



OPIOID-RELATED POISONING HOSPITALIZATIONS

SURVEILLANCE OF OPIOID-RELATED HARMS IN CANADA

January 2016 to March 2020



Health
Canada

Santé
Canada

Canada

Health Canada is the federal department responsible for helping the people of Canada maintain and improve their health. Health Canada is committed to improving the lives of all of Canada's people and to making this country's population among the healthiest in the world as measured by longevity, lifestyle and effective use of the public health care system.

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

Également disponible en français sous le titre :
Hospitalisations pour intoxication aux opioïdes
Surveillance des méfaits associés aux opioïdes au Canada
Janvier 2016 à mars 2020

To obtain additional information, please contact:

Health Canada
Address Locator 0900C2
Ottawa, ON K1A 0K9
Tel.: 613-957-2991
Toll free: 1-866-225-0709
Fax: 613-941-5366
TTY: 1-800-465-7735
E-mail: hc.publications-publications.sc@canada.ca

© Her Majesty the Queen in Right of Canada, as represented by the Minister of Health, 2020

Publication date: September 2020

This publication may be reproduced for personal or internal use only without permission provided the source is fully acknowledged.

Cat.: HP33-4E-PDF
ISSN: 2563-2477
Pub.: 200147

Table of Contents

Acknowledgement	4
Suggested Citation	4
National Summary	5
Total Numbers	5
Sex Breakdown	7
Age Group Breakdown	8
Substances	9
Technical Notes	11
Definitions	11
How opioid-related poisoning hospitalizations are counted	11
Limitations of the data on opioid-related poisoning hospitalizations	12
General notes	12
Intention	13
Sex and age group	13
Fentanyl and fentanyl derivatives	13
Other non-opioid substances	13
Data Suppression	14
Disclosure	16
Data Source	16
Appendix	17



Acknowledgment

This update would not be possible without the collaboration and dedication of provincial and territorial (PT) offices of Chief Coroners and Chief Medical Examiners as well as PT public health and health partners and Emergency Medical Services data providers. We would also like to acknowledge the Canadian Institute for Health Information (CIHI) for collecting and providing the data used for reporting opioid-related poisoning hospitalizations.

Suggested citation

Special Advisory Committee on the Epidemic of Opioid Overdoses. Opioid-related Harms in Canada. Ottawa: Public Health Agency of Canada; September 2020. <https://health-infobase.canada.ca/substance-related-harms/opioids>

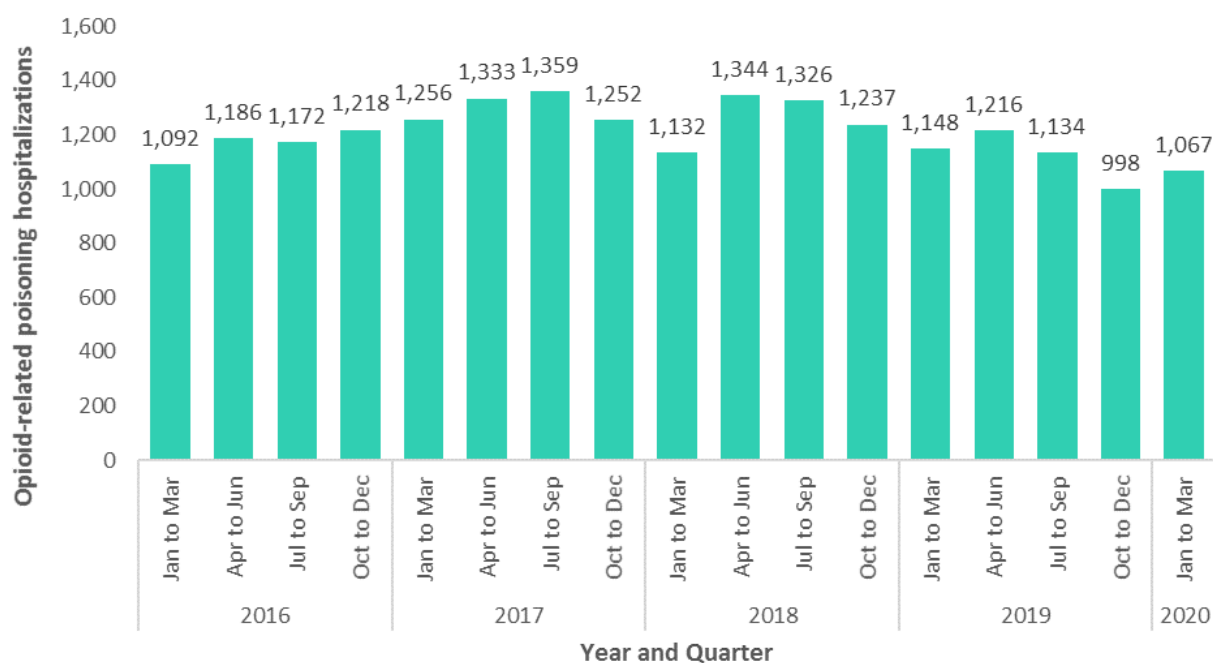
National Summary

Total Numbers

Between January 2016 and March 2020, 20,523 opioid-related poisoning hospitalizations occurred in Canada (excluding Quebec).

In 2020, between January and March, there were 1,067 hospitalizations due to opioid-related poisoning, of which 64% were accidental (unintentional).

