

This report summarizes all illicit drug overdose deaths in British Columbia (accidental and undetermined) that occurred between January 1, 2007 and September 30, 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:

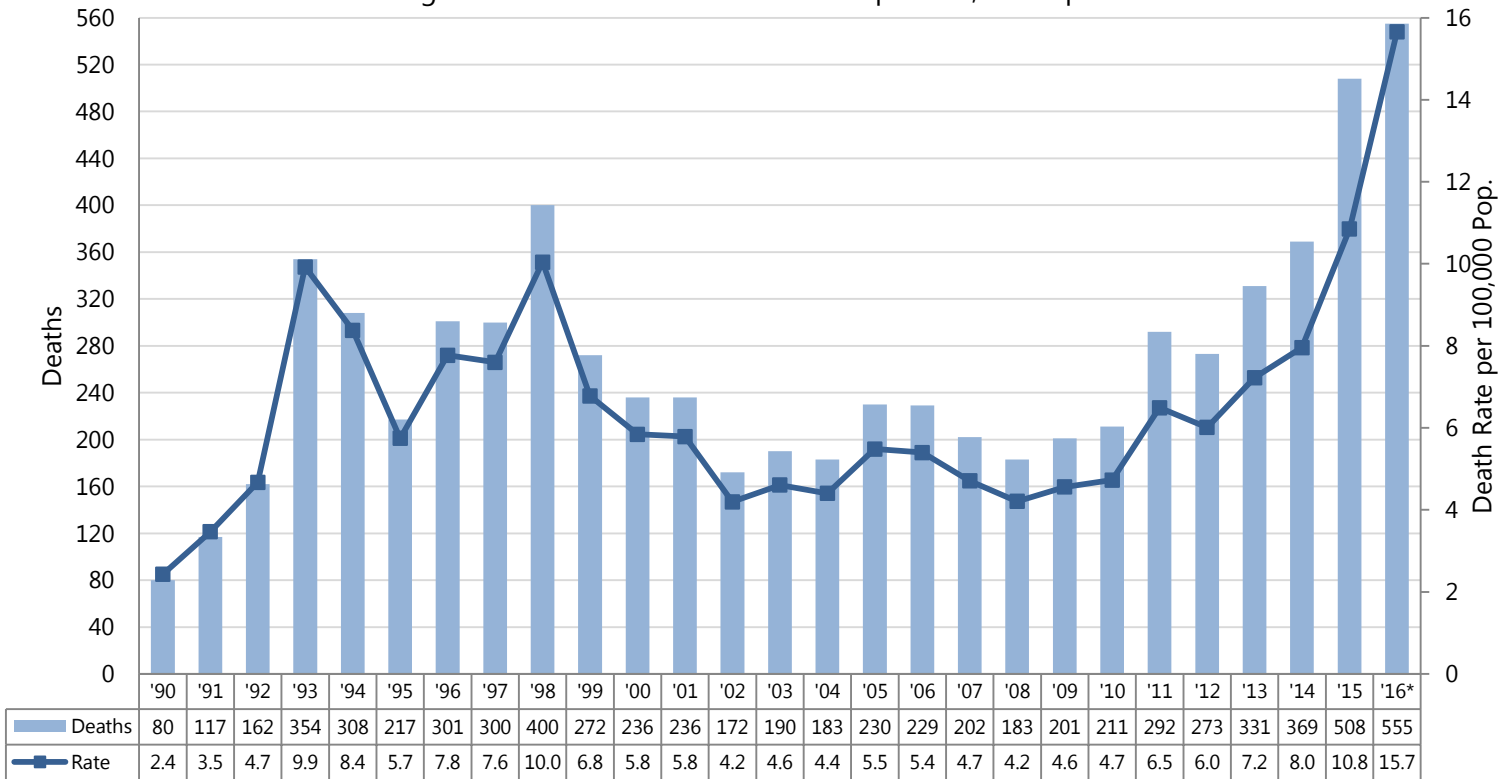
- Street drugs (heroin, cocaine, MDMA, methamphetamine, etc.)
- Medications that may not have been prescribed to the deceased
- Combinations of the above, with prescribed medications
- Origin of drug not known

