



Opioid and Stimulant Poisoning Hospitalizations

Surveillance of Opioid- and
Stimulant-Related Harms in Canada



January 2016 to March 2022



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Prepared by the Substance-Related Overdose and Mortality Surveillance Task Group (SOMS-TG) of the Special Advisory Committee (SAC) on the Epidemic of Opioid Overdoses

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Surveillance des méfaits associés aux opioïdes et aux stimulants au Canada

Janvier 2016 à mars 2022

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Key Findings

Context

There is evidence the COVID-19 pandemic is contributing to the already deadly and ongoing national public health overdose crisis. This crisis is having a tragic impact on people who use substances, their families, and communities across Canada. People who use substances, such as opioids, cocaine, and methamphetamine, are experiencing a number of increased risks, with several jurisdictions reporting higher rates of fatal overdoses and other harms.

These updates include data on overdoses and deaths involving opioids and/or stimulants from January 2016 to March 2022, where available. Recognizing that harms related to opioids, stimulants, and other substances extend beyond overdoses (poisonings) and deaths, we continue to work with federal, provincial and territorial partners to build a broad understanding of harms and substances involved to better respond to this public health crisis. Additional studies can also help us plan and tailor actions to achieve better possible outcomes.

What: There was a total of 32,319 opioid-related and 14,142 stimulant-related poisoning hospitalizations from January 2016 to March 2022 in Canada (excluding Quebec)

- During the first two years of the pandemic, there was a 24% increase in opioid-related poisoning hospitalizations (April 2020 – March 2022, 11,760 hospitalizations), compared to the two-year period before (April 2018 – March 2020, 9,470 hospitalizations).
- A total of 1,350 opioid-related poisoning hospitalizations occurred so far in 2022 (January – March). This is 15 hospitalizations per day. For a similar timeframe in the years prior to the pandemic, there were between 12 (2016) and 14 (2017) hospitalizations per day.
- A total of 532 stimulant-related poisoning hospitalizations occurred so far in 2022 (January – March). This is approximately six hospitalizations per day. For a similar timeframe in the years prior to the pandemic, there were between five (2016) and six (2019) hospitalizations per day during the same period.
- Median total length of hospital stay was three days for both opioid- and stimulant-related poisoning hospitalizations so far in 2022 (January – March).
- Of all opioid-related poisoning hospitalizations, 32% involved fentanyl or fentanyl analogues so far in 2022 (January – March). Among accidental opioid-related poisoning hospitalizations, a larger proportion involved fentanyl (34%) than among intentional poisonings (19%) so far in 2022 (January – March).

Data on opioid-related and stimulant-related poisoning hospitalizations are not mutually exclusive. A high proportion of poisoning hospitalizations involving a stimulant also involved an opioid. Adding up those numbers would result in an overestimation of the burden of opioids and stimulants.



Where: A majority of hospitalizations occurred in British Columbia, Alberta and Ontario

- Rates of opioid-related poisoning hospitalizations continue to remain highest in British Columbia, Alberta and Saskatchewan while for stimulant-related poisoning hospitalizations the highest rates were observed in British Columbia, Saskatchewan, Alberta and Newfoundland and Labrador.
- So far in 2022 (January – March), 89% of poisoning hospitalizations involving opioids and 85% of poisoning hospitalizations involving stimulants occurred in British Columbia, Alberta, and Ontario.

Who: Most accidental poisoning hospitalizations among males and individuals aged 20 to 49 years

- Most accidental opioid-related poisoning hospitalizations occurred among males (68%) and among individuals aged 20 to 49 years (54%) so far in 2022 (January – March).
- Most accidental stimulant-related poisoning hospitalizations occurred among males (73%) and among individuals aged 20 to 49 years (71%) so far in 2022 (January – March).

Poisoning hospitalizations associated with multiple substances so far in 2022 (January to March)

- Of all opioid-related poisoning hospitalizations, 28% involved co-poisoning with a non-opioid substance; 17% involved co-poisoning with a stimulant.
 - Among intentional opioid-related poisoning hospitalizations, a larger proportion involved a co-occurring non-opioid substance (40%) than among accidental poisonings (25%).
- Of all stimulant-related poisoning hospitalizations, 61% involved co-poisoning with a non-stimulant substance; 43% of all stimulant-related poisoning hospitalizations involved co-poisoning with opioids (including fentanyl or fentanyl analogues), while 22% involved specifically fentanyl or fentanyl analogues.
 - Among accidental stimulant-related poisoning hospitalizations, a larger proportion involved fentanyl or fentanyl analogues (34%) than among intentional (5%) poisonings.



This update is based on data extracted by Health Canada on or before August 9, 2022. 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).

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

Accidental stimulant-related poisoning hospitalization: A stimulant-related poisoning hospitalization that is considered to be non-intentional in nature and is defined by a diagnostic “X41” or “X42” ICD -10-CA code associated with any significant stimulant-related poisoning codes (T40.5 and T43.6, see [Table B](#) for more information).

