

This report summarizes all illicit drug overdose deaths in British Columbia (accidental and undetermined) that occurred between January 1, 2007 and August 31, 2016, inclusive. It includes cases where the final cause of death has been determined by the coroner and cases still under investigation where the evidence indicates an apparent illicit drug overdose.

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

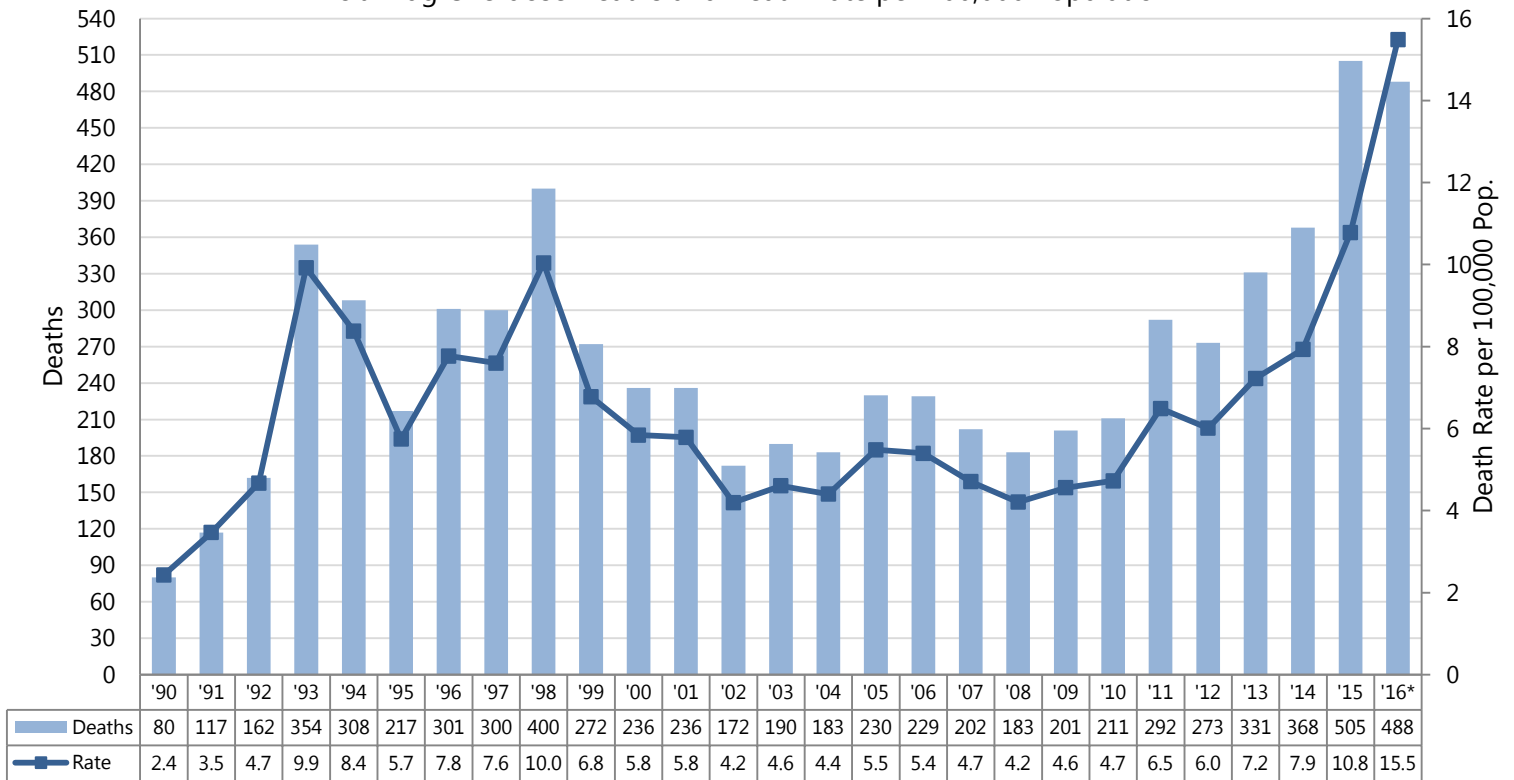
- Street drugs (heroin, cocaine, MDMA, methamphetamine, etc.)
- Medications that were not prescribed to the deceased
- Combinations of the above, with prescribed medications
- Origin of drug not known

