



APPARENT OPIOID-RELATED DEATHS

SURVEILLANCE OF OPIOID-RELATED HARMS IN CANADA

January 2016 to December 2019

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Public Health
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Canada

**TO PROMOTE AND PROTECT THE HEALTH OF CANADIANS THROUGH LEADERSHIP,
PARTNERSHIP, INNOVATION AND ACTION IN PUBLIC HEALTH.**

—Public Health Agency of Canada

Prepared by the Opioid Overdose Surveillance Task Group (OOSTG) of the Special Advisory Committee on the Epidemic of Opioid Overdoses (SAC)

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*Décès apparemment liés à la consommation d'opioïdes
Surveillance des méfaits associés aux opioïdes au Canada
Janvier 2016 à décembre 2019*

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Table of Contents

Acknowledgements	4
Suggested Citation	4
National Summary	5
Total Numbers	5
Sex Breakdown	7
Age Group Breakdown	8
Substances	9
Origin	12
Technical Notes	13
Definitions	13
How apparent opioid-related deaths are counted	14
Limitations of the data on apparent opioid-related deaths	15
Notes on provincial and territorial data	16
General notes	16
Manner of death	16
Sex and age group	17
Fentanyl and fentanyl analogues	17
Other non-opioid substances	17
Origin of the opioid(s)	18
Data Suppression	19
APPENDIX	22



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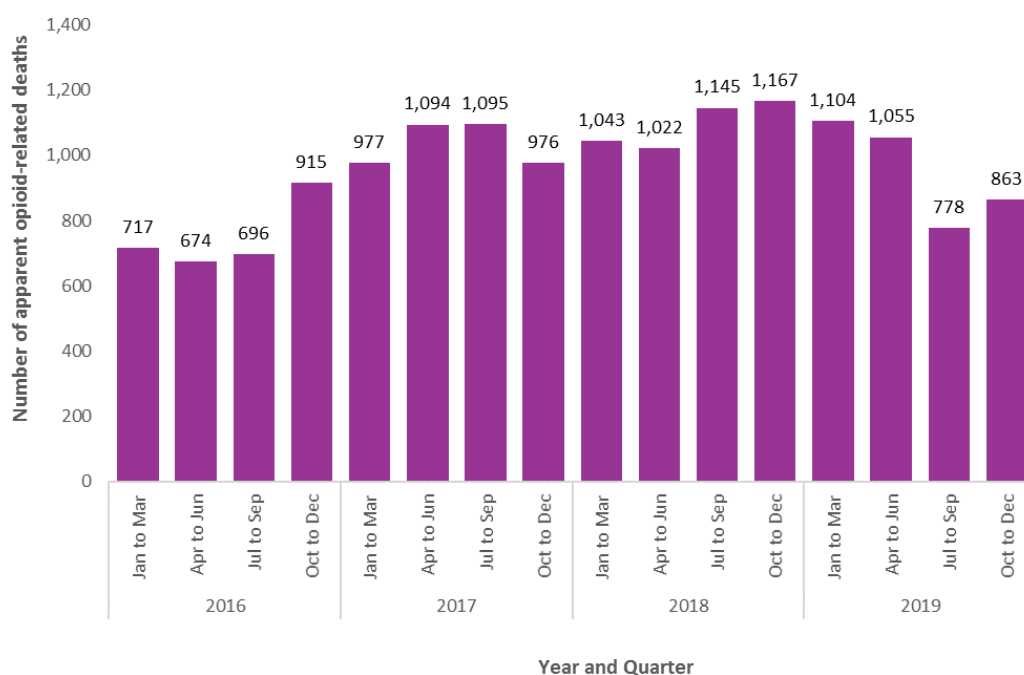
National Summary

Total Numbers

15,393 apparent opioid-related deaths occurred between January 2016 and December 2019.

- Western Canada continues to be the most impacted region of the country, but rates have increased in other regions, including Ontario.
- A significant increase in rates of apparent opioid-related deaths at the national level was observed between January 2016 and June 2017; the rates remained high from July 2017 to December 2019.
- In 2019, between January and December, 3,823 deaths occurred, of which 94% were accidental (unintentional).

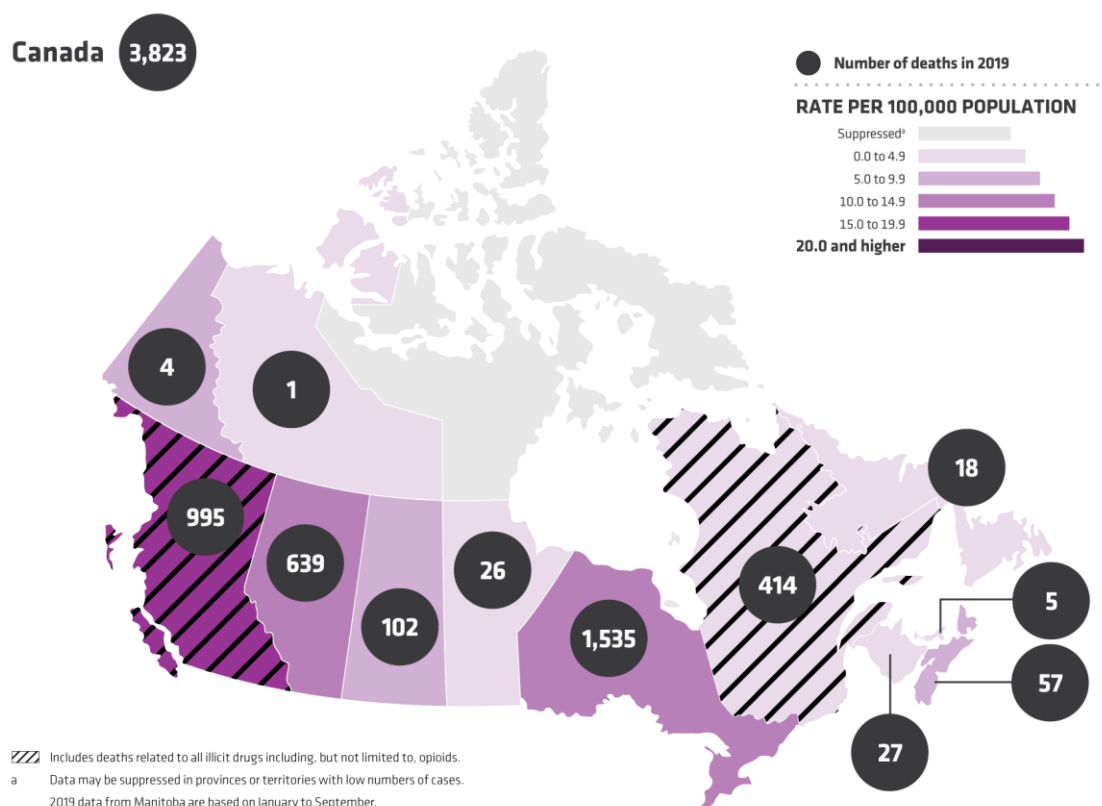
Figure 1. Number of total apparent opioid-related deaths by quarter in Canada, January 2016 to December 2019



For more information, refer to the [appendix](#).

i This update is based on data submitted to the Public Health Agency of Canada on or before May 19, 2020. Due to differences in identifying and reporting cases, comparisons over time and between provinces and territories should be interpreted with caution. Refer to the [Technical notes](#) for more information.