Figure 1. Number of total opioid-related poisoning hospitalizations by quarter in Canada, January 2016 to March 2020

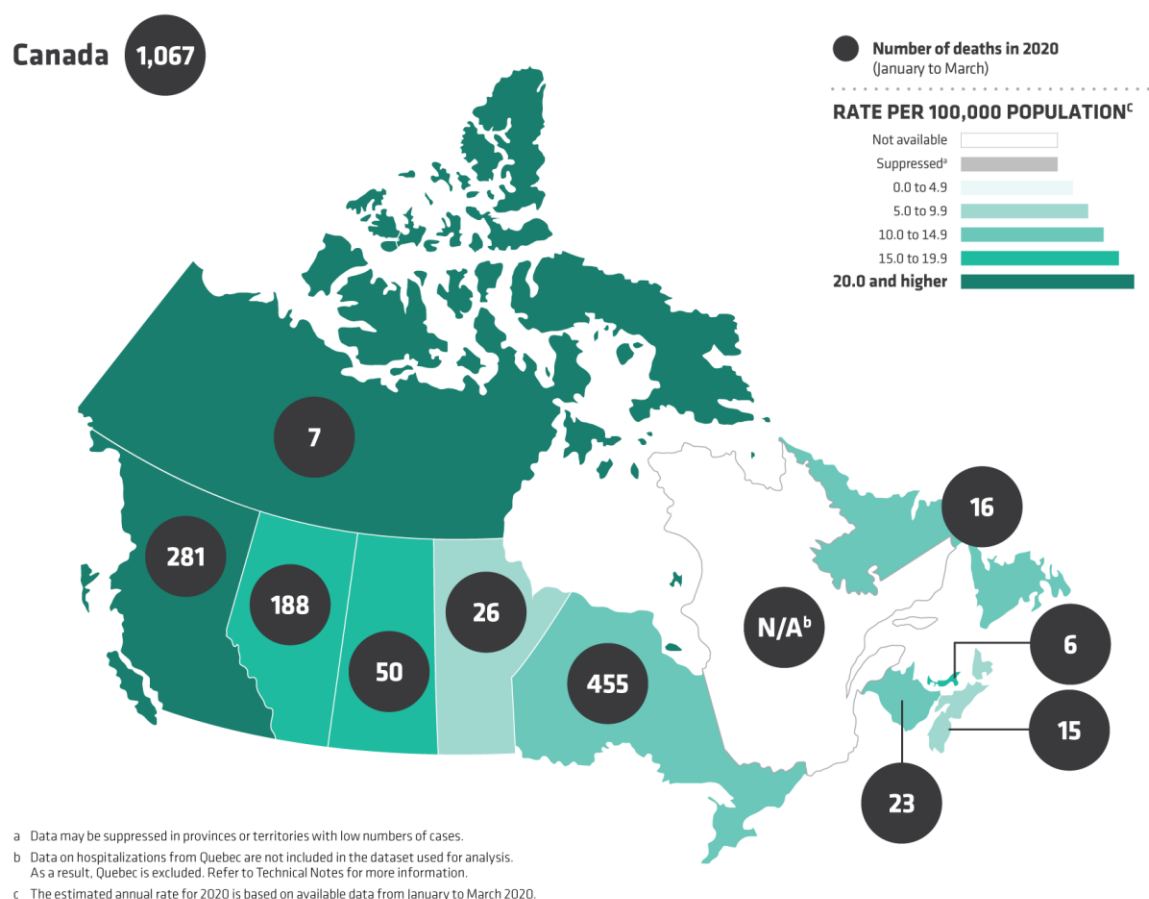


Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded. Refer to [Technical notes](#) for more information.

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 August 28, 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 crude rate (per 100,000) of total opioid-related poisoning hospitalizations by province or territory in 2020 (Jan to Mar)



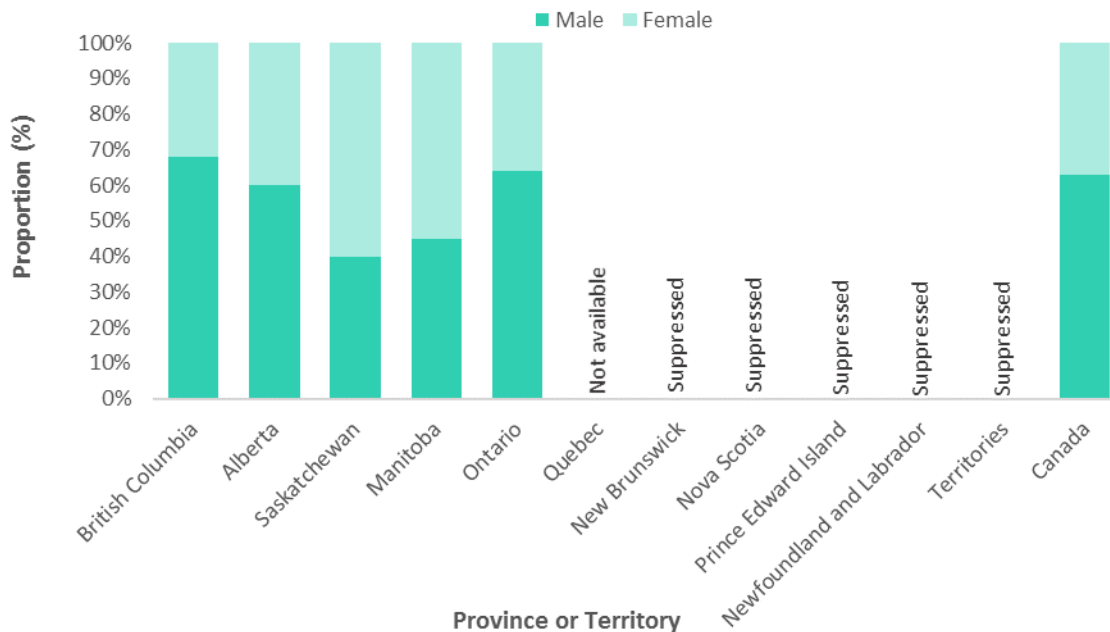
For more information, refer to the [appendix](#).

i This update is based on data submitted to the Public Health Agency of Canada on or before August 28, 2020. Due to differences in identifying and reporting cases, comparisons over time and between provinces and territories should be interpreted with caution. Both age-adjusted and crude rates are available. Refer to the [Technical notes](#) for more information.

Sex Breakdown

In 2020 (Jan to Mar), among accidental opioid-related poisoning hospitalizations, 63% occurred among males compared to 37% among females.

Figure 3. Percentage of accidental opioid-related poisoning hospitalizations by sex and province or territory in 2020 (Jan to Mar)



Data may be suppressed in provinces or territories with low numbers of cases

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded. Refer to [Technical notes](#) for more information.