Caveat: *Some data for more recent years are based on preliminary circumstances and subject to change. Data are not directly comparable to published counts from previous years. * 2016 data includes January 1, 2016 to August 31, 2016.*

Summary

- There were 488 apparent illicit drug overdose deaths from Jan to Aug 2016. This is a 61.6% increase over the number of death occurring during the same period in 2015 (302). An average of 61 apparent illicit drug overdose deaths occurred each month.
- Individuals aged 19-29 and 30-39 have accounted for the largest percentage of illicit drug overdose deaths in Jan – Aug 2016 (24.8% and 30.1%, respectively). Males accounted for 79.1% of apparent illicit drug overdose deaths in Jan – Aug 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 (172) of illicit drug overdose deaths in Jan – Aug 2016 which makes up 35.2% of all illicit drug overdose deaths during that period.
- Vancouver Island Health Authority had the highest rate of illicit drug overdose deaths (18.1 deaths per 100,000 individuals) in Jan – Aug 2016 among all health authorities and saw the largest increase in rate from 2015 (135% increase). Overall, the rate of illicit drug overdose deaths in BC increased 43.5% in Jan – Aug 2016 compared with 2015.
- A number of health services delivery areas saw greater than 50% increase rate of illicit drug overdose deaths in Jan – Aug 2016 compared with 2015 including East Kootenay, Thompson Cariboo, North Shore/Coast Garibaldi, South Vancouver Island, Central Vancouver Island, North Vancouver Island, Northwest, and Northeast.
- Preliminary data for Jan – July 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 60.1% in 2016 from 30.1% in 2015.

Illicit Drug Overdose Deaths and Death Rate per 100,000 Population



* 2016 data include Jan-Aug. 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, British Columbia, 2007-2016*										
Month	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Jan	15	18	23	16	24	20	20	23	41	81
Feb	14	8	15	14	24	17	21	39	30	57
Mar	19	17	10	15	25	25	32	28	30	74
Apr	24	18	8	9	26	31	31	30	35	64
May	10	18	19	22	21	20	28	41	43	46
Jun	18	18	16	21	22	25	25	27	35	62
Jul	11	24	19	23	33	29	37	25	36	55
Aug	21	16	27	24	22	20	21	37	52	49
Subtotal	132	137	137	144	197	187	215	250	302	488
Sep	14	12	16	20	22	17	28	31	44	
Oct	15	10	13	18	23	20	19	35	51	
Nov	19	9	18	18	26	28	31	27	45	
Dec	22	15	17	11	24	21	38	25	63	
Total	202	183	201	211	292	273	331	368	505	488
Average	16.8	15.3	16.8	17.6	24.3	22.8	27.6	30.7	42.1	61.0

Illicit Drug Overdose Deaths by Health Authority, 2007-2016*

HA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Interior	35	22	35	37	38	32	53	48	65	80
Fraser	57	65	58	86	115	104	105	127	202	172
Vancouver Coastal	64	47	69	52	80	74	96	118	153	113
Vancouver Island	35	43	33	23	44	45	58	54	59	93
Northern	11	6	6	13	15	18	19	21	26	30
BC	202	183	201	211	292	273	331	368	505	488

Death township was used where injury township unknown.