Figure 2. Number and rate (per 100,000) of total apparent opioid-related deaths by province or territory in 2019



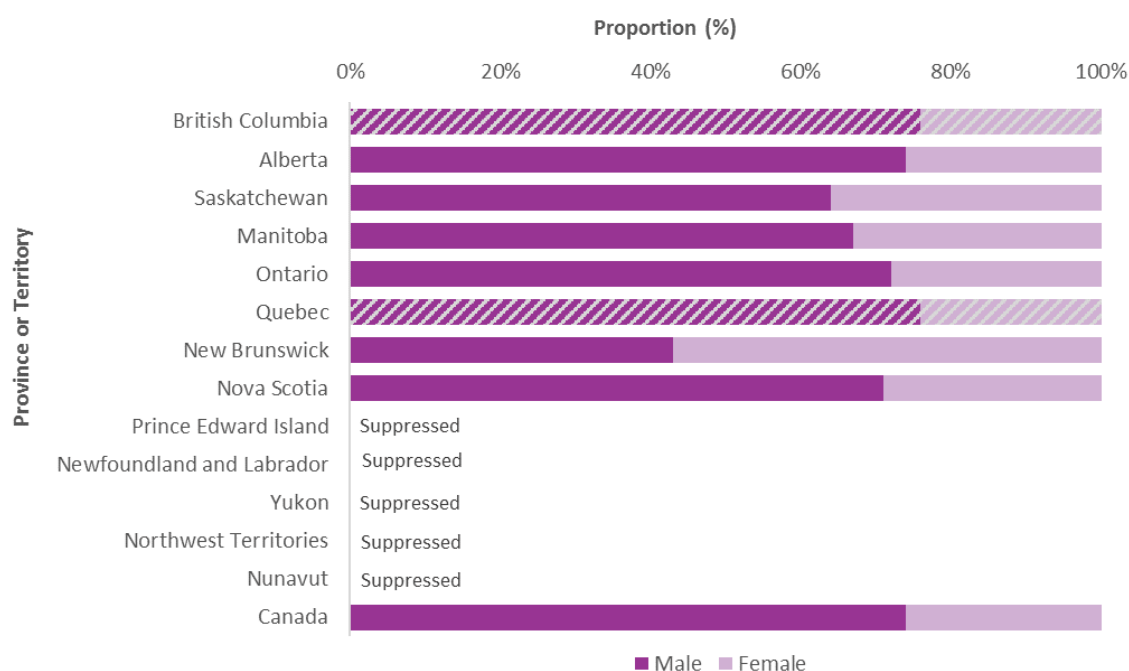
For more information, refer to the [appendix](#).

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Sex Breakdown

In 2019, among accidental apparent opioid-related deaths, 74% occurred among males compared to 26% among females.

Figure 3. Percentage of accidental apparent opioid-related deaths by sex and province or territory in 2019



Includes deaths related to all illicit drugs including, but not limited to, opioids
 Data may be suppressed in provinces or territories with low number of cases
 2019 data from Manitoba are based on January to September.

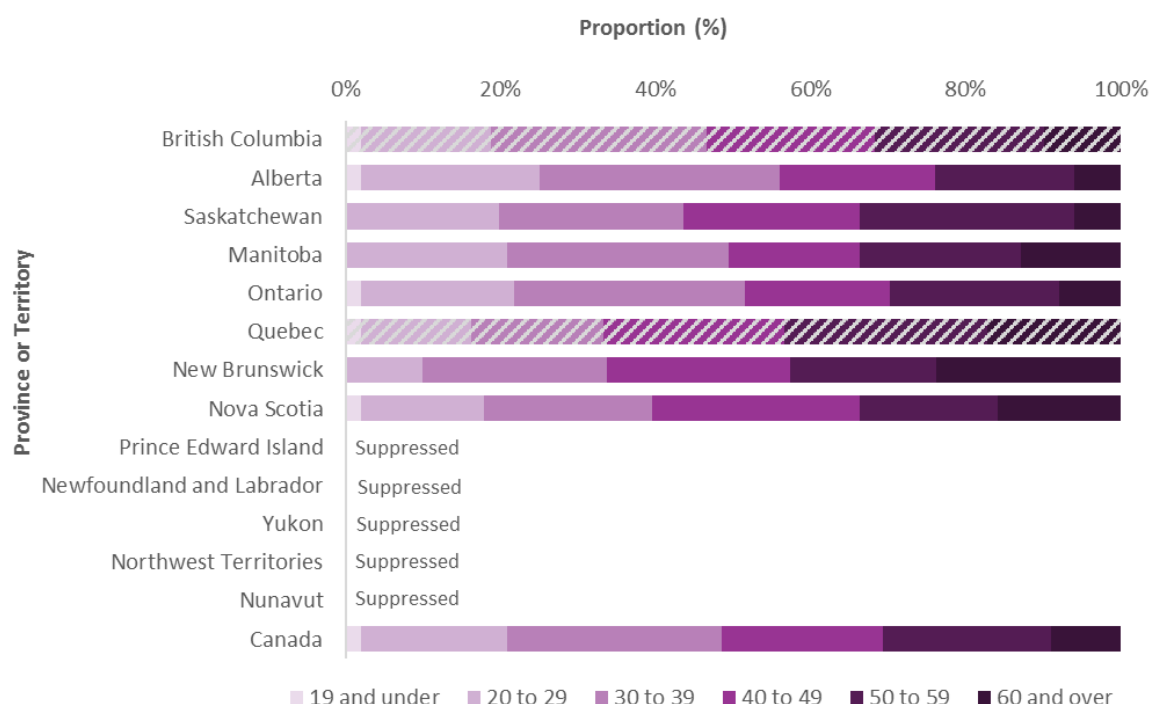
For more information, refer to the [appendix](#).

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Age Group Breakdown

In 2019, among accidental apparent opioid-related deaths, approximately 90% occurred among people aged between 20 and 59 years old.

Figure 4. Percentage of accidental apparent opioid-related deaths by age group and province or territory in 2019



Includes deaths related to all illicit drugs including, but not limited to, opioids
 Data may be suppressed in provinces or territories with low number of cases
 2019 data from Manitoba are based on January to September.