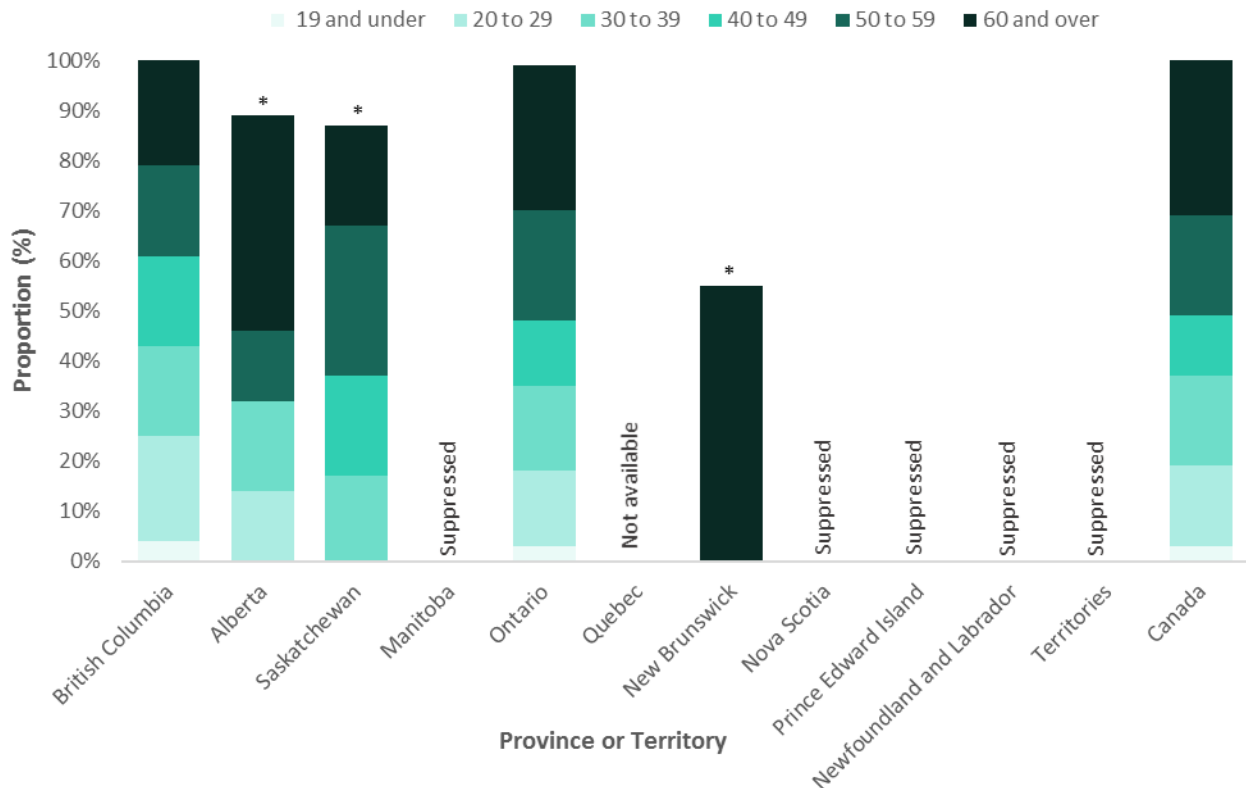
For more information, refer to the [appendix](#).

i This update is based on data submitted to the Public Health Agency of Canada on or before August 28, 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.

Age Group Breakdown

In 2020 (Jan to Mar), among accidental opioid-related poisoning hospitalizations, approximately 51% occurred among people aged 50 years or older.

Figure 4. Percentage of accidental opioid-related poisoning hospitalizations by age group and province or territory in 2020 (Jan to Mar)



*Percentages may not add up to 100% in instances where age groups were suppressed due to low number of cases.
Data may be suppressed in provinces or territories with low numbers of cases
Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded. Refer to [Technical notes](#) for more information.

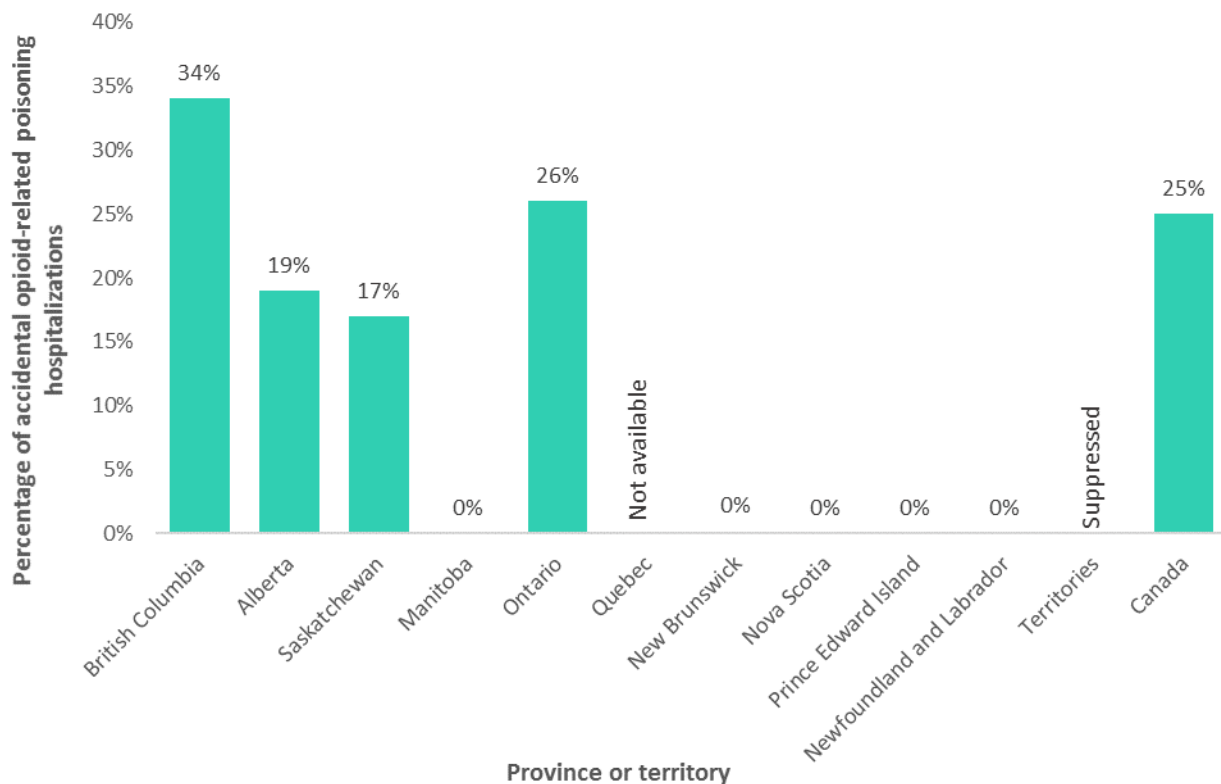
For more information, refer to the [appendix](#).