## Summary

- There were 555 apparent illicit drug overdose deaths from Jan to Sep 2016. This is a 60.9% increase over the number of death occurring during the same period in 2015 (345).
- Individuals aged 19-29 and 30-39 have accounted for the largest percentage of illicit drug overdose deaths from Jan – Sep 2016 (25.4% and 28.5%, respectively). Males accounted for 80% of apparent illicit drug overdose deaths from Jan – Sep 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 (195) of illicit drug overdose deaths in Jan – Sep 2016 which makes up 35.1% of all illicit drug overdose deaths during that period.
- Vancouver Island Health Authority had the highest rate of illicit drug overdose deaths (18.5 deaths per 100,000 individuals) in Jan – Sep 2016 among all health authorities and saw the largest increase in rate from 2015 (137% increase). Overall, the rate of illicit drug overdose deaths in BC increased 45.4% in Jan – Sep 2016 compared with 2015.
- Preliminary data for Jan – Aug 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 61% in 2016 from 30% in 2015.

**BC Data**

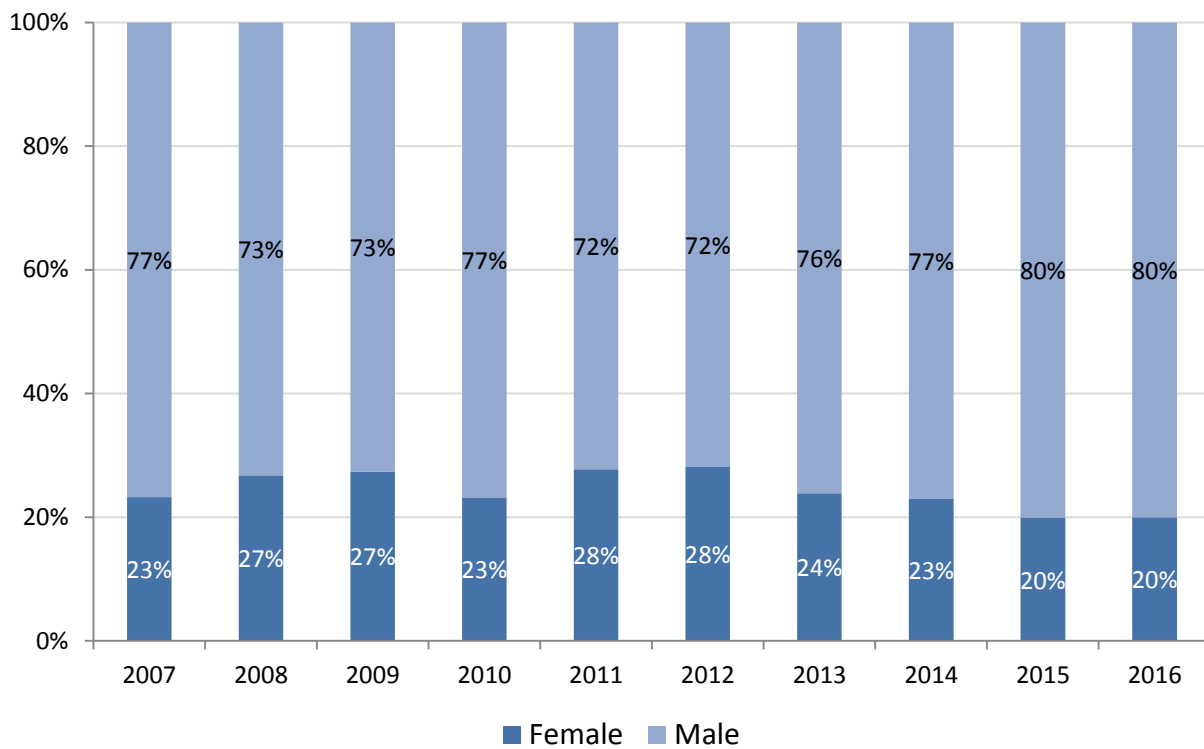
Illicit Drug Overdose Deaths and Death Rate per 100,000 Population<sup>[2,5]</sup>