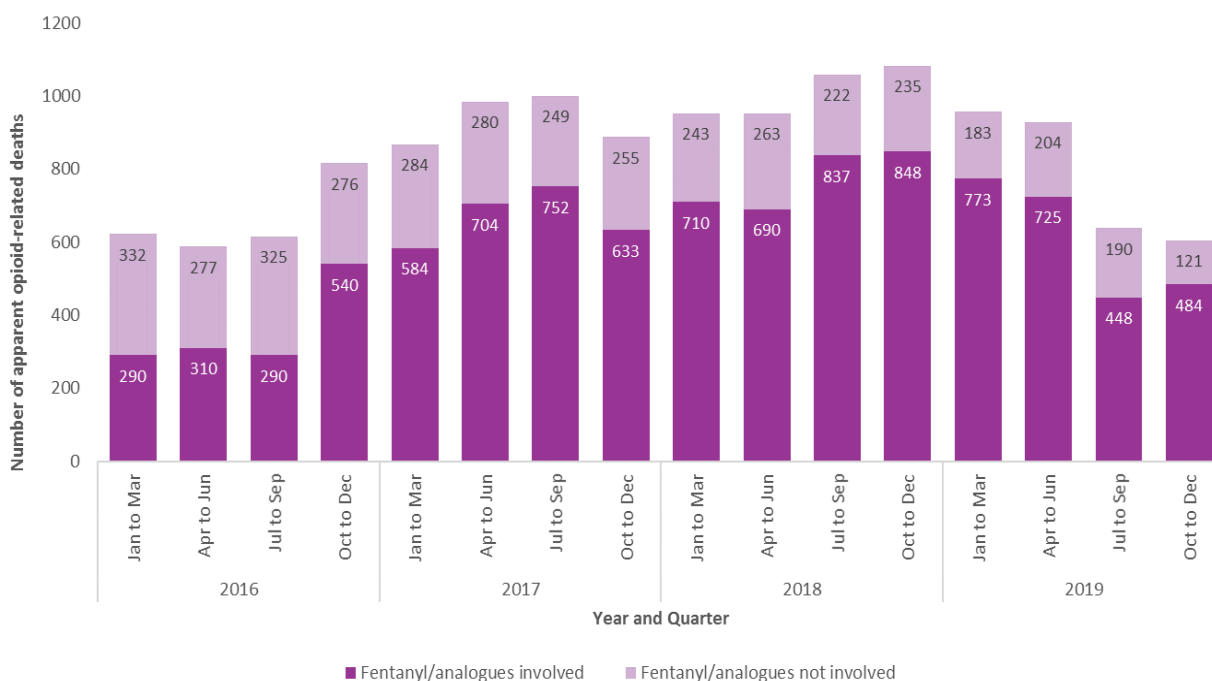
For more information, refer to the [appendix](#).

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Substances

In 2019, among accidental apparent opioid-related deaths, 77% involved fentanyl or fentanyl analogues and 72% involved one or more types of non-opioid substances such as alcohol, benzodiazepines, cocaine, gabapentinoids, methamphetamines, W-18, etc.

Figure 5. Percentage of accidental apparent opioid-related deaths involving or not involving fentanyl or fentanyl analogues by quarter in Canada, January 2016 to December 2019



For more information, refer to the [appendix](#).


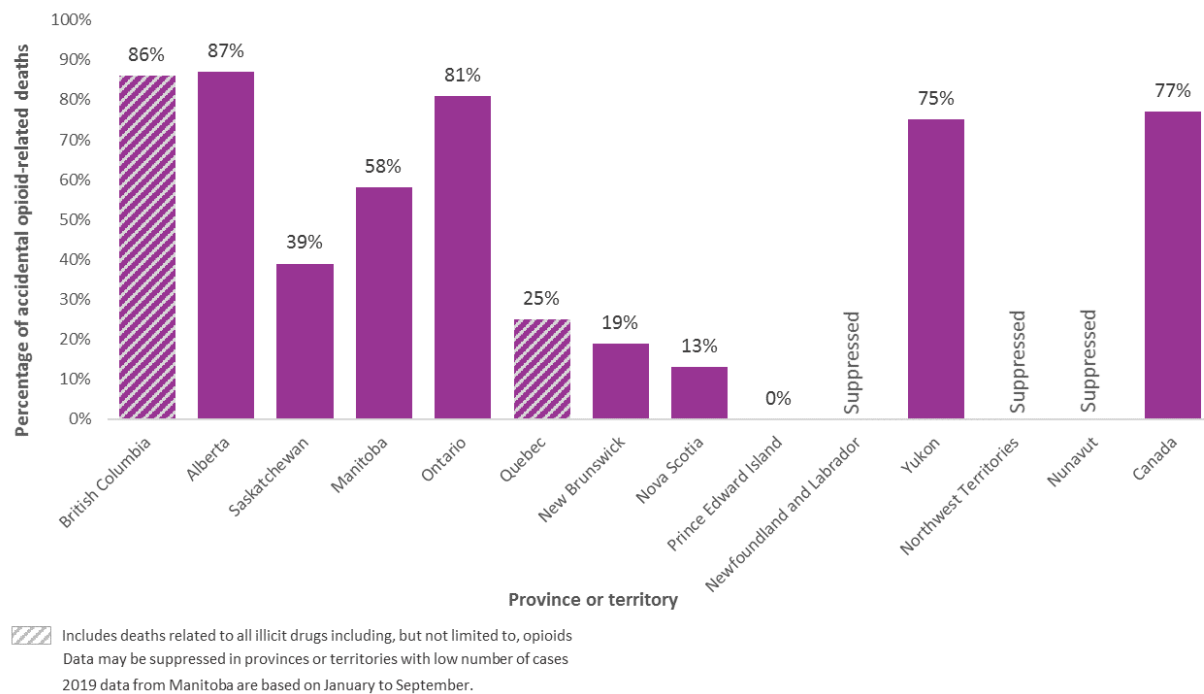
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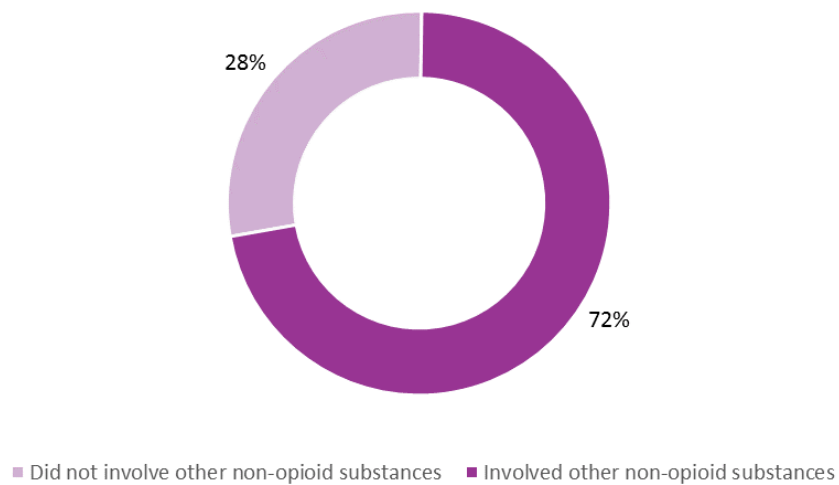
Figure 6. Percentage of accidental apparent opioid-related deaths involving fentanyl or fentanyl analogues by province or territory in 2019




For more information, refer to the [appendix](#).

