

Inclusion Criteria: This report summarizes all deaths that occurred between January 1, 2012 and July 31, 2020 for which fentanyl or its analogues were detected, whether alone or in combination with other drugs, and the death resulted from illicit drug use^[1]. In the majority of deaths, fentanyl or its analogues^[2] were detected in combination with other drugs. Deaths were excluded if the fentanyl was known to be prescribed or the death was suspected to be due to intentional self-harm.

This data has been compiled to better understand overall illicit drug toxicity death trends in British Columbia and to inform other agencies' public safety strategies in a timely manner.^[1] Please see the BC Coroners Service website for a summary of illicit drug toxicity deaths: <http://www2.gov.bc.ca/gov/content/safety/public-safety/death-investigation/statistical-reports>. **Note that fentanyl-detected data is subject to change as further test results become available.**

Summary 2020:

- There were approximately 140 suspected illicit drug toxicity deaths with fentanyl detected in July 2020. This is the highest total of fentanyl-detected deaths ever recorded in B.C. *Note that this data will change as further toxicology results are received for recent months.*
- Post-mortem toxicology results suggest that there has been a greater number of cases with extreme fentanyl concentrations in April-July 2020 compared with previous months (concentrations exceeded >50ug/L (micrograms/litre). From April-July, approximately 13% of cases had extreme fentanyl concentrations as compared to 8% from Jan 2019 to March 2020.
- Between April and July 2020, 16% of fentanyl-detected illicit drug toxicity deaths in Vancouver Coastal Health had extreme fentanyl concentrations (>50ug/L) followed by 14% in Fraser Health and 14% in Island Health.
- Approximately 78% of illicit drug toxicity deaths in B.C. in 2020 have fentanyl detected (709 of 909 deaths, based on preliminary data and pending further results).
- Carfentanil has been detected in 26 suspected illicit drug toxicity deaths to date in 2020, with 12 deaths in June 2020 and 8 in July 2020.
- Approximately 70% of those dying in 2020 were aged 19 to 49, with 89% between 19 and 59. Males accounted for 80% of all deaths during this period.

- Fraser Health Authority had the highest number (224) of illicit drug toxicity deaths with fentanyl detected in 2020, followed by Vancouver Coastal Health (194) and Island Health Authority (131).^{[3],[4]}
- The Health Service Delivery Areas with the most fentanyl-detected illicit drug toxicity deaths in 2020 were Vancouver (174), Fraser South (119), South Vancouver Island (78), Fraser North (64), and Okanagan (54). When looking at individual townships over the same time period, the highest numbers of deaths were seen in Vancouver, Surrey and Victoria.^[3-5]
- Preliminary data for 2020 suggest that the proportion of apparent illicit drug toxicity deaths with fentanyl detected (alone or in combination with other drugs) is at least 78%. Proportions from 2012 to 2020 are as follows:
 - 2012 = 4%
 - 2013 = 15%
 - 2014 = 25%
 - 2015 = 29%
 - 2016 = 67%
 - 2017 = 82%
 - 2018 = 86%
 - 2019 = 85%
 - 2020 = 78% **Preliminary, pending further results.*

