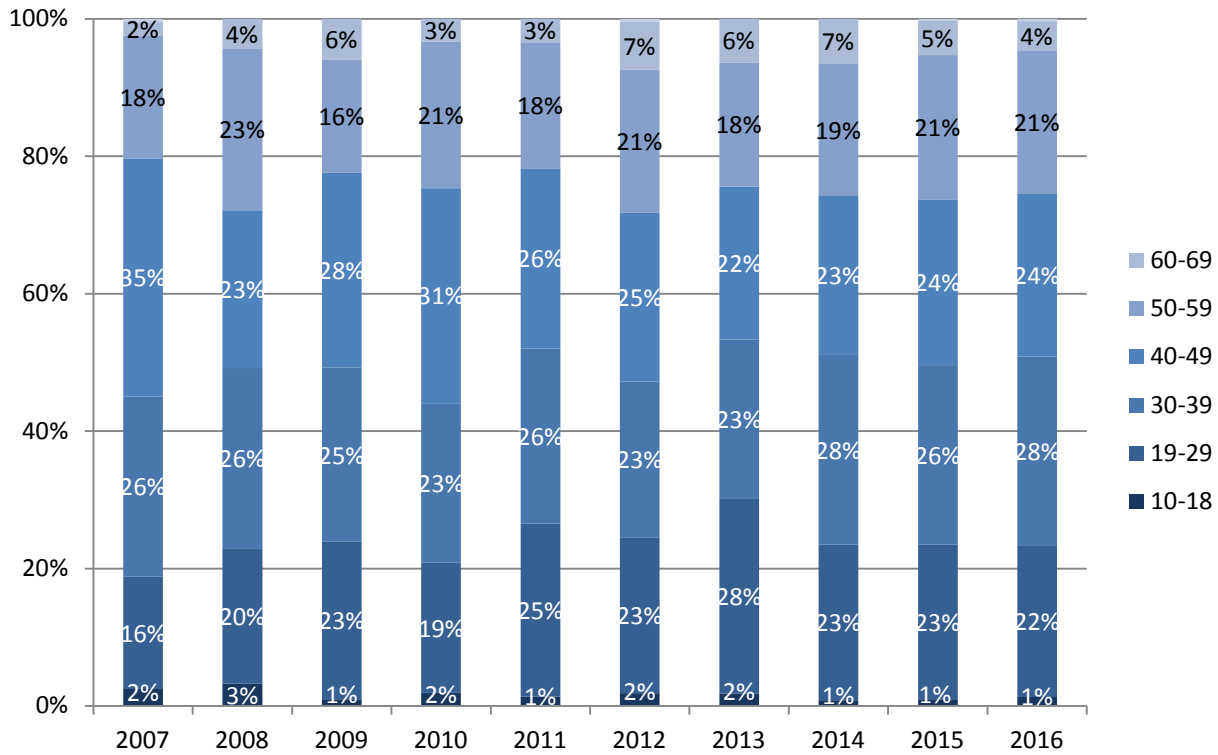
BC Data by Gender/Age:**Illicit Drug Overdose Deaths by Gender, 2007-2016**

Gender	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Female	47	49	55	49	82	75	79	86	99	176
Male	155	134	146	162	212	194	253	280	411	738
Total	202	183	201	211	294	269	332	366	510	914

Illicit Drug Overdose Deaths by Age Group, 2007-2016

Age Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
10-18	5	6	2	4	4	5	6	3	5	12
19-29	33	36	46	40	74	61	94	83	115	201
30-39	53	48	51	49	75	61	77	101	133	252
40-49	70	42	57	66	77	66	74	85	123	216
50-59	36	43	33	45	54	56	60	70	107	191
60-69	4	8	12	7	10	19	21	24	26	39
70-79	1	0	0	0	0	1	0	0	1	3
Total	202	183	201	211	294	269	332	366	510	914

Illicit Drug Overdose Deaths by Age Group, 2007-2016



Age-Specific Illicit Drug Overdose Death Rates per 100,000, 2007-2016 ^[4]

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	2.7
19-29	5.2	5.5	6.9	5.9	10.9	8.9	13.7	11.9	16.5	28.7
30-39	9.1	8.2	8.6	8.3	12.6	10.2	12.7	16.4	21.3	39.5
40-49	10.1	6.1	8.3	9.7	11.4	9.9	11.4	13.3	19.4	34.1
50-59	5.8	6.8	5.1	6.8	8.0	8.2	8.6	10.0	15.2	27.2
60-69	1.0	1.8	2.6	1.5	2.0	3.7	3.9	4.3	4.5	6.5
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	19.3