This update is based on data submitted to the Public Health Agency of Canada on or before May 19, 2020. Due to differences in identifying and reporting cases, comparisons over time and between provinces and territories should be interpreted with caution. Refer to the [Technical notes](#) for more information.

Figure 7. Percentage of accidental apparent opioid-related deaths involving other non-opioid substances in Canada in 2019



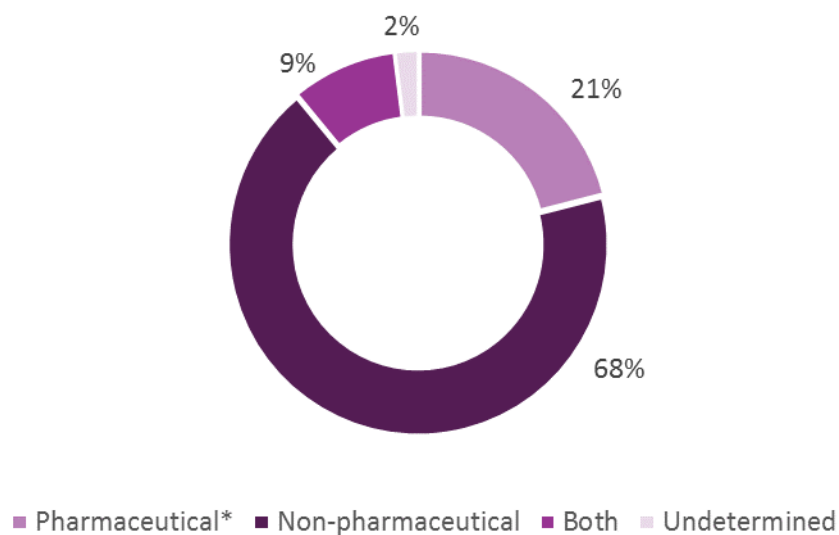
For more information, refer to the [appendix](#).

 This update is based on data submitted to the Public Health Agency of Canada on or before May 19, 2020. Due to differences in identifying and reporting cases, comparisons over time and between provinces and territories should be interpreted with caution. Refer to the [Technical notes](#) for more information.

Origin


In 2019, among accidental apparent opioid-related deaths with completed investigations from six provinces, 68% involved non-pharmaceutical opioids only. In comparison, 21% involved pharmaceutical* opioids only and 9% involved both.

Figure 8. Percentage of accidental apparent opioid-related deaths by origin of the opioid(s) directly contributing to death, among deaths with completed investigations in Canada in 2019



*Refers to opioid(s) that were manufactured by a pharmaceutical company and approved for medical purposes in humans. Pharmaceutical origin does not indicate how the opioids were obtained (e.g. through personal prescription or by other means).

For more information, refer to the [appendix](#).

 This update is based on data submitted to the Public Health Agency of Canada on or before May 19, 2020. Due to differences in identifying and reporting cases, comparisons over time and between provinces and territories should be interpreted with caution. Refer to the [Technical notes](#) for more information.

Technical notes

Definitions

Apparent opioid-related death (AORD): A death caused by intoxication/toxicity (poisoning) resulting from substance use, where one or more of the substances is an opioid, regardless of how it was obtained (e.g. illegally or through personal prescription).

Ongoing investigation: Coroners and medical examiners continue to collect information on how and why the death occurred. Data for ongoing investigations are considered preliminary and subject to change.

Completed investigation: Coroners and medical examiners have collected all available information on how and why a death occurred. The time required to complete an investigation and related administrative processes is case-dependent and can range from approximately three to twenty-four months.

Manner of death - Accident: Deaths with completed investigations where the coroner or medical examiner determined that the death was unintentional. This category also includes deaths with ongoing investigations where the manner of death was believed to be unintentional or had not been assigned at the time of reporting.

Manner of death - Suicide: Deaths with completed investigations where the coroner or medical examiner determined that the opioids were consumed with the intent to die. This category also includes deaths with ongoing investigations where suicide was believed to be the manner of death at the time of reporting.

Manner of death - Undetermined: Deaths with completed investigations where a specific manner of death (e.g. accident, suicide) could not be assigned based on available or competing information. For this manner of death category, provinces and territories report only completed investigations with the exception of British Columbia which also includes data from ongoing investigations.

Opioid origin – Pharmaceutical: Deaths with completed investigations where all opioids that directly contributed to death were manufactured by a pharmaceutical company and approved for medical purposes in humans. Pharmaceutical origin does not indicate how the opioids were obtained (e.g. through personal prescription or by other means)

Opioid origin – Non-pharmaceutical: Deaths with completed investigations where all opioids that directly contributed to the death were not manufactured by a pharmaceutical company or not approved for medical purposes in humans.

Opioid origin – Both pharmaceutical and non-pharmaceutical: Deaths with completed investigations where the opioids that directly contributed to the death were a combination of pharmaceutical and non-pharmaceutical opioids, without any opioids of undetermined origin.

Opioid origin – Undetermined: Deaths with completed investigations where, for one or more opioids that directly contributed to the death, it was not possible to determine whether the opioid was pharmaceutical or non-pharmaceutical.



How apparent opioid-related deaths are counted

Counts are provided by the provinces and territories that collect data from their respective offices of Chief Coroners or Medical Examiners. Crude rates are calculated using the most current population data from Statistics Canada.

The data provided by the provinces and territories can include deaths:

- with completed or ongoing investigations
- where manner of death is classified as accident, suicide, or undetermined

These data **do not** include deaths due to:

- the medical consequences of long-term substance use or overuse (for example, alcoholic cirrhosis)
- medical assistance in dying
- trauma where use of the substance(s) contributed to the circumstances of the injury that lead to the death, but was not directly involved in the death
- homicide

However, some provincial and territorial differences remain in the type of data reported and in the time periods for which data are available (refer to [Table A](#)).



Limitations of the data on apparent opioid-related deaths

Data presented in this update should be interpreted with caution.

- This update is based on data submitted to the Public Health Agency of Canada on or before May 19, 2020. New or revised data reported after this date will be reflected in future updates.
- Data released by provinces and territories may differ from the data provided in this update due to the availability of updated data, differences in the type of data reported (e.g. manners of death), the use of alternate age groupings, differences in time periods presented and/or population estimates used for calculations, etc.
- As some data are based on ongoing investigations by coroners and medical examiners, they are considered preliminary and subject to change. The time required to complete an investigation and related administrative processes is case-dependent and can range from approximately three to twenty-four months.
- This update is based on data that do not specify how the opioids were obtained (e.g. illegally or through personal prescription); the level of toxicity may differ depending on the opioid (substance(s) involved, concentration, and dosage).
- Provincial and territorial differences in the death investigation process, death classification method, toxicology testing, and the manners of death reported may impact the interpretation and comparability of the data presented in this update over time and between provinces and territories.
- Rates reported here have not been adjusted for existing differences in provincial and territorial age distributions.
- Percentages for sex and age breakdown are based exclusively on data where the information was known.