Illicit Drug Overdose Deaths by Month, British Columbia, 2007-2016 <sup>[2]</sup>										
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	59
Mar	19	17	10	15	25	25	32	28	30	76
Apr	24	18	8	9	26	31	31	30	35	65
May	10	18	19	22	21	20	28	41	43	47
Jun	18	18	16	21	22	25	25	28	34	63
Jul	11	24	19	23	33	29	37	25	36	59
Aug	21	16	27	24	22	20	21	37	52	49
Sep	14	12	16	20	22	17	28	31	44	56
Subtotal	146	149	153	164	219	204	243	282	345	555
Oct	15	10	13	18	23	20	19	35	52	
Nov	19	9	18	18	26	28	31	27	46	
Dec	22	15	17	11	24	21	38	25	65	
Total	202	183	201	211	292	273	331	369	508	555
Average	16.8	15.3	16.8	17.6	24.3	22.8	27.6	30.8	42.3	61.7

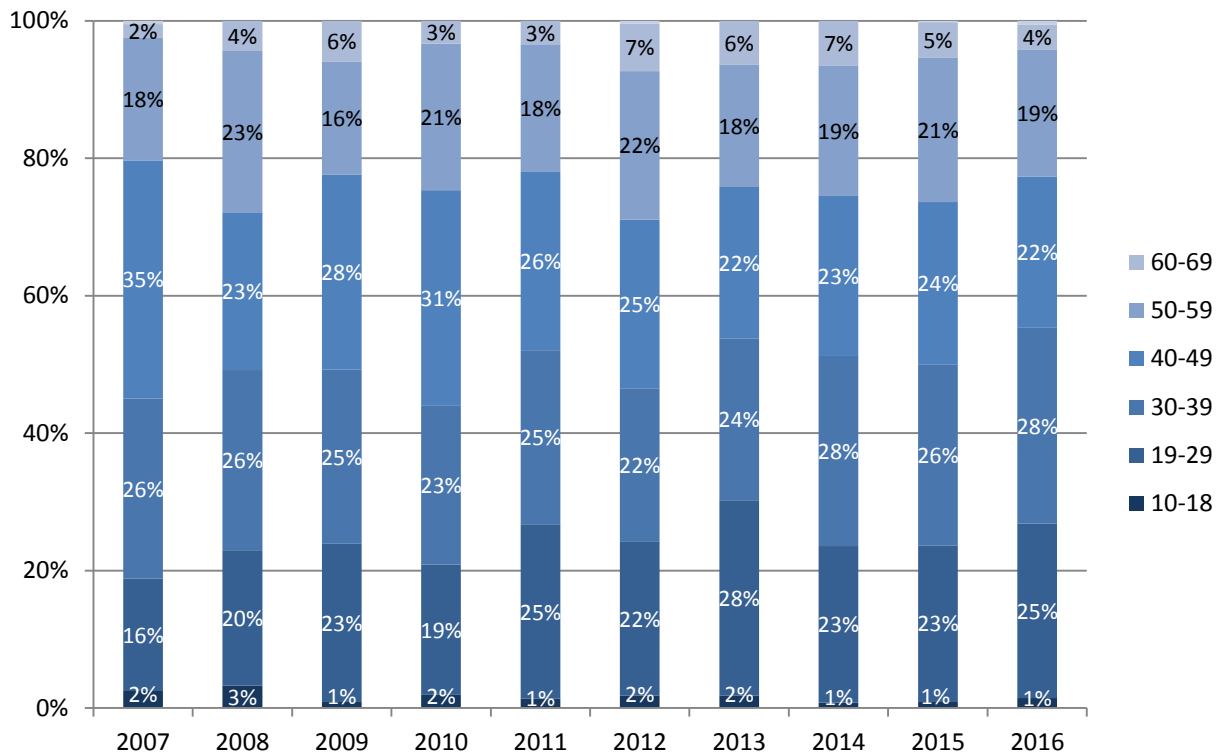
Illicit Drug Overdose Deaths by Gender, 2007-2016 <sup>[2]</sup>										
Gender	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Female	47	49	55	49	81	77	79	85	101	111
Male	155	134	146	162	211	196	252	284	407	444
<b>Total</b>	<b>202</b>	<b>183</b>	<b>201</b>	<b>211</b>	<b>292</b>	<b>273</b>	<b>331</b>	<b>369</b>	<b>508</b>	<b>555</b>