Figure 1: Percent of Illicit Drug Deaths with Fentanyl Detected

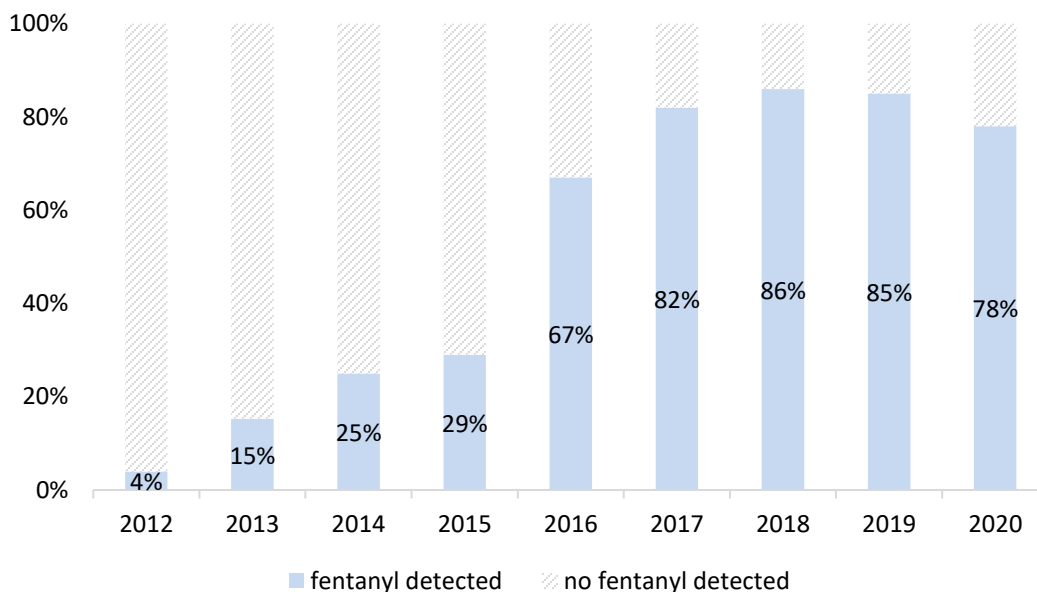
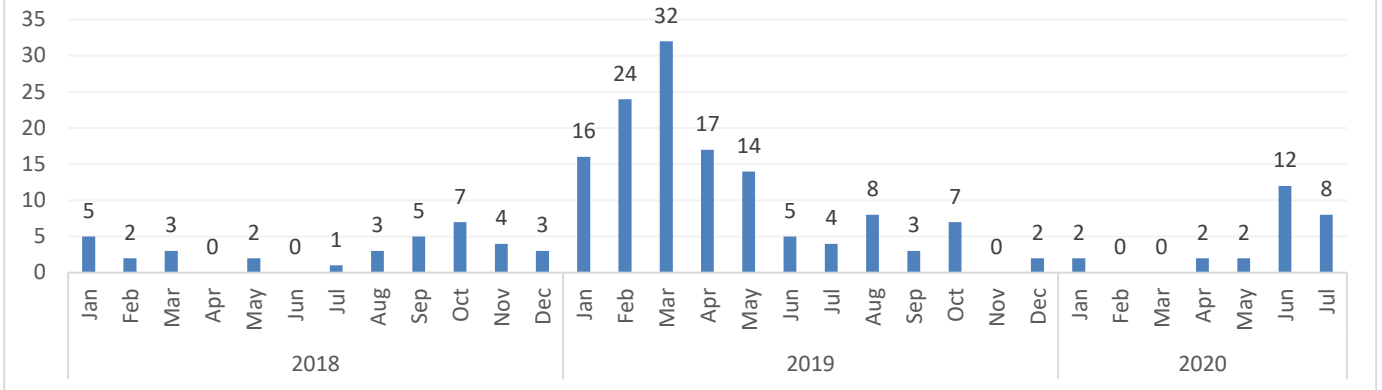
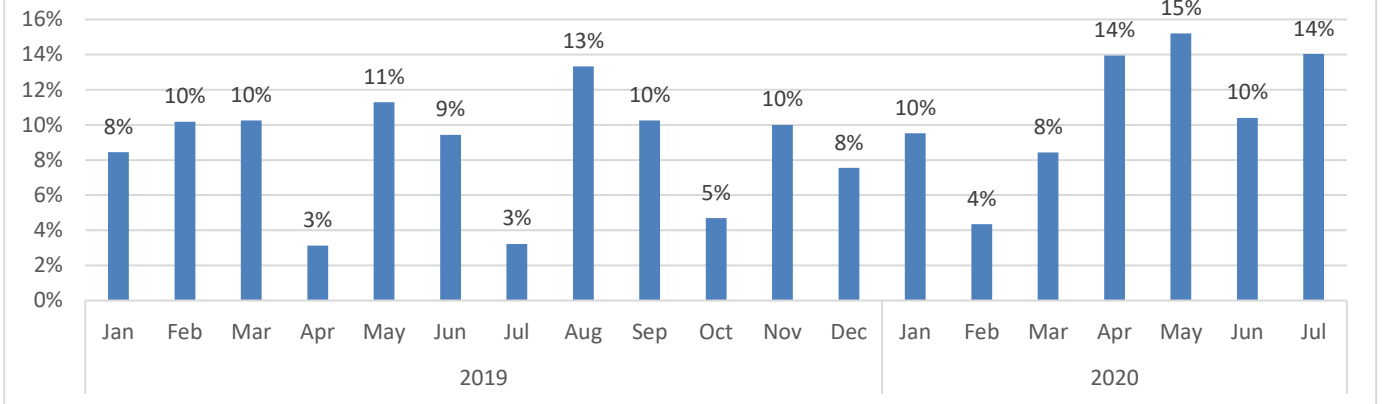