Notes on provincial and territorial data

Due to differences in identifying and reporting cases, comparisons over time and between provinces and territories should be interpreted with caution.

General notes

1. Data reported by some provinces and territories do not include all manners of death (accident, suicide, undetermined) or stages of investigation (ongoing, completed); refer to [Table A](#) for more details.
2. Data presented here will be updated on a quarterly basis based on results of completed investigations.
3. Rates for provinces and territories with relatively smaller populations may change substantially with even slight changes in the number of deaths.
4. Data from British Columbia include deaths related to all illicit drugs (including opioids) used alone or in combination with prescribed/diverted medication.
5. Quebec data for 2016, 2017 and 2018 include deaths with completed investigations only; death investigations were underway for 0.4% of deaths that occurred in 2016, 1.6% in 2017 and 9.4% in 2018. Available 2019 data from Quebec include unintentional deaths with ongoing investigations related to all illicit drugs including, but not limited to, opioids. Preliminary data for drug-related poisonings, for which toxicology information was available, indicate that 53% of deaths between January and December 2019 involved an opioid. Data presented here will be updated quarterly based on results of completed investigations.
6. Data from Yukon include deaths with completed investigations only. In 2018, one apparent opioid-related death occurred in a different province following an overdose in Yukon. This death is included in the data from the jurisdiction where the death occurred and is not reported in the data from Yukon.
7. Data from Prince Edward Island include accidental deaths with completed investigations only. Only annual totals were available for 2016 data from Prince Edward Island; quarterly data for 2016 were not available at the time of this publication.
8. In Ontario, apparent opioid-related death data were captured using an enhanced data collection tool by the Office of the Chief Coroner as of May 1, 2017. Prior to this time period, retrospective case information was collected using a different tool.
9. Data from Nunavut were not included in national counts or percentages.
10. Manitoba data from October to December 2019 were not available at the time of this publication.

Manner of death

11. Manner of death is assigned by the coroner or medical examiner during, or following an investigation. The data in this update include accidental, suicide or undetermined deaths.
12. Suicide data were unavailable from Prince Edward Island and Nunavut.

Sex and age group

13. For most provinces/territories, data on the sex of the individual was based on biological characteristics or legal documentation.
14. Data on deaths where sex was categorized as “Other” were excluded from analyses by sex, but were included in overall analyses.
15. Data on sex were unavailable for less than five individuals in 2017. Due to rounding, percentages may not add to 100%.
16. For Ontario, from January 2016 to April 2017, data on the sex of the individual reflected the sex assigned at birth or was based on biological characteristics at the time of death; as of May 2017, the perceived or projected identity of the individual was reported.
17. Alberta uses data on the sex of the individual based on the medical examiner’s decision, which is largely based on biological characteristics. In the small subset of cases where the individual was known to identify with a gender different than their biological sex, the medical examiner may indicate their identified gender.
18. Data on deaths where age group was categorized as “Unknown” were excluded from analyses by age group, but were included in overall analyses.
19. Data on age group were unavailable for less than five individuals in 2017. Due to rounding, percentages may not add to 100%.

Fentanyl and fentanyl analogues

20. Refer to [Table B](#) below for details on opioids.
21. Observed trends of accidental apparent opioid-related deaths involving fentanyl or fentanyl analogues should be interpreted with caution until additional data become available. In addition, changes to testing practices during the reporting period may affect observed trends.
22. Given provincial and territorial differences in death classification methods, the term “involving” includes deaths where the substance was either detected and/or directly contributed to the death.
23. Data from British Columbia and available 2019 data from Quebec on deaths related to illicit drugs where toxicology information was available and fentanyl (or fentanyl analogues) was detected were used to approximate apparent opioid-related deaths involving fentanyl (or fentanyl analogues).
24. National-level, quarterly data on accidental apparent opioid-related deaths involving fentanyl or fentanyl analogues do not include data from Prince Edward Island (2016 only), Newfoundland and Labrador, or Nunavut.
25. For Ontario, only data on deaths with completed investigations, where relevant toxicology information was available, were included in percentages for fentanyl or fentanyl analogues.

Other non-opioid substances

26. Refer to [Table B](#) below for details on other non-opioid substances.
27. National-level percentages of accidental apparent opioid-related deaths involving other non-opioid substances do not include data from British Columbia and Nunavut as these data were not available.

28. For Alberta, only data on deaths with completed investigations and specific substances causing death listed on the death certificate were included in percentages of accidental apparent opioid-related deaths involving other non-opioid substances.
29. For Ontario, only data on deaths with completed investigations, where relevant toxicology information was available, were included in percentages of accidental apparent opioid-related deaths involving other non-opioid substances. Data for non-opioid substances from Ontario between January 2016 and April 2017 were based on their detection and do not include alcohol; as of May 1, 2017, data on non-opioid substances are based on their direct effects and include alcohol.

Origin of opioid(s)

30. The origin of opioid(s) refers to whether the opioids that directly contributed to the death were pharmaceutical, non-pharmaceutical, both or undetermined.
31. Data on origin were only available for deaths with completed investigations from 2018 onward from six provinces and territories. Completed investigations represented 93% of apparent opioid-related death investigations from these provinces/territories over that period; refer to [Table A](#) for more details.
32. Summary data and trends based on origin of opioid(s) should be interpreted with caution until additional data become available.
33. Origin categorization is based on toxicology results and scene evidence and does not indicate how the consumed substances were prepared, their appearance, or how they were ‘advertised’; nor should it be used to infer the timing or mode of consumption.
34. Pharmaceutical opioids also include those approved for use in humans in other countries, but not necessarily in Canada.
35. For the purposes of origin categorization, deaths involving fentanyl are categorized as “suspected non-pharmaceutical” when there is: 1) no evidence of a patch, vial, or other pharmaceutical formulation at the scene, or 2) no/unknown evidence of a prescription. These deaths are grouped with deaths involving non-pharmaceutical opioids.
36. Origin categorization represents the best estimate based on the information available and should be interpreted with caution.
37. Origin refers only to the opioid(s) that directly contributed to the death and should not be used as an indication of prior use of opioids of the same or other origin.



Data suppression

The suppression of data in this update is based on the preferences of individual provinces or territories to address concerns around releasing small numbers for their jurisdiction.