Illicit Drug Overdose Deaths by Gender, 2007-2016<sup>[2]</sup>



Illicit Drug Overdose Deaths by Age Group, 2007-2016 <sup>[2]</sup>										
Age Group	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
10-18	5	6	2	4	4	5	6	3	5	8
19-29	33	36	46	40	74	61	94	84	115	141
30-39	53	48	51	49	74	61	78	102	134	158
40-49	70	42	57	66	76	67	73	86	120	122
50-59	36	43	33	45	54	59	59	70	107	103
60-69	4	8	12	7	10	19	21	24	26	20
70-79	1	-	-	-	-	1	-	-	1	3
<b>Total</b>	<b>202</b>	<b>183</b>	<b>201</b>	<b>211</b>	<b>292</b>	<b>273</b>	<b>331</b>	<b>369</b>	<b>508</b>	<b>555</b>

Illicit Drug Overdose Deaths by Age Group, 2007-2016<sup>[2]</sup>



Age-Specific Illicit Drug Overdose Death Rates per 100,000, 2007-2016 <sup>[2,5]</sup>

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	2.4
19-29	5.2	5.5	6.9	5.9	10.9	8.9	13.7	12.1	16.5	26.8
30-39	9.1	8.2	8.6	8.3	12.5	10.2	12.9	16.5	21.4	33.4
40-49	10.1	6.1	8.3	9.7	11.3	10.1	11.2	13.4	19.0	26.1
50-59	5.8	6.8	5.1	6.8	8.0	8.6	8.5	10.0	15.2	19.3
60-69	1.0	1.8	2.6	1.5	2.0	3.7	3.9	4.3	4.5	4.5
70-79	0.4	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.3	1.2
<b>Total</b>	<b>4.7</b>	<b>4.2</b>	<b>4.6</b>	<b>4.7</b>	<b>6.5</b>	<b>6.0</b>	<b>7.2</b>	<b>8.0</b>	<b>10.8</b>	<b>15.7</b>

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 of Injury, British Columbia, 2007-2016(YTD) <sup>[2,3]</sup>**

Day	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Monday	25	21	15	29	39	33	33	38	69	53
Tuesday	23	24	24	26	26	35	42	37	60	62
Wednesday	24	25	31	30	34	39	35	50	65	82
Thursday	24	25	27	33	51	34	41	59	72	85
Friday	38	31	28	33	42	32	55	60	81	76
Saturday	34	34	34	35	53	47	73	73	85	99
Sunday	34	23	42	25	47	53	52	52	76	98
<b>Total</b>	<b>202</b>	<b>183</b>	<b>201</b>	<b>211</b>	<b>292</b>	<b>273</b>	<b>331</b>	<b>369</b>	<b>508</b>	<b>555</b>