Figure 2: Illicit Drug Overdose Deaths with Carfentanyl Detected



Percent of Fentanyl Detected Illicit Drug Toxicity Deaths with Fentanyl Concentrations >50 µg/L



Percent of Fentanyl Detected Illicit Drug Toxicity Deaths with Fentanyl Concentrations >50 µg/L by Health Authority

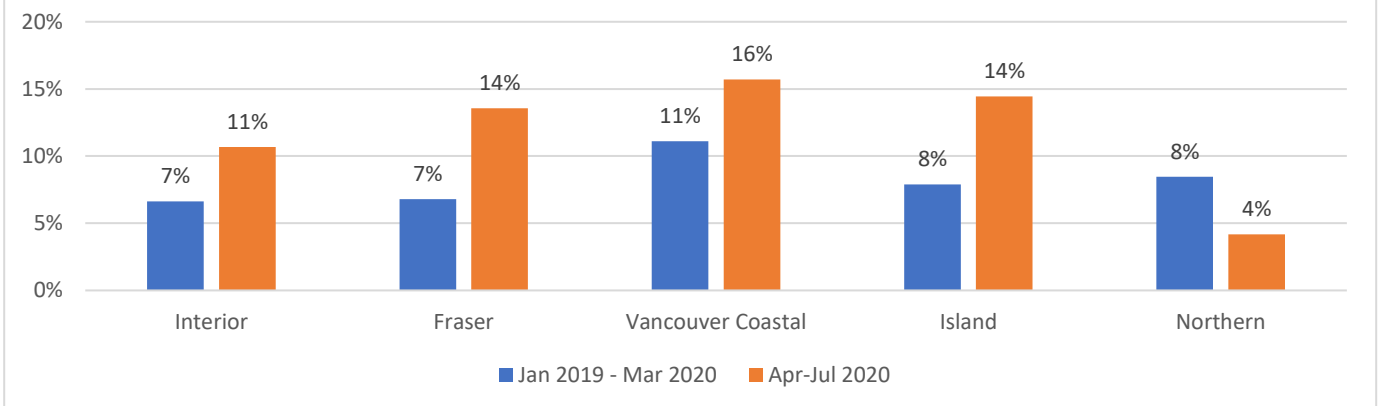


Table 1: Fentanyl-Detected Deaths by Month, 2012-2020^[3]

Month	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	0	5	5	20	46	106	116	87	66
February	0	3	5	8	30	106	90	72	49
March	0	6	9	8	48	117	136	98	88
April	1	8	8	12	48	129	116	70	96
May	1	3	8	8	37	113	92	74	131
June	1	2	6	11	42	104	91	58	139
July	0	1	3	14	41	105	127	67	140
August	1	4	8	15	38	111	112	68	-
September	1	2	9	15	43	81	122	47	-
October	0	4	13	16	52	82	106	66	-
November	4	6	6	13	111	90	120	70	-
December	3	6	11	13	131	82	107	58	-
Total	12	50	91	153	667	1,226	1,335	835	709

Table 2: Fentanyl-Detected Deaths by Sex, 2012-2020^[3]

Sex	2012	2013	2014	2015	2016	2017	2018	2019	2020
Female	2	9	21	26	127	213	270	192	143
Male	10	41	70	127	540	1,013	1,065	643	566
Total	12	50	91	153	667	1,226	1,335	835	709

Table 3: Fentanyl-Detected Deaths by Age Group, 2012-2020^[3]

Age Group	2012	2013	2014	2015	2016	2017	2018	2019	2020
<19	0	1	0	2	12	16	14	11	12
19-29	3	19	28	43	153	244	275	152	134
30-39	2	10	33	46	196	350	358	243	177
40-49	6	13	19	29	154	283	301	182	170
50-59	1	5	7	24	121	247	284	176	148
60-69	0	2	4	9	30	82	97	68	63
70-79	0	0	0	0	1	4	6	3	5
Total	12	50	91	153	667	1,226	1,335	835	709

Table 4: Fentanyl-Detected Deaths by Health Authority of Injury, 2012-2020^[3-6]

HA	2012	2013	2014	2015	2016	2017	2018	2019	2020
Interior	2	3	9	21	117	209	197	116	112
Fraser	7	16	29	57	210	387	445	283	224
Vancouver Coastal	1	10	26	40	182	367	384	236	194
Island Health	1	14	17	23	122	211	222	145	131
Northern	1	7	10	12	36	52	87	55	48
Total	12	50	91	153	667	1,226	1,335	835	709