- Prince Edward Island suppressed counts between one and four for quarterly data, and for any data related to sex or age distribution.
- Newfoundland and Labrador suppressed counts between one and four for quarterly data, and data related to substances involved and sex or age distribution
- Quebec suppressed counts less than five for deaths with ongoing investigations (2019 data).
- Yukon suppressed counts between one and four for data related to sex or age distribution (2019 data).
- Nunavut suppressed all counts less than five.

In addition, suppression was applied in some instances where all data for a province or territory fell in a single category of a given table or figure.

Table A. Reporting periods, manners of death, and availability of opioids origin data included in this update by province or territory.

		BC	AB	SK	MB	ON	QC	NB	NS	PE	NL	YT	NT	NU
Reporting period (as of May 19, 2020)														
2016-18	January to December	✓	✓	✓ (C)	✓	✓	✓ (C)	✓	✓	✓ (C)	✓ (C)	✓ (C)	✓	✓
2019	January to December	✓	✓	✓ (C)	✓ (INC)	✓	✓	✓	✓	✓ (C)	✓ (C)	✓ (C)	✓	✓
Classification of deaths included in the reported data														
Accident	Completed investigations	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Ongoing investigations where manner of death was believed to be unintentional	✓	-	N/A	✓	-	✓	✓	✓	N/A	N/A	N/A	✓	N/A
	Ongoing investigations where manner of death had not been assigned at the time of reporting	-	✓	N/A	✓	✓	N/A	✓	✓	N/A	-	-	✓	N/A
Suicide	Completed investigations	✓	✓	✓	✓	✓	✓	✓	✓	N/A	✓	✓	✓	✓
	Ongoing investigations where the manner of death was believed to be suicide	✓	N/A	N/A	✓	-	N/A	✓	✓	N/A	N/A	N/A	✓	N/A
Deaths with completed investigations and an undetermined manner of death		✓	✓	✓	✓	✓	✓	✓	✓	N/A	✓	✓	✓	✓
Classification of deaths by origin of opioid(s)														
2018	January to December	N/A	✓	N/A	N/A	✓	N/A	N/A	✓	N/A	✓	N/A	N/A	N/A
2019	January to December	N/A	✓	✓	✓ (INC)	✓	N/A	N/A	✓	N/A	✓	N/A	N/A	N/A

- ✓ These data have been reported by the province or territory and are reflected in this update, unless otherwise specified
- (C) Data includes deaths with completed investigations only
- (INC) Data was not available for the entire period
- The classification is not used in the province or territory
- N/A Data were not available at the time of this publication

Table B. Opioids and other substances

Category	Includes (but are not limited to):	
Fentanyl and fentanyl analogues	<ul style="list-style-type: none">• 3-methylfentanyl• acetylfentanyl• acrylfentanyl• butyrylfentanyl• carfentanil• cyclopropyl fentanyl	<ul style="list-style-type: none">• despropionyl-fentanyl• fentanyl• fluoroisobutyrylfentanyl (FIBF)• furanylfentanyl• methoxyacetylfentanyl• norfentanyl
Non-fentanyl-related opioids	<ul style="list-style-type: none">• buprenorphine metabolites• codeine• dihydrocodeine• heroin• hydrocodone• hydromorphone• loperamide• meperidine	<ul style="list-style-type: none">• methadone• monoacetylmorphine• morphine• normeperidine• oxycodone• tapentadol• tramadol• U-47700
Non-opioid substances	<ul style="list-style-type: none">• alcohol• benzodiazepines• cocaine	<ul style="list-style-type: none">• gabapentin• methamphetamine• W-18




APPENDIX

Table 1. Number and rate of total apparent opioid-related deaths by province or territory, 2016 to 2019

Province or territory	2016		2017		2018		2019	
	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population
British Columbia	1,005	20.7	1,524	30.9	1,561	31.2	995	19.6
Alberta	602	14.3	744	17.5	849	19.7	639	14.6
Saskatchewan	83	7.3	85	7.4	125	10.7	102	8.7
Manitoba	88	6.7	106	7.9	93	6.9	26	2.5
Ontario	867	6.2	1,265	9.0	1,473	10.3	1,535	10.5
Quebec	258	3.1	276	3.3	187	2.2	414	4.9
New Brunswick	34	4.5	37	4.8	30	3.9	27	3.5
Nova Scotia	53	5.6	64	6.7	54	5.6	57	5.9
Prince Edward Island	5	3.4	5	3.3	7	4.6	5	3.2
Newfoundland and Labrador	18	3.4	33	6.2	12	2.3	18	3.5
Yukon	7	18.2	7	17.6	5	12.3	4	9.8
Northwest Territories	5	11.2	1	2.2	2	4.4	1	2.2
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	3,025	8.4	4,147	11.3	4,398	11.9	3,823	10.2

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.


 Includes deaths related to all illicit drugs including, but not limited to, opioids

Note: 2019 data from Manitoba are based on January to September.

Table 2. Number and rate of accidental apparent opioid-related deaths by province or territory, 2016 to 2019

Province or territory	2016		2017		2018		2019	
	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population
British Columbia	981	20.2	1,487	30.2	1,525	30.5	935	18.4
Alberta	547	13.0	683	16.1	800	18.6	596	13.6
Saskatchewan	76	6.7	74	6.4	113	9.7	97	8.3
Manitoba	61	4.6	87	6.5	78	5.8	24	2.3
Ontario	726	5.2	1,127	8.0	1,316	9.2	1,437	9.9
Quebec	173	2.1	182	2.2	131	1.6	414	4.9
New Brunswick	27	3.5	31	4.0	23	3.0	21	2.7
Nova Scotia	40	4.2	58	6.1	49	5.1	45	4.6
Prince Edward Island	5	3.4	5	3.3	7	4.6	5	3.2
Newfoundland and Labrador	13	2.5	23	4.4	Suppr.	Suppr.	13	2.5
Yukon	5	13.0	6	15.1	4	9.8	4	9.8
Northwest Territories	4	9.0	1	2.2	2	4.4	Suppr.	Suppr.
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	2,658	7.4	3,764	10.3	4,048	10.9	3,591	9.6

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

 Includes deaths related to all illicit drugs including, but not limited to, opioids

Note 2019 data from Manitoba are based on January to September.

Table 3a. Summary of apparent opioid-related deaths by manner of death, 2016 to 2019.

Manner of death	2016		2017		2018		2019	
	Count	% of annual	Count	% of annual	Count	% of annual	Count	% of annual
Total	3,025	100%	4,147	100%	4,398	100%	3,823	100%
Accidental	2,658	88%	3,764	91%	4,048	92%	3,591	94%
Suicide	269	9%	287	7%	252	6%	145	4%
Undetermined	98	3%	96	2%	88	2%	87	2%

Table 3b. Summary of total apparent opioid-related deaths in Canada, 2016 to 2019.