i This update is based on data submitted to the Public Health Agency of Canada on or before August 28, 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.

Substances

In 2020 (Jan to Mar), among accidental opioid-related poisoning hospitalizations, 25% involved fentanyl or fentanyl analogues and 27% were also diagnosed with a poisoning due to one or more non-opioid substances such as alcohol, benzodiazepines, cannabis, cocaine, stimulants, etc.

Figure 5. Percentage of accidental opioid-related poisoning hospitalizations involving fentanyl or fentanyl analogues by province or territory in 2020 (Jan to Mar)



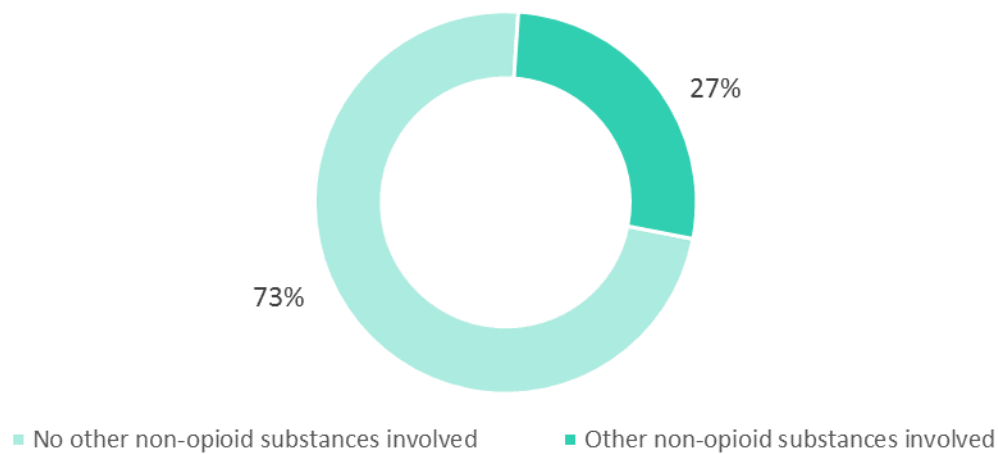
Data may be suppressed in provinces or territories with low numbers of cases

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded. Refer to [Technical notes](#) for more information.

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 August 28, 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 6. Percentage of accidental opioid-related poisoning hospitalizations where patients were also diagnosed with a poisoning related to one or more non-opioid substances in Canada in 2020 (Jan to Mar)



Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded. Refer to [Technical notes](#) for more information.

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

 This update is based on data submitted to the Public Health Agency of Canada on or before August 28, 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

Opioid-related poisoning hospitalization: Acute care hospitalizations that recorded a significant diagnosis for opioid-related poisoning. Please see [Table A](#) for a list of diagnosis codes for opioid-related poisonings.

Accidental opioid-related poisoning hospitalization: An opioid-related poisoning hospitalization that is considered to be non-intentional in nature and is defined by a diagnostic “X42” ICD-10-CA code associated with any significant opioid-related poisoning codes (T40.0-T40.4 and T40.6, see [Table A](#) for more information).

Intentional opioid-related poisoning hospitalization: An opioid-related poisoning hospitalization that occurred as a result of purposely self-inflicted harm and is defined by a diagnostic “X62” ICD-10-CA code associated with any significant opioid-related poisoning codes (T40.0-T40.4 and T40.6, see [Table A](#) for more information).

Undetermined opioid-related poisoning hospitalization: An opioid-related poisoning hospitalization that is categorized by physician documentation of undetermined/unknown intent and is defined by a diagnostic “Y12” ICD-10-CA code associated with any significant opioid-related poisoning codes (T40.0-T40.4 and T40.6, see [Table A](#) for more information).

How opioid-related poisoning hospitalizations are counted

Data on opioid-related poisoning hospitalizations are extracted from the Discharge Abstract Database (DAD), a national administrative database from the Canadian Institute for Health Information (CIHI) that compiles information on hospital discharges (including deaths, sign-outs, and transfers) from acute care institutions in all provinces and territories, except Quebec. CIHI receives the data directly from acute care facilities or from their health/regional authority or ministry/department of health. Data were extracted for analyses using the CIHI Portal by Health Canada. Only inpatient hospitalizations from acute care facilities were included in the analyses.

Opioid-related poisoning hospitalizations were identified as follows:

- Diagnoses for opioid-related poisonings were based on the International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canada (ICD-10-CA), which is used to code up to 25 diagnoses per hospital record, as it is the national standard for reporting morbidity. Refer to [Table A](#) for details on the ICD-10-CA codes used to identify opioid-related

poisonings (T40.0-T40.4 and T40.6). Additional ICD-10-CA codes were used to classify the hospitalizations by intent.

- Hospitalizations were included if the opioid-related poisoning diagnosis was considered influential to the time spent and/or treatment received while in hospital, identified by diagnosis types “M” (most responsible diagnosis (MRD)), “1” (pre-admission comorbidity), “2” (post-admission comorbidity), and “W”, “X”, “Y” (service transfer diagnosis).
- Hospitalizations where the diagnosis was considered questionable, as indicated by prefix code of “Q”, were excluded.