Illicit Drug Overdose Death Rates by Health Authority per 100,000, 2007-2016*

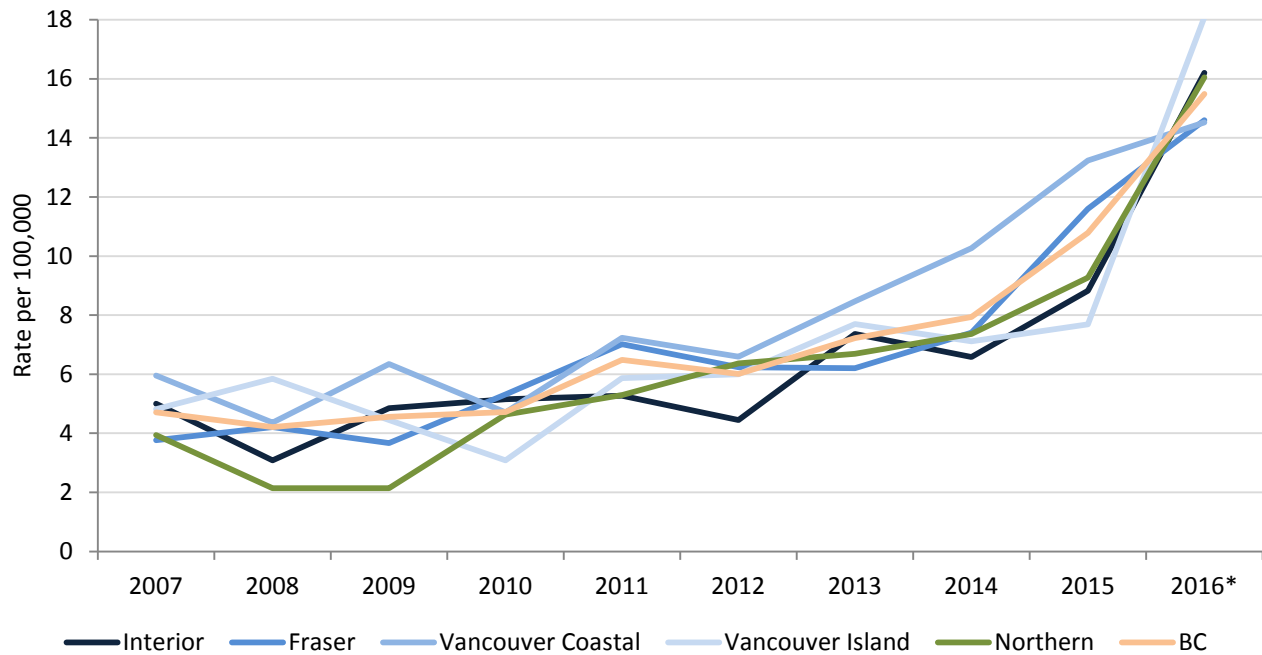
HA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Interior	5.0	3.1	4.9	5.2	5.3	4.4	7.4	6.6	8.8	16.2
Fraser	3.8	4.2	3.7	5.3	7.0	6.2	6.2	7.4	11.6	14.6
Vancouver Coastal	6.0	4.4	6.3	4.7	7.2	6.6	8.5	10.3	13.2	14.5
Vancouver Island	4.8	5.9	4.5	3.1	5.9	6.0	7.7	7.1	7.7	18.1
Northern	3.9	2.1	2.1	4.6	5.3	6.4	6.7	7.4	9.3	16.0
BC	4.7	4.2	4.6	4.7	6.5	6.0	7.2	7.9	10.8	15.5

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.

Illicit Drug Overdose Deaths by Month of Death and Health Authority, 2016*

Month	Interior	Fraser	Vancouver		Northern	Total
			Coastal	Island		
Jan	16	27	20	13	5	81
Feb	11	17	16	12	1	57
Mar	14	26	12	15	7	74
Apr	7	24	14	14	5	64
May	9	18	6	9	4	46
Jun	9	24	18	7	4	62
Jul	7	21	11	13	3	55
Aug	7	15	16	10	1	49
Total	80	172	113	93	30	488

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



* 2016 data include Jan-Aug. Death township was used in 5 cases of unknown or out of province injury township. 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 Gender, 2007-2016*										
Gender	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Female	47	49	55	49	81	77	79	84	101	102
Male	155	134	146	162	211	196	252	284	404	386
Total	202	183	201	211	292	273	331	368	505	488

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	6
19-29	33	36	46	40	74	61	94	84	115	121
30-39	53	48	51	49	74	61	78	102	134	147
40-49	70	42	57	66	76	67	73	86	119	104
50-59	36	43	33	45	54	59	59	69	105	93
60-69	4	8	12	7	10	19	21	24	26	15
70-79	1	-	-	-	-	1	-	-	1	2
Total	202	183	201	211	292	273	331	368	505	488

Age-Specific Illicit Drug Overdose Death Rates per 100,000, 2007-2016*

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	2.1
19-29	5.2	5.5	6.9	5.9	10.9	8.9	13.7	12.1	16.5	25.8
30-39	9.1	8.2	8.6	8.3	12.5	10.2	12.9	16.5	21.4	34.9
40-49	10.1	6.1	8.3	9.7	11.3	10.1	11.2	13.4	18.8	25.0
50-59	5.8	6.8	5.1	6.8	8.0	8.6	8.5	9.8	14.9	19.6
60-69	1.0	1.8	2.6	1.5	2.0	3.7	3.9	4.3	4.5	3.8
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	6.0	7.2	7.9	10.8	15.5

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.