**Illicit Drug Overdose Deaths by Top Townships of Injury, 2007-2016 <sup>[2,4]</sup>**

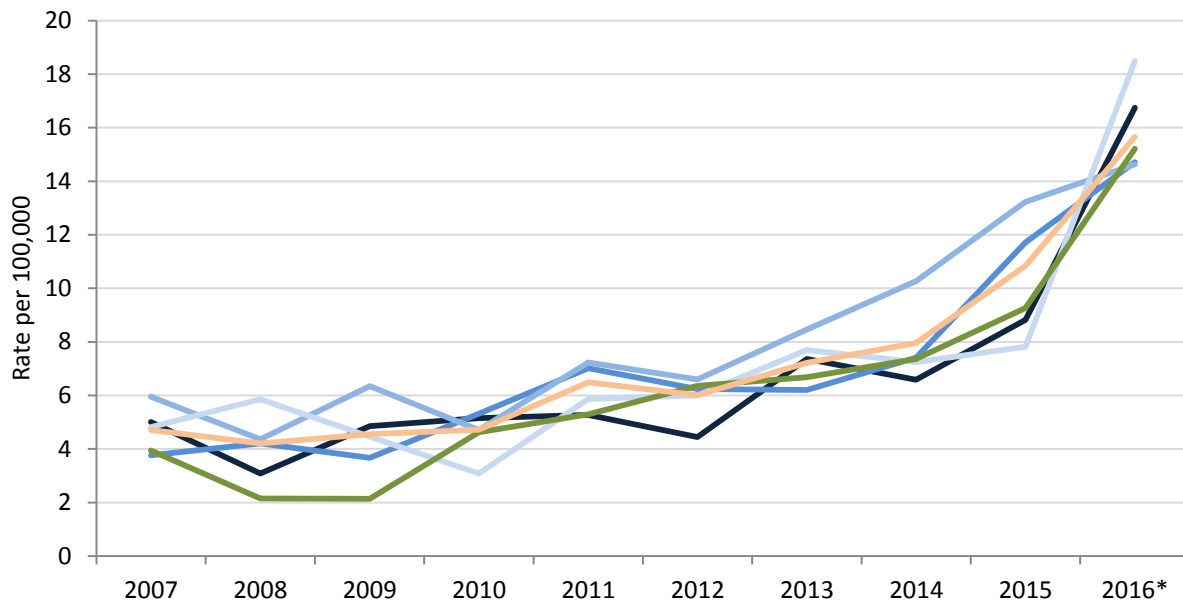
Township	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Vancouver	59	38	60	42	68	67	80	100	133	110
Surrey	22	20	23	32	42	44	36	44	75	71
Victoria	19	29	13	13	17	17	25	20	18	44
Kelowna	6	2	5	9	14	8	12	12	20	31
Burnaby	9	12	8	9	10	10	13	11	16	17
Abbotsford	3	4	4	10	16	7	9	7	25	26
Nanaimo	2	2	6	4	8	6	20	16	19	20
Maple Ridge	5	2	6	4	4	5	10	14	28	22
Kamloops	11	7	7	10	2	5	8	8	7	25
Langley	3	5	2	3	9	5	10	10	10	20
Unknown Township	-	-	-	-	-	-	-	-	2	2
Other Township	63	62	67	75	102	99	108	127	155	167
<b>Total</b>	<b>202</b>	<b>183</b>	<b>201</b>	<b>211</b>	<b>292</b>	<b>273</b>	<b>331</b>	<b>369</b>	<b>508</b>	<b>555</b>

## Health Authority Data

Illicit Drug Overdose Deaths by Health Authority, 2007-2016 <sup>[2,4,6]</sup>										
HA	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016*
Interior	35	22	35	37	38	32	53	48	65	93
Fraser	57	65	58	86	115	104	105	127	204	195
Vancouver Coastal	64	47	69	52	80	74	96	118	153	128
Vancouver Island	35	43	33	23	44	45	58	55	60	107
Northern	11	6	6	13	15	18	19	21	26	32
BC	202	183	201	211	292	273	331	369	508	555

Illicit Drug Overdose Death Rates by Health Authority per 100,000, 2007-2016 <sup>[2,4-6]</sup>										
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	16.7
Fraser	3.8	4.2	3.7	5.3	7.0	6.2	6.2	7.4	11.7	14.7
Vancouver Coastal	6.0	4.4	6.3	4.7	7.2	6.6	8.5	10.3	13.2	14.6
Vancouver Island	4.8	5.9	4.5	3.1	5.9	6.0	7.7	7.2	7.8	18.5
Northern	3.9	2.1	2.1	4.6	5.3	6.4	6.7	7.4	9.3	15.2
BC	4.7	4.2	4.6	4.7	6.5	6.0	7.2	8.0	10.8	15.7