Crude and age-adjusted rates are calculated using the most current population data from Statistics Canada. Age-adjusted rates used the 2016 Canadian population as a reference and direct standardization was applied.

Crude rates: summarize the situation within a region at a certain time period and have not been adjusted for existing differences by provincial and territorial age distributions (e.g. (number of hospitalizations / population) x 100,000).

Age-adjusted rates: have been adjusted for existing differences by provincial and territorial age distributions using the 2016 Canadian population as a reference. These rates assume that all regions have the same age distributions and are useful when comparing between regions and over time.

Limitations of the data on opioid-related poisoning hospitalizations

General notes

1. The unit of observation for this analysis was a discharged inpatient hospitalization visit, rather than an individual patient. The time period reported is the calendar year in which a patient was discharged from the nursing unit of the reporting facility. The province or territory reflects the location of the reporting facility where the hospitalization occurred.
2. To facilitate comparisons over time as well as across jurisdictions, age-adjusted rates per 100,000 populations per year were calculated using the latest population estimates from Statistics Canada. As age-specific population estimates for 2020 are not yet available from Statistics Canada, population estimates from 2019 were used in the interim.
3. Data on hospitalizations from Quebec are not included in the Discharge Abstract Database, subsequently Quebec is excluded from these analyses.
4. Data from Yukon, Northwest Territories and Nunavut were combined due to small numbers.

5. Data collected through DAD or the ICD-10-CA codes 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).

Intention

6. Opioid-related poisonings were further examined by the documented reason for the poisoning, based on diagnostic type “9” (external cause of injury), and classified into three categories: accidental (ICD-10-CA: X42), intentional (X62), and undetermined/unknown (Y12).
7. Poisonings are classified as accidental unless there is clear documentation of intentional self-harm or undetermined intent.
8. When there was no documentation of intent, hospitalizations were excluded from analysis by intention, but were included in the total number of cases.

Sex and age group

9. For most provinces/territories, data on the sex of the individual was based on biological characteristics or legal documentation. Data on hospitalizations where sex was categorized as “Other” were excluded from analyses by sex, but were included in the overall analyses. Due to rounding, percentages may not add to 100%.

Fentanyl and fentanyl derivatives

10. Data on accidental opioid-related poisoning hospitalizations involving fentanyl or fentanyl analogues should be interpreted with caution as data on fentanyl-related poisoning hospitalizations became available starting April 1, 2018. As a result, fentanyl-related data presented for 2018 are limited to April to December. The ICD-10-CA classification codes to describe outcomes related to fentanyl and fentanyl analogues (“T40.40 – Poisoning by fentanyl and derivatives”) was used in data collection starting 2018-19 fiscal year, as they did not exist prior to that.

Other non-opioid substances

11. Accidental opioid-related poisoning hospitalizations were further examined for diagnoses of poisoning from one or more other non-opioid substances in the same hospital stay. Diagnoses for non-opioid substance-related poisoning were identified using ICD-10-CA codes and included poisonings from psychoactive substances. These codes were limited to diagnoses considered influential to the time spent/treatment received in hospital and cases where the diagnosis was considered questionable, as indicated by prefix code “Q”, were excluded. Co-occurring poisonings due to non-psychoactive substances (such as non-opioid analgesics, etc.) and anti-depressants were not included. Refer to [Table B](#) for details on ICD-10-CA codes used to identify non-opioid-related poisonings.

Data suppression

Counts less than five have been suppressed as per CIHI privacy guidelines.

Table A. List of diagnosis codes included for opioid-related poisonings

Code	Details
T40.0	Poisoning by opium
T40.1	Poisoning by heroin
T40.2	Poisoning by other opioids
T40.20*	Poisoning by codeine and derivatives
T40.21*	Poisoning by morphine
T40.22*	Poisoning by hydromorphone
T40.23*	Poisoning by oxycodone
T40.28*	Poisoning by other opioids not elsewhere classified
T40.3	Poisoning by methadone
T40.4	Poisoning by other synthetic narcotics
T40.40*	Poisoning by fentanyl and derivatives
T40.41*	Poisoning by tramadol
T40.48*	Poisoning by other synthetic narcotics not elsewhere classified
T40.6	Poisoning by other and unspecified narcotics

*Introduced as of April 1, 2018

Table B. List of diagnosis codes included for poisonings related to other non-opioid substances

Code	Details
T40.5	Poisoning by cocaine
T40.7	Poisoning by cannabis (derivatives)
T40.8	Poisoning by lysergide (LSD)
T40.9	Poisoning by other and unspecified psychodysleptics (hallucinogens)
T42.3	Poisoning by barbiturates
T42.4	Poisoning by benzodiazepines
T42.6	Poisoning by other antiepileptic and sedative-hypnotic drugs
T43.6	Poisoning by psychostimulants with abuse potentials (excl. cocaine)
T43.8	Poisoning by other psychotropic drugs, not elsewhere classified
T43.9	Poisoning by psychotropic drug, unspecified
T44.9	Poisoning by other and unspecified drugs primarily affecting the autonomic nervous system
T51	Toxic effect of alcohol
T51.0	Toxic effect of ethanol
T51.1	Toxic effect of methanol
T51.2	Toxic effect of 2-propanol
T51.3	Toxic effect of fusel oil
T51.8	Toxic effect of other alcohols
T51.9	Toxic effect of alcohol, unspecified



Disclosure

Parts of this material are based on data and information compiled and provided by CIHI. However, the analyses, conclusions, opinions and statements expressed herein are those of the authors, and not necessarily those of CIHI.

Data Source

Discharge Abstract Database (DAD), Canadian Institute for Health Information, 2015-2016 to 2019-2020.