Intentional stimulant-related poisoning hospitalization: A stimulant-related poisoning hospitalization that occurred as a result of purposely self-inflicted harm and is defined by a diagnostic “X61” or “X62” ICD-10- CA code associated with any significant stimulant-related poisoning codes (T40.5 and T43.6, see [Table B](#) for more information).

Undetermined stimulant-related poisoning hospitalization: A stimulant-related poisoning hospitalization that is categorized by physician documentation of undetermined/unknown intent and is defined by a diagnostic “Y11” or “Y12” ICD-10-CA code associated with any significant stimulant-related poisoning codes (T40.5 and T43.6, see [Table B](#) for more information).

How poisoning hospitalizations are counted

Data on opioid- and stimulant-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 and stimulant- related poisoning hospitalizations were identified as follows:

- Poisoning diagnoses 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) and [Table B](#) for details on the ICD-10-CA codes used to identify stimulant- related poisonings (T40.5 and T43.6). Additional ICD-10-CA codes were used to classify the hospitalizations by intent.
- Hospitalizations were included if the opioid or stimulant-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 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 population per year were calculated using the latest population estimates from Statistics Canada.
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. Poisonings were further examined by the documented reason for the poisoning, based on ICD-10-CA diagnostic type “9” (external cause of injury), and classified into three categories: accidental, intentional, and undetermined/unknown.
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 or 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. Data on hospitalizations where age group was categorized as “Unknown” were excluded from analyses by age group, but were included in overall analyses. Due to rounding, percentages may not add to 100%.



Fentanyl and fentanyl analogues

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) were used in data collection starting 2018-19 fiscal year, as they did not exist prior to that.

Methamphetamine

11. Data specifically on methamphetamine-related poisoning hospitalizations are of interest. However, there is currently no ICD-10-CA code specific to poisoning by methamphetamine. The ICD-10-CA code T43.6 currently includes poisonings related to methamphetamine as well as other psychostimulants (excl. cocaine). Once an ICD-10-CA code specific to poisoning by methamphetamine is available, it will be incorporated into analyses.

Co-occurring non-opioid poisonings

12. Opioid-related poisoning hospitalizations were further examined for diagnoses of poisoning from one or more co-occurring non-opioid substance 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 C](#) for details on ICD-10-CA codes used to identify non-opioid-related poisonings.

Co-occurring non-stimulant poisonings

13. Stimulant-related poisoning hospitalizations were further examined for diagnoses of poisoning from one or more co-occurring non-stimulant substance in the same hospital stay. Diagnoses for non-stimulant substance-related poisoning were identified using ICD-10-CA codes and included poisonings from other 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. Refer to [Table D](#) for details on ICD-10-CA codes used to identify non-stimulant-related poisonings.



Co-occurring non-stimulant/non-opioid poisonings

14. Stimulant and opioid -related poisoning hospitalizations were further examined for diagnoses of poisoning from one or more co-occurring non-stimulant/non-opioid substance in the same hospital stay. Diagnoses for non-stimulant/non-opioid substance-related poisoning were identified using ICD-10-CA codes and included poisonings from other 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. Refer to [Table E](#) for details on ICD-10-CA codes used to identify non-stimulant/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 stimulant-related poisonings

Code	Details
T40.5	Poisoning by cocaine
T43.6	Poisoning by psychostimulants with abuse potential (excl. cocaine)



Table C. List of diagnosis codes included for non-opioid poisonings co-occurring with opioid poisonings

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
T42.7	Poisoning by antiepileptic and sedative-hypnotic drugs, unspecified
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

Table D. List of diagnosis codes included for non-stimulant poisonings co-occurring with stimulant 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
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
T42.7	Poisoning by antiepileptic and sedative-hypnotic drugs, unspecified
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



Table E. List of diagnosis codes included for non-stimulant/non-opioid poisonings co-occurring with opioid or stimulant poisonings

Code	Details
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
T42.7	Poisoning by antiepileptic and sedative-hypnotic drugs, unspecified
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, 2016 to 2022 (Jan to Mar).



Appendix

Table 1a. Number and crude rate of total opioid-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

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
BC	1,156	23.8	1,407	28.5	1,418	28.3	1,196	23.5
AB	930	22.2	947	22.3	922	21.5	709	16.3
SK	264	23.2	244	21.2	229	19.7	264	22.5
MB	123	9.4	161	12.1	108	8.0	84	6.1
ON	1,875	13.5	2,124	15.1	2,095	14.6	1,981	13.6
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	129	16.9	101	13.2	87	11.3	104	13.4
NS	101	10.7	83	8.7	80	8.3	79	8.1
PE	22	15.0	16	10.6	20	13.0	24	15.2
NL	56	10.6	90	17.0	67	12.7	52	9.9
Territories	31	25.8	30	24.6	26	21.0	21	16.8
Canada	4,687	16.8	5,203	18.4	5,052	17.6	4,514	15.5