BC Data by Day of Week:

Illicit Drug Overdose Deaths by Day of Week of Injury, British Columbia, 2007-2016(YTD) ^[2]										
Day	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Monday	25	21	15	29	39	32	33	38	68	97
Tuesday	23	24	24	26	27	35	42	37	61	107
Wednesday	24	25	31	30	35	37	35	48	65	118
Thursday	24	25	27	33	51	34	41	59	72	137
Friday	38	31	28	33	42	32	56	60	79	132
Saturday	34	34	34	35	53	46	73	72	86	166
Sunday	34	23	42	25	47	53	52	52	79	157
Total	202	183	201	211	294	269	332	366	510	914

BC Data by Township of Injury:

Illicit Drug Overdose Deaths by Top Townships of Injury, 2007-2016* ^[3]										
Township	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Vancouver	59	38	60	42	69	65	80	99	134	215
Surrey	22	20	23	32	42	44	36	43	76	108
Victoria	19	29	13	13	17	17	25	20	18	66
Kelowna	6	2	5	9	14	8	12	12	19	48
Kamloops	11	7	7	10	2	5	8	7	7	40
Abbotsford	3	4	4	10	16	7	10	7	27	37
Burnaby	9	12	8	9	10	10	13	11	16	36
Langley	3	5	2	3	9	5	10	10	10	30
Nanaimo	2	2	6	4	8	6	20	16	19	29
Maple Ridge	5	2	6	4	4	5	10	14	29	27
Prince George	5	2	4	1	6	10	7	10	12	17
Vernon	3	1	4	6	7	1	11	6	8	13
Other Township	55	59	59	68	90	86	90	111	135	248
Total	202	183	201	211	294	269	332	366	510	914

*sorted by 2016 totals

Health Authority Data:

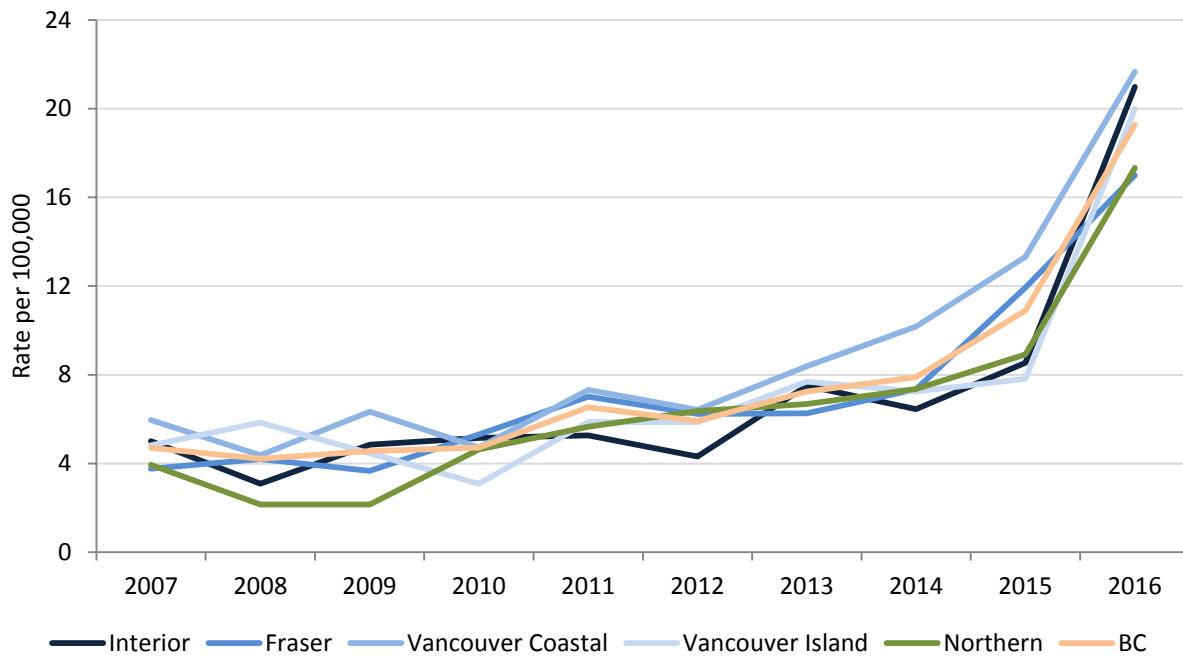
Illicit Drug Overdose Deaths by Health Authority, 2007-2016^[3,5]