Illicit Drug Overdose Death Rates by Health Authority, 2007-2016<sup>[2,4-6]</sup>



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 <sup>[2,4,6]</sup>						
Month	Interior	Fraser	Vancouver		Northern	Total
			Coastal	Island		
Jan	16	28	20	13	4	81
Feb	10	20	16	12	1	59
Mar	13	27	13	15	8	76
Apr	8	24	14	14	5	65
May	9	19	6	9	4	47
Jun	9	25	18	7	4	63
Jul	8	21	12	15	3	59
Aug	7	15	16	10	1	49
Sep	13	16	13	12	2	56
Total	93	195	128	107	32	555

Illicit Drug Overdose Deaths by Health Services Delivery Area, 2007-2016 <sup>[2,4,6]</sup>										
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	5
Okanagan	13	9	15	18	28	16	32	27	44	45
Thompson Cariboo	16	11	17	16	5	10	15	14	13	38
Fraser East	9	14	9	22	31	20	19	16	39	34
Fraser North	19	22	23	26	25	30	35	51	73	63
Fraser South	29	29	26	38	59	54	51	60	92	98
Richmond	0	1	3	4	4	1	3	3	5	3
Vancouver	59	38	60	42	68	67	80	100	134	110
North Shore/Coast Garibaldi	5	8	6	6	8	6	13	15	14	15
South Vancouver Island	21	31	15	13	17	20	26	23	22	53
Central Vancouver Island	8	6	13	6	17	20	24	25	30	40
North Vancouver Island	6	6	5	4	10	5	8	7	8	14
Northwest	2	2	0	3	1	0	6	1	5	6
Northern Interior	7	3	5	7	8	12	8	12	16	13
Northeast	2	1	1	3	6	6	5	8	5	13
Total	202	183	201	211	292	273	331	369	508	555

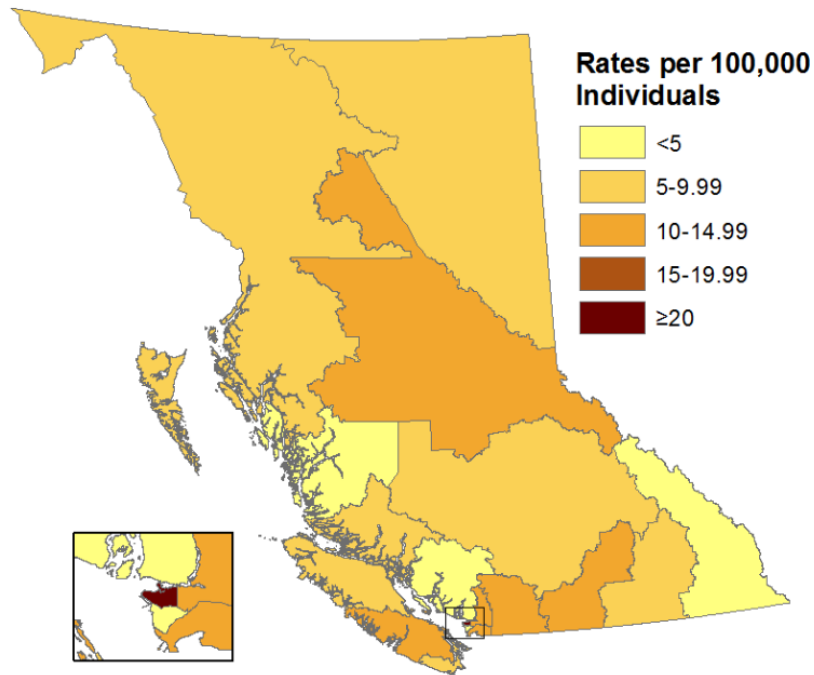
**Illicit Drug Overdose Death Rates by Health Services Delivery Area per 100,000, 2007-2016<sup>[2,4-6]</sup>**