		2016	2017	2018	2019
Total	Number	3,025	4,147	4,398	3,823
	Crude rate	8.4	11.3	11.9	10.2
Percent by sex	Male	71%	74%	72%	72%
	Female	29%	26%	28%	28%
Percent by age group	19 years or less	2%	2%	2%	2%
	20 – 29 years	18%	19%	20%	18%
	30 – 39 years	26%	27%	26%	27%
	40 – 49 years	21%	21%	21%	20%
	50 – 59 years	23%	21%	22%	22%
	60 years or more	9%	10%	10%	10%
Percent involving fentanyl or fentanyl analogues		49%	67%	72%	75%
Percent involving other non-opioid substances		83%	73%	69%	72%

Table 3c. Summary of suicide apparent opioid-related deaths in Canada, 2016 to 2019.

		2016	2017	2018	2019
Total	Number	269	287	252	145
	Crude rate	0.7	0.8	0.7	0.4
Percent by sex	Male	46%	48%	51%	46%
	Female	54%	52%	49%	54%
Percent by age group	19 years or less	1%	1%	1%	1%
	20 – 29 years	8%	9%	8%	7%
	30 – 39 years	11%	16%	10%	15%
	40 – 49 years	19%	16%	18%	18%
	50 – 59 years	28%	30%	32%	27%
	60 years or more	32%	29%	31%	33%
Percent involving fentanyl or fentanyl analogues		13%	15%	21%	24%
Percent involving other non-opioid substances		82%	76%	71%	69%

Table 4. Number of total apparent opioid-related deaths by quarter and province or territory, January 2016 to December 2019.

Province or territory	2016				2017				2018				2019			
	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec
British Columbia	226	195	203	381	408	438	359	319	399	372	412	378	304	250	222	219
Alberta	137	140	159	166	162	182	183	217	206	214	222	207	174	193	160	112
Saskatchewan	25	17	24	17	25	20	22	18	34	28	34	29	25	32	22	23
Manitoba	18	20	17	33	34	34	19	19	21	17	24	31	10	10	6	n/a
Ontario	214	218	195	240	238	311	414	302	307	325	394	447	450	463	240	382
Quebec	66	64	68	60	66	78	66	66	53	44	37	53	119	83	103	109
New Brunswick	12	4	10	8	10	8	8	11	8	4	9	9	6	6	12	3
Nova Scotia	17	14	17	5	19	17	13	15	15	18	10	11	14	18	13	12
Prince Edward Island	n/a	n/a	n/a	n/a	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	Suppr.	Suppr.	11	6	9	7	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Yukon	0	2	2	3	4	0	1	2	0	0	3	2	1	0	0	3
Northwest Territories	2	0	1	2	0	0	1	0	1	0	1	0	1	0	0	0
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	717	674	696	915	977	1,094	1,095	976	1,043	1,022	1,145	1,167	1,104	1,055	778	863

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

Not available (n/a) – Data were not available at the time of this publication.


 Includes deaths related to all illicit drugs including, but not limited to, opioids

Table 5. Number of accidental apparent opioid-related deaths by quarter and province or territory, January 2016 to December 2019.

Province or territory	2016				2017				2018				2019			
	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec	Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec
British Columbia	218	192	197	374	401	429	346	311	396	360	400	369	288	236	207	204
Alberta	118	130	144	155	152	161	171	199	192	206	209	193	162	181	145	108
Saskatchewan	25	14	22	15	22	17	19	16	31	25	30	27	23	32	21	21
Manitoba	11	14	13	23	26	27	18	16	15	14	22	27	8	10	6	n/a
Ontario	174	180	174	198	191	276	380	280	262	292	358	404	415	439	223	360
Quebec	50	44	43	36	45	51	45	41	35	34	22	40	119	83	103	109
New Brunswick	11	3	6	7	8	6	7	10	7	4	5	7	5	5	9	2
Nova Scotia	14	8	15	3	17	16	12	13	14	16	8	11	10	14	10	11
Prince Edward Island	n/a	n/a	n/a	n/a	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Yukon	0	2	0	3	3	0	1	2	0	0	2	2	1	0	0	3
Northwest Territories	1	0	1	2	0	0	1	0	1	0	1	0	Suppr.	Suppr.	Suppr.	Suppr.
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	622	587	615	816	865	983	1,000	888	953	951	1,057	1,080	1,031	1,000	724	818

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

Not available (n/a) – Data were not available at the time of this publication.

 Includes deaths related to all illicit drugs including, but not limited to, opioids

Table 6. Sex distribution of accidental apparent opioid-related deaths by province or territory, 2016 to 2019.

Province or territory	2016		2017		2018		2019	
	Male	Female	Male	Female	Male	Female	Male	Female
British Columbia	80%	20%	82%	18%	80%	20%	76%	24%
Alberta	73%	27%	76%	24%	74%	26%	74%	26%
Saskatchewan	59%	41%	57%	43%	58%	42%	64%	36%
Manitoba	61%	39%	67%	33%	55%	45%	67%	33%
Ontario	71%	29%	75%	25%	73%	27%	72%	28%
Quebec	69%	31%	69%	31%	61%	39%	76%	24%
New Brunswick	63%	37%	61%	39%	43%	57%	43%	57%
Nova Scotia	78%	23%	71%	29%	67%	33%	71%	29%
Prince Edward Island	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	62%	38%	70%	30%	50%	50%	Suppr.	Suppr.
Yukon	Suppr.	Suppr.	83%	17%	50%	50%	Suppr.	Suppr.
Northwest Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	74%	26%	77%	23%	74%	26%	74%	26%

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

Includes deaths related to all illicit drugs including, but not limited to, opioids

Note: 2019 data from Manitoba are based on January to September.

Table 7. Age group distribution of accidental apparent opioid-related deaths by province or territory, 2016 to 2019.

2016

Province or territory	Age group					
	19 and under	20 to 29	30 to 39	40 to 49	50 to 59	60 and over
British Columbia	3%	19%	27%	23%	23%	5%
Alberta	2%	21%	37%	18%	17%	5%
Saskatchewan	0%	12%	45%	13%	21%	9%
Manitoba	5%	30%	26%	16%	15%	8%
Ontario	2%	19%	24%	22%	25%	8%
Quebec	2%	13%	19%	25%	28%	12%
New Brunswick	0%	11%	22%	30%	26%	11%
Nova Scotia	3%	20%	30%	13%	23%	13%
Prince Edward Island	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Yukon	0%	20%	40%	20%	20%	0%
Northwest Territories	0%	50%	0%	0%	25%	25%
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	2%	19%	28%	21%	22%	7%

2017

Province or territory	Age group					
	19 and under	20 to 29	30 to 39	40 to 49	50 to 59	60 and over
British Columbia	2%	17%	27%	24%	21%	9%
Alberta	3%	24%	32%	19%	17%	5%
Saskatchewan	4%	28%	23%	20%	16%	8%
Manitoba	0%	31%	32%	22%	7%	8%
Ontario	2%	21%	27%	22%	20%	8%
Quebec	2%	14%	24%	19%	27%	14%
New Brunswick	3%	23%	29%	19%	19%	6%
Nova Scotia	5%	10%	26%	24%	29%	5%
Prince Edward Island	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Yukon	0%	17%	67%	17%	0%	0%
Northwest Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	2%	20%	28%	22%	20%	8%