APPENDIX

Table 1a. Number and crude rate (per 100,000) of total opioid-related poisoning hospitalizations by province or territory, 2016 to 2020 (Jan to Mar)

Province or territory	2016		2017		2018		2019		2020 (Jan to Mar)	
	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	Number	Crude rate per 100,000 population
British Columbia	1,156	23.8	1,407	28.6	1,418	28.4	1,196	23.6	281	22.2
Alberta	930	22.2	947	22.3	922	21.4	709	16.2	188	17.2
Saskatchewan	264	23.2	244	21.2	229	19.7	264	22.5	50	17.0
Manitoba	123	9.4	161	12.1	108	8.0	84	6.1	26	7.6
Ontario	1,875	13.5	2,124	15.1	2,095	14.6	1,981	13.6	455	12.5
Quebec	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	129	16.9	101	13.2	87	11.3	104	13.4	23	11.8
Nova Scotia	101	10.7	83	8.7	80	8.3	79	8.1	15	6.2
Prince Edward Island	22	15.0	16	10.6	20	13.0	24	15.3	6	15.3
Newfoundland and Labrador	56	10.6	90	17.0	67	12.7	52	10.0	16	12.3
Territories	31	25.8	30	24.6	26	21.0	21	16.9	7	22.5
Canada	4,687	16.8	5,203	18.4	5,052	17.6	4,514	15.5	1,067	14.7

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Table 1b. Number and age-adjusted rate (per 100,000) of total opioid-related poisoning hospitalizations by province or territory, 2016 to 2020 (Jan to Mar)

Province or territory	2016		2017		2018		2019		2020 (Jan to Mar)	
	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population
British Columbia	1,156	23.4	1,407	28.3	1,418	28.1	1,196	23.4	281	21.9
Alberta	930	23.3	947	23.1	922	22.0	709	16.8	188	17.8
Saskatchewan	264	23.9	244	21.9	229	20.4	264	22.9	50	17.6
Manitoba	123	9.7	161	12.4	108	8.3	84	6.3	26	7.8
Ontario	1,875	13.5	2,124	15.1	2,095	14.6	1,981	13.5	455	12.5
Quebec	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	129	17.0	101	12.9	87	11.7	104	13.4	23	11.3
Nova Scotia	101	10.1	83	9.3	80	8.0	79	7.8	15	6.0
Prince Edward Island	22	14.9	16	9.8	20	12.3	24	14.2	6	14.0
Newfoundland and Labrador	56	10.3	90	16.8	67	12.7	52	9.9	16	12.3
Territories	31	29.9	30	25.6	26	21.8	21	17.8	7	20.8
Canada	4,687	16.8	5,203	18.4	5,052	17.6	4,514	15.5	1,067	14.6

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Table 2a. Number and crude rate of accidental opioid-related poisoning hospitalizations by province or territory, 2016 to 2020 (Jan to Mar)

Province or territory	2016		2017		2018		2019		2020 (Jan to Mar)	
	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	Number	Crude rate per 100,000 population
British Columbia	663	13.6	886	18.0	988	19.8	768	15.1	177	14.0
Alberta	558	13.3	624	14.7	636	14.8	490	11.2	124	11.3
Saskatchewan	163	14.3	146	12.7	139	12.0	145	12.3	30	10.2
Manitoba	67	5.1	81	6.1	61	4.5	46	3.4	11	3.2
Ontario	1,014	7.3	1,203	8.5	1,277	8.9	1,247	8.6	310	8.5
Quebec	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	45	5.9	21	2.7	31	4.0	38	4.9	11	5.7
Nova Scotia	53	5.6	31	3.3	39	4.1	34	3.5	8	3.3
Prince Edward Island	11	7.5	7	4.7	10	6.5	13	8.3	Suppr.	Suppr.
Newfoundland and Labrador	11	2.1	19	3.6	17	3.2	19	3.6	6	4.6
Territories	11	9.2	9	7.4	15	12.1	5	4.0	Suppr.	Suppr.
Canada	2,596	9.3	3,027	10.7	3,213	11.2	2,805	9.6	677	9.4

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Table 2b. Number and age-adjusted rate of accidental opioid-related poisoning hospitalizations by province or territory, 2016 to 2020 (Jan to Mar)

Province or territory	2016		2017		2018		2019		2020 (Jan to Mar)	
	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population	Number	Age-adjusted rate per 100,000 population
British Columbia	663	13.4	886	17.8	988	19.6	768	15.0	177	13.7
Alberta	558	14.4	624	15.4	636	15.3	490	11.7	124	12.0
Saskatchewan	163	14.7	146	12.9	139	12.3	145	12.5	30	10.9
Manitoba	67	5.3	81	6.2	61	4.7	46	3.4	11	3.4
Ontario	1,014	7.3	1,203	8.5	1,277	8.9	1,247	8.5	310	8.4
Quebec	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	45	5.6	21	2.4	31	3.8	38	4.7	11	5.2
Nova Scotia	53	5.1	31	3.0	39	3.7	34	3.2	8	2.9
Prince Edward Island	11	7.3	7	4.6	10	5.6	13	6.9	Suppr.	Suppr.
Newfoundland and Labrador	11	2.0	19	3.4	17	3.0	19	3.4	6	4.0
Territories	11	10.9	9	7.4	15	13.1	5	5.5	Suppr.	Suppr.
Canada	2,596	9.3	3,027	10.7	3,213	11.2	2,805	9.6	677	9.4

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Table 3a. Summary of opioid-related poisoning hospitalizations by intention, 2016 to 2019

Intention	2016		2017		2018		2019		2020 (Jan to Mar)	
	Number	% of annual	Number	% of annual	Number	% of annual	Number	% of annual	Number	% of annual
Total	4,687	100%	5,203	100%	5,052	100%	4,514	100%	1,067	100%
Accidental	2,596	55%	3,027	58%	3,213	64%	2,805	62%	685	64%
Intentional	1,370	29%	1388	27%	1,247	25%	1170	26%	277	26%
Unknown	600	13%	651	13%	561	11%	531	12%	103	10%

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Note: The total number include opioid-related poisoning hospitalizations for which the intent was not recorded.

Table 3b. Summary of total opioid-related poisoning hospitalizations in Canada, 2016 to 2020 (Jan to Mar).