HA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Interior	35	22	35	37	38	31	54	47	63	156
Fraser	57	65	58	86	115	104	106	126	208	301
Vancouver Coastal	64	47	69	52	81	72	95	117	154	253
Vancouver Island	35	43	33	23	44	44	58	55	60	155
Northern	11	6	6	13	16	18	19	21	25	49
BC	202	183	201	211	294	269	332	366	510	914

Illicit Drug Overdose Death Rates by Health Authority per 100,000, 2007-2016^[3-5]

HA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Interior	5.0	3.1	4.9	5.2	5.3	4.3	7.5	6.4	8.5	21.0
Fraser	3.8	4.2	3.7	5.3	7.0	6.2	6.3	7.3	11.9	17.0
Vancouver Coastal	6.0	4.4	6.3	4.7	7.3	6.4	8.4	10.2	13.3	21.7
Vancouver Island	4.8	5.9	4.5	3.1	5.9	5.9	7.7	7.2	7.8	20.0
Northern	3.9	2.1	2.1	4.6	5.7	6.4	6.7	7.4	8.9	17.3
BC	4.7	4.2	4.6	4.7	6.5	5.9	7.2	7.9	10.9	19.3

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



Illicit Drug Overdose Deaths by Month of Death and Health Authority, 2016 ^[3,5]						
Month	Interior	Fraser	Vancouver		Northern	Total
			Coastal	Island		
Jan	16	29	22	14	4	85
Feb	10	20	16	12	2	60
Mar	12	28	14	15	8	77
Apr	9	25	15	14	5	68
May	9	21	6	8	4	48
Jun	9	25	20	7	4	65
Jul	8	23	16	15	3	65
Aug	6	17	17	10	2	52
Sep	14	16	13	12	2	57
Oct	15	15	20	13	4	67
Nov	19	44	46	18	1	128
Dec	29	38	48	17	10	142
Total	156	301	253	155	49	914
Average	13.0	25.1	21.1	12.9	4.1	76.2

Illicit Drug Overdose Deaths by Health Services Delivery Area, 2007-2016 ^[3,5]											
HSDA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
East Kootenay	2	2	1	0	1	2	4	4	2	9	
Kootenay Boundary	4	0	2	3	4	4	2	3	6	10	
Okanagan	13	9	15	18	28	16	33	27	42	76	
Thompson Cariboo	16	11	17	16	5	9	15	13	13	61	
Fraser East	9	14	9	22	31	20	20	16	41	56	
Fraser North	19	22	23	26	25	30	35	51	74	95	
Fraser South	29	29	26	38	59	54	51	59	93	150	
Richmond	0	1	3	4	4	1	3	3	5	11	
Vancouver	59	38	60	42	69	65	80	99	134	215	
North Shore/Coast Garibaldi	5	8	6	6	8	6	12	15	15	27	
South Vancouver Island	21	31	15	13	17	20	26	23	22	75	
Central Vancouver Island	8	6	13	6	17	20	24	25	30	57	
North Vancouver Island	6	6	5	4	10	4	8	7	8	23	
Northwest	2	2	0	3	1	0	6	2	6	12	
Northern Interior	7	3	5	7	8	12	8	11	15	20	
Northeast	2	1	1	3	7	6	5	8	4	17	
Total	202	183	201	211	294	269	332	366	510	914	