Illicit Drug Overdose Deaths by Day of Week, British Columbia, 2007-2016(YTD)										
Day	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Monday	27	23	14	25	39	38	38	39	72	55
Tuesday	22	28	26	28	31	36	40	41	62	56
Wednesday	24	20	30	26	34	41	38	48	62	71
Thursday	26	25	23	34	49	29	45	58	68	69
Friday	36	30	29	34	36	38	53	60	76	67
Saturday	33	33	36	36	51	38	64	71	84	88
Sunday	34	24	43	28	52	53	53	51	81	82
Total	202	183	201	211	292	273	331	368	505	488

Illicit Drug Overdose Deaths by Top Townships of Injury, 2007-2016*										
Township	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Vancouver	59	38	60	42	68	67	80	100	133	96
Surrey	22	20	23	32	42	44	36	44	72	62
Victoria	19	29	13	13	17	17	25	19	17	39
Kelowna	6	2	5	9	14	8	12	12	20	27
Burnaby	9	12	8	9	10	10	13	11	16	13
Abbotsford	3	4	4	10	16	7	9	7	25	23
Nanaimo	2	2	6	4	8	6	20	16	19	20
Maple Ridge	5	2	6	4	4	5	10	14	28	20
Kamloops	11	7	7	10	2	5	8	8	7	23
Langley	3	5	2	3	9	5	10	10	10	19
Unknown Township	-	-	-	-	-	-	-	-	2	2
Other Township [†]	63	62	67	75	102	99	108	127	156	144
Total	202	183	201	211	292	273	331	368	505	488

Illicit Drug Overdose Deaths by Health Services Delivery Area, 2007-2016*										
HSDA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
East Kootenay	2	2	1	0	1	2	4	4	2	5
Kootenay Boundary	4	0	2	3	4	4	2	3	6	4
Okanagan	13	9	15	18	28	16	32	27	44	37
Thompson Cariboo	16	11	17	16	5	10	15	14	13	34
Fraser East	9	14	9	22	31	20	19	16	39	31
Fraser North	19	22	23	26	25	30	35	51	73	55
Fraser South	29	29	26	38	59	54	51	60	90	86
Richmond	0	1	3	4	4	1	3	3	5	2
Vancouver	59	38	60	42	68	67	80	100	134	96
North Shore/Coast Garibaldi	5	8	6	6	8	6	13	15	14	15
South Vancouver Island	21	31	15	13	17	20	26	22	21	48
Central Vancouver Island	8	6	13	6	17	20	24	25	30	35
North Vancouver Island	6	6	5	4	10	5	8	7	8	10
Northwest	2	2	0	3	1	0	6	1	5	7
Northern Interior	7	3	5	7	8	12	8	12	16	11
Northeast	2	1	1	3	6	6	5	8	5	12
Total	202	183	201	211	292	273	331	367	505	488

References for health region breakdowns can be found at:

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

Illicit Drug Overdose Death Rates by Health Services Delivery Area per 100,000, 2007-2016*										
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	9.8
Kootenay Boundary	5.2	0.0	2.6	3.9	5.1	5.2	2.6	3.9	7.8	7.8
Okanagan	3.9	2.6	4.3	5.2	8.1	4.6	9.2	7.6	12.2	15.2
Thompson Cariboo	7.5	5.1	7.8	7.4	2.3	4.6	6.9	6.3	5.9	23.0
Fraser East	3.3	5.1	3.2	7.8	10.9	7.0	6.6	5.5	13.2	15.6
Fraser North	3.3	3.8	3.8	4.2	4.0	4.8	5.5	7.9	11.2	12.5
Fraser South	4.3	4.2	3.7	5.3	8.0	7.2	6.6	7.7	11.4	16.0
Richmond	0.0	0.5	1.6	2.0	2.0	0.5	1.5	1.5	2.4	1.4
Vancouver	9.5	6.1	9.6	6.6	10.7	10.4	12.2	15.1	20.1	21.4
North Shore/Coast Garibaldi	1.9	3.0	2.2	2.2	2.9	2.2	4.7	5.3	5.0	8.0
South Vancouver Island	5.9	8.6	4.1	3.5	4.6	5.4	7.0	5.9	5.6	18.9
Central Vancouver Island	3.2	2.3	5.0	2.3	6.5	7.6	9.1	9.4	11.2	19.5
North Vancouver Island	5.2	5.1	4.2	3.4	8.3	4.2	6.7	5.8	6.6	12.3
Northwest	2.7	2.7	0.0	4.1	1.4	0.0	8.2	1.4	6.9	14.6
Northern Interior	5.0	2.1	3.6	5.0	5.6	8.5	5.7	8.5	11.6	12.0
Northeast	3.1	1.5	1.5	4.5	8.9	8.8	7.2	11.3	7.2	25.6
Total	4.7	4.2	4.6	4.7	6.5	6.0	7.2	7.9	10.8	15.5