Table 5: Fentanyl-Detected Deaths by Health Service Delivery Area of Injury, 2012-2020^[3-6]

HSDA	2012	2013	2014	2015	2016	2017	2018	2019	2020
East Kootenay	0	1	2	1	6	4	5	0	10
Kootenay Boundary	0	0	1	2	5	15	12	10	8
Okanagan	2	1	4	14	60	133	111	69	54
Thompson Cariboo Shuswap	0	1	2	4	46	57	69	37	40
Fraser East	1	3	1	10	37	82	80	74	41
Fraser North	1	6	15	28	72	108	132	74	64
Fraser South	5	7	13	19	101	197	233	135	119
Richmond	0	0	0	3	13	25	11	12	6
Vancouver	1	5	22	32	152	307	339	209	174
North Shore/Coast Garibaldi	0	5	4	5	17	35	34	15	14
South Vancouver Island	1	3	2	9	60	95	114	64	78
Central Vancouver Island	0	10	13	11	46	84	82	57	40
North Vancouver Island	0	1	2	3	16	32	26	24	13
Northwest	0	1	0	1	7	6	12	15	5
Northern Interior	1	3	4	7	14	31	54	25	27
Northeast	0	3	6	4	15	15	21	15	16
Total	12	50	91	153	667	1,226	1,335	835	709

Table 6: Fentanyl-Detected Deaths by Month of Death and Health Authority of Injury, 2019-2020^[3-6]

Year	HA	Interior	Fraser	Vancouver Coastal	Island	Northern	Total
2019	January	11	29	27	14	6	87
	February	9	28	24	8	3	72
	March	20	31	29	14	4	98
	April	8	23	24	12	3	70
	May	10	26	23	10	5	74
	June	3	23	16	13	3	58
	July	11	19	16	13	8	67
	August	6	28	21	8	5	68
	September	7	17	9	12	2	47
	October	10	19	17	12	8	66
	November	8	25	16	17	4	70
	December	13	15	14	12	4	58
2020	January	9	16	23	11	7	66
	February	9	18	12	6	4	49
	March	12	34	21	13	8	88
	April	19	25	31	16	5	96
	May	18	44	32	30	7	131
	June	22	42	44	27	4	139
	July	23	45	31	28	13	140
Total		228	507	430	276	103	1,544

Table 7: Fentanyl-Detected Deaths by Top Townships of Injury in 2020, 2012-2020^[3-5]

Township	2012	2013	2014	2015	2016	2017	2018	2019	2020
Vancouver	1	5	22	32	152	307	339	209	174
Surrey	3	4	8	11	73	148	181	102	96
Victoria	0	3	2	8	53	84	92	54	73
Kelowna	0	0	1	6	37	67	51	27	27
Kamloops	0	1	2	3	31	31	38	22	26
Abbotsford	0	1	1	6	22	40	36	38	20
Nanaimo	0	8	12	9	28	46	32	27	19
Prince George	1	3	4	6	13	20	46	17	17
New Westminster	1	0	0	3	8	16	30	15	17
Burnaby	0	3	0	6	28	35	45	28	16
Langley	1	1	5	6	19	32	29	20	15
Chilliwack	1	0	0	2	8	17	27	19	15
Maple Ridge	0	3	7	12	20	24	26	9	12
Coquitlam	0	0	4	4	8	21	18	10	11
Fort St John	0	2	4	1	9	2	9	8	10
Other Township	4	16	19	38	158	336	336	230	161
Total	12	50	91	153	667	1,226	1,335	835	709

Notes:

1. The BCCS operates in a live database environment. Some data for more recent years are based on preliminary circumstances and are subject to change as investigations are concluded. Data are not directly comparable to published counts from previous years.
2. Toxicology testing includes acetylfentanyl as of November 2015. Standard testing for carfentanil, 3-methylfentanyl, furanylfentanyl, and W-18 began in June 1, 2017. Fentanyl-detected data is derived from testing conducted by the BC Coroners Service.
3. Data for 2020 include cases from January 1 to July 31, 2020.
4. Data are based on location of injury.
5. Township of death was used in cases where injury township was unknown.
6. More information about the health regions can be found at <http://www2.gov.bc.ca/gov/content/data/geographic-data-services/land-use/administrative-boundaries/health-boundaries>