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	8.7
Kootenay Boundary	5.2	0.0	2.6	3.9	5.1	5.2	2.6	3.9	7.8	8.6
Okanagan	3.9	2.6	4.3	5.2	8.1	4.6	9.2	7.6	12.2	16.4
Thompson Cariboo	7.5	5.1	7.8	7.4	2.3	4.6	6.9	6.3	5.9	22.9
Fraser East	3.3	5.1	3.2	7.8	10.9	7.0	6.6	5.5	13.2	15.2
Fraser North	3.3	3.8	3.8	4.2	4.0	4.8	5.5	7.9	11.2	12.7
Fraser South	4.3	4.2	3.7	5.3	8.0	7.2	6.6	7.7	11.6	16.2
Richmond	0.0	0.5	1.6	2.0	2.0	0.5	1.5	1.5	2.4	1.9
Vancouver	9.5	6.1	9.6	6.6	10.7	10.4	12.2	15.1	20.1	21.8
North Shore/Coast Garibaldi	1.9	3.0	2.2	2.2	2.9	2.2	4.7	5.3	5.0	7.1
South Vancouver Island	5.9	8.6	4.1	3.5	4.6	5.4	7.0	6.2	5.8	18.6
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	4.2	6.7	5.8	6.6	15.3
Northwest	2.7	2.7	0.0	4.1	1.4	0.0	8.2	1.4	6.9	11.1
Northern Interior	5.0	2.1	3.6	5.0	5.6	8.5	5.7	8.5	11.6	12.6
Northeast	3.1	1.5	1.5	4.5	8.9	8.8	7.2	11.3	7.2	24.7
Total	4.7	4.2	4.6	4.7	6.5	6.0	7.2	8.0	10.8	15.7

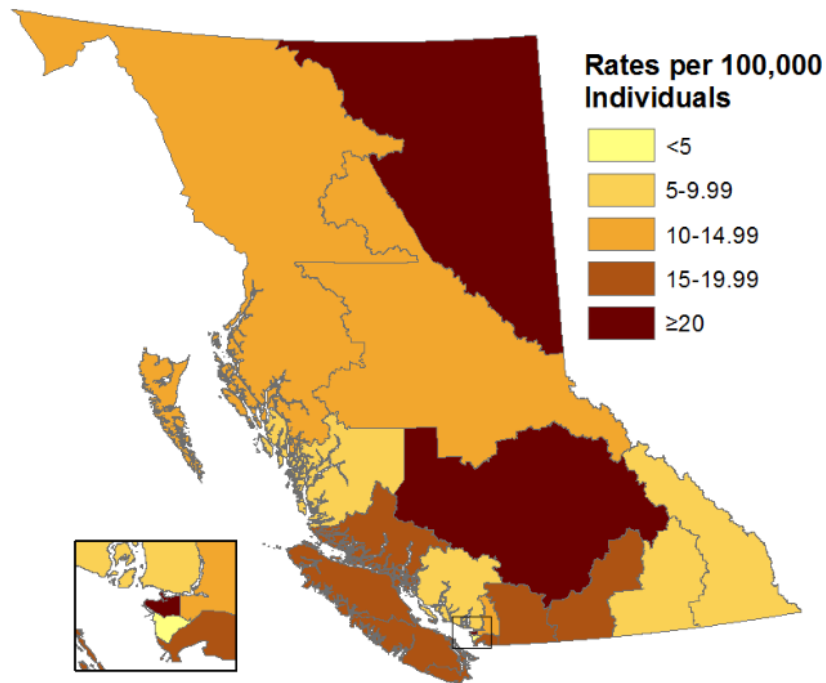


# Illicit Drug Overdose Death Rate Maps by Health Services Delivery Area

2015 Illicit Drug Overdose Death Rates by Health Services Delivery Area



2016<sup>[2]</sup> 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>.

**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 September 30, 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>