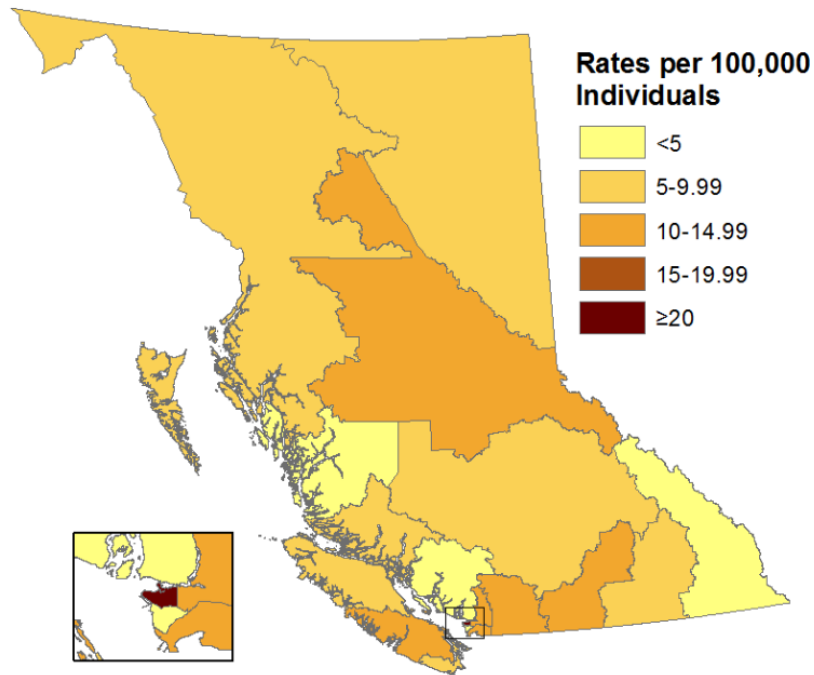
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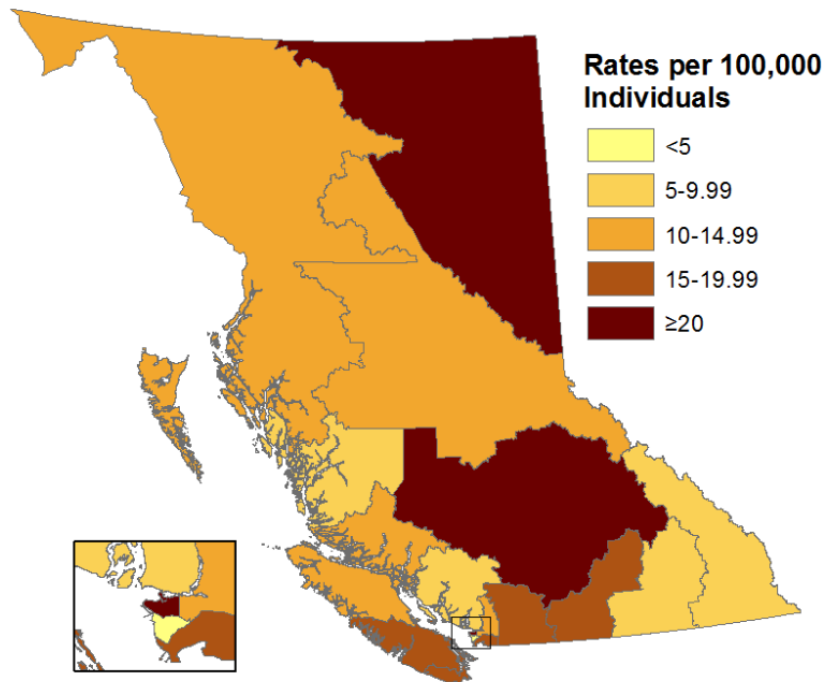
<http://www.bcstats.gov.bc.ca/statisticsbysubject/geography/referencemaps/health.aspx>.

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>