		2016	2017	2018	2019	2020 (Jan to Mar)
Total	Number	4,687	5,203	5,052	4,514	1,067
	Crude rate	16.8	18.4	17.6	15.5	14.7
	Age-adjusted rate	16.8	18.4	17.6	15.5	14.6
Percent by sex	Male	50%	55%	55%	54%	57%
	Female	50%	45%	45%	46%	43%
Percent by age group	19 years or less	6%	6%	7%	6%	5%
	20 – 29 years	17%	18%	18%	17%	17%
	30 – 39 years	16%	19%	19%	20%	19%
	40 – 49 years	15%	14%	16%	14%	14%
	50 – 59 years	20%	19%	18%	18%	20%
	60 years or more	27%	25%	23%	25%	25%
Percent involving fentanyl or fentanyl analogues		n/a	n/a	16%	21%	22%
Percent involving other non-opioid substances		35%	35%	34%	34%	31%

Refer to the [Technical notes](#) for more information.

Table 3c. Summary of intentional opioid-related poisoning hospitalizations in Canada, 2016 to 2020 (Jan to Mar).

		2016	2017	2018	2019	2020 (Jan to Mar)
Total	Number	1,370	1,388	1,247	1,170	277
	Crude rate	4.9	4.9	4.3	4.0	3.8
	Age-adjusted rate	4.9	4.9	4.4	4.0	3.8
Percent by sex	Male	43%	46%	41%	41%	38%
	Female	57%	54%	59%	59%	62%
Percent by age group	19 years or less	9%	10%	12%	11%	10%
	20 – 29 years	18%	19%	18%	18%	21%
	30 – 39 years	17%	19%	17%	18%	19%
	40 – 49 years	18%	16%	17%	17%	16%
	50 – 59 years	22%	20%	18%	18%	18%
	60 years or more	16%	16%	18%	18%	16%
Percent involving fentanyl or fentanyl analogues		n/a	n/a	7%	11%	12%
Percent involving other non-opioid substances		50%	48%	46%	49%	43%

Refer to the [Technical notes](#) for more information.

Table 4. Number of total opioid-related poisoning hospitalizations by quarter and province or territory, January 2016 to March 2020

Province or territory	2016				2017				2018				2019				2020
	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	Jan to Mar
British Columbia	304	269	278	305	338	375	358	336	293	382	380	363	315	308	314	259	281
Alberta	229	239	239	223	235	235	256	221	202	229	271	220	171	174	214	150	188
Saskatchewan	75	59	72	58	55	60	64	65	52	65	61	51	56	73	67	68	50
Manitoba	25	35	26	37	40	49	32	40	30	27	23	28	18	17	21	28	26
Ontario	402	500	458	515	493	537	578	516	481	566	519	529	515	573	454	439	455
Quebec	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	24	26	46	33	29	28	19	25	24	22	22	19	30	20	27	27	23
Nova Scotia	18	23	32	28	28	17	18	20	13	33	16	18	23	19	18	19	15
Prince Edward Island	Suppr.	6	7	Suppr.	7	Suppr.	Suppr.	6	7	Suppr.	7	Suppr.	Suppr.	8	Suppr.	Suppr.	6
Newfoundland and Labrador	15	16	14	11	21	24	28	17	19	20	19	9	9	16	19	8	16
Territories	Suppr.	13	Suppr.	8	10	8	6	6	11	Suppr.	8	Suppr.	5	8	Suppr.	Suppr.	7
Canada	1,092	1,186	1,172	1,218	1,256	1,333	1,359	1,252	1,132	1,344	1,326	1,237	1,142	1,216	1,134	998	1,067

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Note: Totals for Canada by year do not match those from figure 1 as they do not include the suppressed numbers in provinces/territories, in order to comply with privacy and confidentiality rules.

Table 5. Number of accidental opioid-related poisoning hospitalizations by quarter and province or territory, January 2016 to March 2020

Province or territory	2016				2017				2018				2019				2020
	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	Jan to Mar
British Columbia	164	147	155	197	204	236	221	225	190	280	266	252	212	204	190	162	177
Alberta	135	140	156	127	151	146	169	158	138	165	168	165	114	129	149	98	124
Saskatchewan	42	37	51	33	28	36	42	40	31	36	37	35	22	42	39	42	30
Manitoba	12	17	15	23	16	27	18	20	16	15	12	18	9	12	10	15	11
Ontario	220	267	243	284	256	307	356	284	269	370	327	311	336	363	269	279	310
Quebec	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	7	13	15	10	Suppr.	Suppr.	6	6	8	9	8	6	8	6	11	13	11
Nova Scotia	7	11	22	13	10	5	8	8	Suppr.	20	Suppr.	8	8	5	9	12	8
Prince Edward Island	Suppr.	Suppr.	Suppr.	Suppr.	0	0	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	6	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	5	Suppr.	Suppr.	5	6	Suppr.	Suppr.	Suppr.	7	Suppr.	Suppr.	6	Suppr.	Suppr.	Suppr.	6
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	7	Suppr.	5	Suppr.	Suppr.	Suppr.	0	Suppr.	Suppr.
Canada	587	637	657	687	670	763	820	741	659	902	823	795	715	767	677	621	677

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Note: Totals for Canada by year do not match those from figure 2 as they do not include the suppressed numbers in provinces/territories, in order to comply with privacy and confidentiality rules.