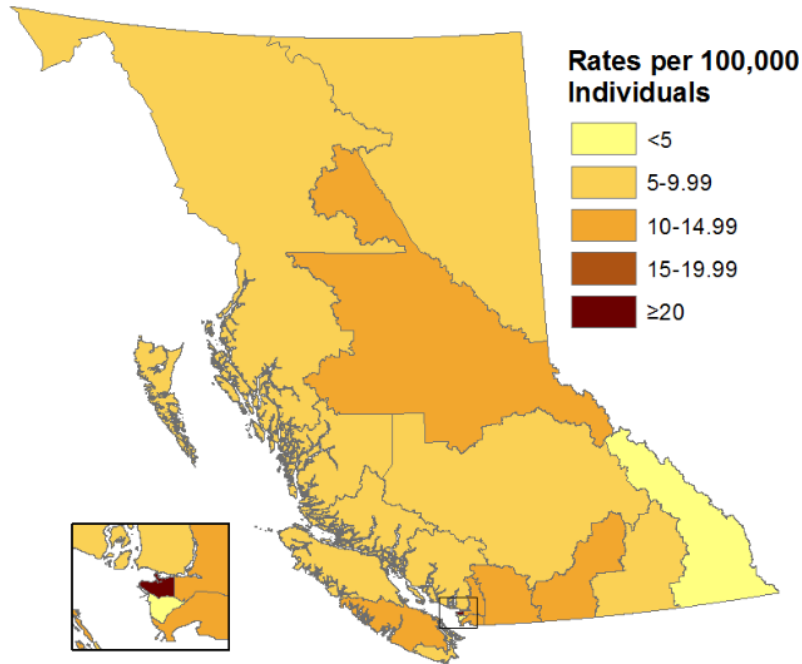
Illicit Drug Overdose Death Rates by Health Services Delivery Area per 100,000, 2007-2016 ^[3-5]										
HSDA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
East Kootenay	2.7	2.6	1.3	0.0	1.3	2.6	5.3	5.2	2.6	11.7
Kootenay Boundary	5.2	0.0	2.6	3.9	5.1	5.2	2.6	3.9	7.8	12.9
Okanagan	3.9	2.6	4.3	5.2	8.1	4.6	9.5	7.6	11.6	20.7
Thompson Cariboo	7.5	5.1	7.8	7.4	2.3	4.1	6.9	5.9	5.9	27.4
Fraser East	3.3	5.1	3.2	7.8	10.9	7.0	7.0	5.5	13.9	18.7
Fraser North	3.3	3.8	3.8	4.2	4.0	4.8	5.5	7.9	11.3	14.3
Fraser South	4.3	4.2	3.7	5.3	8.0	7.2	6.6	7.6	11.7	18.6
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	10.9	10.1	12.2	15.0	20.1	31.9
North Shore/Coast Garibaldi	1.9	3.0	2.2	2.2	2.9	2.2	4.3	5.3	5.3	9.5
South Vancouver Island	5.9	8.6	4.1	3.5	4.6	5.4	7.0	6.2	5.8	19.6
Central Vancouver Island	3.2	2.3	5.0	2.3	6.5	7.6	9.1	9.4	11.2	21.0
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	16.5
Northern Interior	5.0	2.1	3.6	5.0	5.6	8.5	5.7	7.8	10.8	14.4
Northeast	3.1	1.5	1.5	4.5	10.4	8.8	7.2	11.3	5.7	24.1
Total	4.7	4.2	4.6	4.7	6.5	5.9	7.2	7.9	10.9	19.3

Notes:

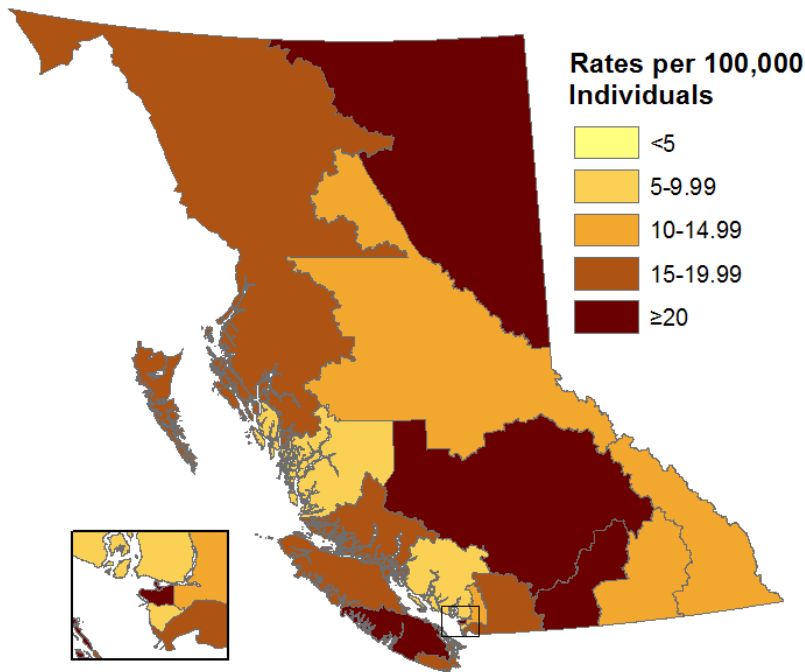
1. The BCCS operates in a live database environment. Some data for more recent years is based on preliminary circumstances and is subject to change as investigations are concluded. Data are not directly comparable to published counts from previous years.
2. Date of death was used in tables where date of injury was unknown.
3. Death township was used in 5 cases of unknown or out of province injury township.
4. 2016 population estimates were taken from:
<http://www.bcstats.gov.bc.ca/StatisticsBySubject/Demography/PopulationProjections.aspx>
5. 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



References for health regions can be found at:

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