2018

Province or territory	Age group					
	19 and under	20 to 29	30 to 39	40 to 49	50 to 59	60 and over
British Columbia	2%	19%	26%	22%	23%	9%
Alberta	2%	25%	30%	20%	18%	7%
Saskatchewan	0%	24%	25%	19%	20%	12%
Manitoba	0%	26%	28%	20%	20%	7%
Ontario	2%	20%	29%	22%	20%	8%
Quebec	0%	13%	28%	22%	24%	13%
New Brunswick	0%	9%	22%	22%	35%	13%
Nova Scotia	2%	22%	24%	20%	18%	12%
Prince Edward Island	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Yukon	0%	50%	25%	0%	25%	0%
Northwest Territories	50%	50%	0%	0%	0%	0%
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	2%	21%	27%	22%	21%	8%

2019

Province or territory	Age group					
	19 and under	20 to 29	30 to 39	40 to 49	50 to 59	60 and over
British Columbia	2%	17%	28%	22%	22%	10%
Alberta	2%	23%	31%	20%	18%	6%
Saskatchewan	0%	20%	24%	23%	28%	6%
Manitoba	0%	21%	29%	17%	21%	13%
Ontario	2%	20%	30%	19%	22%	8%
Quebec	2%	14%	17%	23%	26%	17%
New Brunswick	0%	10%	24%	24%	19%	24%
Nova Scotia	2%	16%	22%	27%	18%	16%
Prince Edward Island	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Yukon	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Northwest Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	2%	19%	28%	21%	22%	9%

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

 Includes deaths related to all illicit drugs including, but not limited to, opioids

Note: 2019 data from Manitoba are based on January to September.

Table 8. Number and percentage of accidental apparent opioid-related deaths involving or not involving fentanyl or fentanyl analogues, by quarter, January 2016 to December 2019

Year	Quarter	Fentanyl or fentanyl analogues directly contributed to death		Only non-fentanyl related opioids directly contributed to death	
		Number	%	Number	%
2016	Jan to Mar	290	47%	332	53%
	Apr to Jun	310	53%	277	47%
	Jul to Sep	290	47%	325	53%
	Oct to Dec	540	66%	276	34%
2017	Jan to Mar	584	67%	284	33%
	Apr to Jun	704	72%	280	28%
	Jul to Sep	752	75%	249	25%
	Oct to Dec	633	71%	255	29%
2018	Jan to Mar	710	75%	243	25%
	Apr to Jun	690	72%	263	28%
	Jul to Sep	837	79%	222	21%
	Oct to Dec	848	78%	235	22%
2019	Jan to Mar	773	81%	183	19%
	Apr to Jun	725	78%	204	22%
	Jul to Sep	448	70%	190	30%
	Oct to Dec	484	80%	121	20%


Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

Not available (n/a) – Data were not available at the time of this publication.

Table 9. Percentage of accidental apparent opioid-related deaths involving fentanyl or fentanyl analogues by province or territory, 2016 to 2019

Province or territory	2016	2017	2018	2019
British Columbia	67%	82%	87%	86%
Alberta	63%	81%	83%	87%
Saskatchewan	11%	20%	44%	39%
Manitoba	46%	51%	38%	58%
Ontario	45%	69%	74%	81%
Quebec	23%	27%	17%	25%
New Brunswick	15%	23%	4%	19%
Nova Scotia	18%	10%	18%	13%
Prince Edward Island	20%	0%	14%	0%
Newfoundland and Labrador	Suppr.	26%	0%	Suppr.
Yukon	80%	83%	100%	75%
Northwest Territories	25%	0%	0%	Suppr.
Nunavut	Suppr.	Suppr.	Suppr.	Suppr.
Canada	54%	71%	76%	77%

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

 Includes deaths related to all illicit drugs including, but not limited to, opioids

Note: 2019 data from Manitoba are based on January to September.

Table 10. Percentage of accidental apparent opioid-related deaths involving one or more non-opioid substances in Canada, 2016 to 2019

Substances involved	Value	2016	2017	2018	2019
Total	Number	2,658	3,764	4,048	3,591
No other non-opioid substances involved	Percent	17%	27%	31%	28%
Other non-opioid substances involved	Percent	83%	73%	69%	72%

Table 11. Percentage of accidental opioid-related deaths by origin of opioid(s) directly contributing to death, by province or territory, 2018 and 2019

2018

Jurisdiction	2018			
	Pharm only	Non-pharm only*	Both	Undetermined
British Columbia	n/a	n/a	n/a	n/a
Alberta	16%	79%	6%	0%
Saskatchewan	58%	35%	4%	3%
Manitoba	n/a	n/a	n/a	n/a
Ontario	23%	65%	9%	3%
Quebec	n/a	n/a	n/a	n/a
New Brunswick	n/a	n/a	n/a	n/a
Nova Scotia	82%	6%	10%	2%
Prince Edward Island	n/a	n/a	n/a	n/a
Newfoundland and Labrador	100%	0%	0%	0%
Yukon	n/a	n/a	n/a	n/a
Northwest Territories	n/a	n/a	n/a	n/a
Nunavut	n/a	n/a	n/a	n/a
Canada	24%	67%	8%	2%

* Includes deaths with suspected non-pharmaceutical fentanyl alone or with any other non-pharmaceutical opioid(s)

Only applies to deaths with completed investigations for 2018 and 2019.

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

Not available (n/a) – Data were not available at the time of this publication.

2019

Jurisdiction	2019			
	Pharm only	Non-pharm only*	Both	Undetermined
British Columbia	n/a	n/a	n/a	n/a
Alberta	14%	79%	7%	0%
Saskatchewan	60%	30%	5%	5%
Manitoba	50%	50%	0%	0%
Ontario	18%	69%	11%	2%
Quebec	n/a	n/a	n/a	n/a
New Brunswick	n/a	n/a	n/a	n/a
Nova Scotia	93%	2%	2%	2%
Prince Edward Island	n/a	n/a	n/a	n/a
Newfoundland and Labrador	77%	23%	0%	0%
Yukon	n/a	n/a	n/a	n/a
Northwest Territories	n/a	n/a	n/a	n/a
Nunavut	n/a	n/a	n/a	n/a
Canada	21%	68%	9%	2%

* Includes deaths with suspected non-pharmaceutical fentanyl alone or with any other non-pharmaceutical opioid(s)

Only applies to deaths with completed investigations for 2018 and 2019.

Suppressed (suppr.) – Data may be suppressed in provinces or territories with low numbers of cases.

Not available (N/A) – Data were not available at the time of this publication.

Note: 2019 data from Manitoba are based on July to September.