Table 6. Sex distribution of accidental opioid-related poisoning hospitalizations by province or territory, 2016 to 2020 (Jan to Mar)

Province or territory	2016		2017		2018		2019		2020 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
British Columbia	37%	63%	31%	69%	32%	68%	34%	66%	32%	68%
Alberta	50%	50%	43%	57%	42%	58%	46%	54%	40%	60%
Saskatchewan	50%	50%	51%	49%	56%	44%	52%	48%	60%	40%
Manitoba	52%	48%	43%	57%	59%	41%	54%	46%	55%	45%
Ontario	51%	49%	46%	54%	44%	56%	43%	57%	36%	64%
Quebec	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	36%	64%	71%	29%	55%	45%	42%	58%	Suppr.	Suppr.
Nova Scotia	58%	42%	45%	55%	41%	59%	53%	47%	Suppr.	Suppr.
Prince Edward Island	45%	55%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	32%	68%	59%	41%	47%	53%	Suppr.	Suppr.
Territories	Suppr.	Suppr.	Suppr.	Suppr.	53%	47%	Suppr.	Suppr.	Suppr.	Suppr.
Canada	47%	53%	41%	59%	41%	59%	42%	58%	37%	63%

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Table 7. Age group distribution of accidental opioid-related poisoning hospitalizations by province or territory, 2016 to 2020 (Jan to Mar)

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%	20%	21%	16%	15%	24%
Alberta	4%	17%	12%	16%	18%	33%
Saskatchewan	9%	14%	19%	14%	20%	24%
Manitoba	Suppr.	12%	Suppr.	19%	19%	36%
Ontario	4%	13%	14%	11%	20%	39%
Quebec	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	Suppr.	13%	Suppr.	22%	22%	36%
Nova Scotia	Suppr.	11%	Suppr.	Suppr.	15%	60%
Prince Edward Island	0%	Suppr.	0%	0%	Suppr.	55%
Newfoundland and Labrador	Suppr.	0%	Suppr.	Suppr.	Suppr.	45%
Territories	Suppr.	Suppr.	Suppr.	0%	Suppr.	Suppr.
Canada	4%	16%	15%	14%	19%	34%

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	5%	22%	23%	17%	15%	18%
Alberta	3%	19%	21%	13%	18%	27%
Saskatchewan	12%	17%	17%	15%	17%	22%
Manitoba	9%	25%	21%	7%	12%	26%
Ontario	4%	14%	16%	13%	20%	34%
Quebec	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	0%	Suppr.	0%	Suppr.	24%	57%
Nova Scotia	Suppr.	Suppr.	Suppr.	Suppr.	19%	55%
Prince Edward Island	0%	Suppr.	Suppr.	0%	0%	71%
Newfoundland and Labrador	0%	Suppr.	Suppr.	Suppr.	37%	32%
Territories	0%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	5%	17%	19%	14%	18%	28%

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	5%	22%	22%	17%	17%	17%
Alberta	4%	21%	18%	16%	17%	25%
Saskatchewan	11%	18%	19%	14%	16%	22%
Manitoba	8%	23%	11%	10%	25%	23%
Ontario	3%	13%	20%	14%	18%	32%
Quebec	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	Suppr.	Suppr.	Suppr.	Suppr.	19%	45%
Nova Scotia	Suppr.	Suppr.	Suppr.	Suppr.	18%	51%
Prince Edward Island	0%	0%	0%	Suppr.	0%	Suppr.
Newfoundland and Labrador	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	47%
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	33%
Canada	5%	18%	19%	15%	17%	26%

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	7%	18%	24%	14%	17%	20%
Alberta	4%	14%	20%	12%	16%	35%
Saskatchewan	15%	22%	15%	15%	13%	19%
Manitoba	Suppr.	22%	20%	Suppr.	13%	28%
Ontario	3%	16%	20%	13%	18%	31%
Quebec	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	Suppr.	Suppr.	Suppr.	13%	21%	45%
Nova Scotia	Suppr.	Suppr.	Suppr.	21%	Suppr.	53%
Prince Edward Island	0%	0%	Suppr.	Suppr.	Suppr.	77%
Newfoundland and Labrador	0%	Suppr.	Suppr.	Suppr.	42%	32%
Territories	0%	Suppr.	0%	Suppr.	0%	Suppr.
Canada	5%	16%	20%	13%	17%	29%

2020 (Jan to Mar)

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	4%	21%	18%	18%	18%	23%
Alberta	Suppr.	14%	18%	Suppr.	14%	43%
Saskatchewan	Suppr.	Suppr.	17%	20%	30%	20%
Manitoba	0%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Ontario	3%	15%	17%	13%	22%	29%
Quebec	n/a	n/a	n/a	n/a	n/a	n/a
New Brunswick	0%	0%	Suppr.	0%	Suppr.	55%
Nova Scotia	0%	Suppr.	Suppr.	0%	Suppr.	Suppr.
Prince Edward Island	0%	0%	0%	0%	Suppr.	Suppr.
Newfoundland and Labrador	Suppr.	0%	0%	0%	Suppr.	Suppr.
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	0%
Canada	3%	16%	18%	12%	20%	31%

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Table 8. Percentage of accidental opioid-related poisoning hospitalizations involving fentanyl or fentanyl analogues by province or territory, 2016 to 2020 (Jan to Mar)

Province or territory	2016	2017	2018 (Apr to Dec)	2019	2020 (Jan to Mar)
British Columbia	n/a	n/a	33%	40%	34%
Alberta	n/a	n/a	16%	20%	19%
Saskatchewan	n/a	n/a	7%	6%	17%
Manitoba	n/a	n/a	11%	13%	0%
Ontario	n/a	n/a	13%	23%	26%
Quebec	n/a	n/a	n/a	n/a	n/a
New Brunswick	n/a	n/a	0%	Suppr.	0%
Nova Scotia	n/a	n/a	0%	0%	0%
Prince Edward Island	n/a	n/a	Suppr.	0%	0%
Newfoundland and Labrador	n/a	n/a	Suppr.	0%	0%
Territories	n/a	n/a	40%	Suppr.	Suppr.
Canada	n/a	n/a	19%	26%	25%

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

Not available (n/a) – Data were not available.

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.

Note: The ICD-10-CA code for poisoning by fentanyl and derivatives was introduced April 2018. Fentanyl-specific data were not available prior to this date.

Table 9. Percentage of accidental opioid-related poisoning hospitalizations where patients were also diagnosed with a poisoning related to one or more non-opioid substances, in Canada, 2016 to 2020 (Jan to Mar)

Substances involved	Value	2016	2017	2018	2019	2020
Total	Number	2,596	3,027	3,213	2,805	685
No other non-opioid substances involved	Percent	72%	71%	70%	72%	73%
One or more other non-opioid substances involved	Percent	28%	29%	30%	28%	27%

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.

Refer to [Technical notes](#) for more information.