Province or territory	2020		2021		2022 (Jan to Mar)	
	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population
BC	1,586	30.7	1,955	37.5	446	34.2
AB	890	20.1	1,144	25.7	267	24.0
SK	315	26.7	321	27.2	65	22.0
MB	126	9.1	122	8.8	31	9.0
ON	2,044	13.9	2,446	16.5	485	13.1
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	105	13.4	98	12.4	23	11.7
NS	72	7.3	71	7.2	18	7.3
PE	17	10.5	17	10.3	Suppr.	Suppr.
NL	64	12.3	68	13.1	15	11.5
Territories	21	16.6	31	24.2	Suppr.	Suppr.
Canada	5,240	17.8	6,273	21.2	1,350	18.3

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s)

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 of total opioid-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

Province or territory	2016		2017		2018		2019	
	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
BC	1,156	23.4	1,407	28.2	1,418	28.0	1,196	23.2
AB	930	23.3	947	23.1	922	22.1	709	16.8
SK	264	23.9	244	21.9	229	20.4	264	23.0
MB	123	9.7	161	12.4	108	8.3	84	6.3
ON	1,875	13.5	2,124	15.1	2,095	14.6	1,981	13.5
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	129	17.0	101	12.9	87	11.7	104	13.4
NS	101	10.1	83	8.5	80	8.0	79	7.8
PE	22	14.9	16	9.8	20	12.3	24	14.1
NL	56	10.3	90	16.6	67	12.8	52	9.9
Territories	31	29.9	30	24.9	26	20.9	21	17.7
Canada	4,687	16.8	5,203	18.4	5,052	17.6	4,514	15.5



Province or territory	2020		2021		2022 (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
BC	1,586	30.4	1,955	37.2	446	34.0
AB	890	20.5	1,144	25.7	267	24.1
SK	315	27.7	321	28.4	65	23.2
MB	126	9.5	122	9.0	31	9.3
ON	2,044	13.8	2,446	16.3	485	12.8
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	105	12.7	98	12.3	23	11.9
NS	72	6.8	71	6.7	18	7.3
PE	17	10.0	17	9.6	Suppr.	Suppr.
NL	64	12.3	68	13.1	15	12.6
Territories	21	16.6	31	23.9	Suppr.	Suppr.
Canada	5,240	17.8	6,273	21.1	1,350	18.3

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s)

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

Totals used to calculate age-adjusted rates do not include cases with missing age in provinces/territories.

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 2022 (Jan to Mar)

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
BC	663	13.6	886	18.0	988	19.7	768	15.1
AB	558	13.3	624	14.7	636	14.8	490	11.2
SK	163	14.3	146	12.7	139	12.0	145	12.4
MB	67	5.1	81	6.1	61	4.5	46	3.4
ON	1,014	7.3	1,203	8.6	1,277	8.9	1,247	8.6
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	45	5.9	21	2.7	31	4.0	38	4.9
NS	53	5.6	31	3.3	39	4.1	34	3.5
PE	11	7.5	7	4.7	10	6.5	13	8.3
NL	11	2.1	19	3.6	17	3.2	19	3.6
Territories	11	9.2	9	7.4	15	12.1	5	4.0
Canada	2,596	9.3	3,027	10.7	3,213	11.2	2,805	9.6



Province or territory	2020		2021		2022 (Jan to Mar)	
	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population
BC	1,121	21.7	1,427	27.4	347	26.6
AB	650	14.7	920	20.7	209	18.8
SK	216	18.3	227	19.2	50	17.0
MB	66	4.8	81	5.9	18	5.2
ON	1,388	9.4	1,640	11.1	323	8.7
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	49	6.3	51	6.5	12	6.1
NS	39	4.0	36	3.6	10	4.0
PE	10	6.2	9	5.5	Suppr.	Suppr.
NL	22	4.2	20	3.8	Suppr.	Suppr.
Territories	11	8.7	18	14.1	Suppr.	Suppr.
Canada	3,572	12.1	4,429	14.9	969	13.1

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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 2022 (Jan to Mar)

Province or territory	2016		2017		2018		2019	
	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
BC	663	13.4	886	17.7	988	19.5	768	14.9
AB	558	14.4	624	15.4	636	15.3	490	11.7
SK	163	14.7	146	12.9	139	12.3	145	12.6
MB	67	5.3	81	6.2	61	4.7	46	3.4
ON	1,014	7.3	1,203	8.5	1,277	8.9	1,247	8.5
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	45	5.6	21	2.4	31	3.8	38	4.7
NS	53	5.1	31	3.0	39	3.7	34	3.2
PE	11	7.3	7	4.6	10	5.6	13	7.0
NL	11	1.9	19	3.4	17	3.0	19	3.4
Territories	11	10.9	9	7.4	15	13.1	5	5.5
Canada	2,596	9.3	3,027	10.7	3,213	11.2	2,805	9.6



Province or territory	2020		2021		2022 (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
BC	1,121	21.5	1,427	27.2	347	26.5
AB	650	15.0	920	20.8	209	18.9
SK	216	19.1	227	20.1	50	17.8
MB	66	5.1	81	6.0	18	5.2
ON	1,388	9.3	1,640	10.9	323	8.5
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	49	5.6	51	6.3	12	5.7
NS	39	3.4	36	3.3	10	4.0
PE	10	5.3	9	4.7	Suppr.	Suppr.
NL	22	4.0	20	3.6	Suppr.	Suppr.
Territories	11	10.1	18	14.0	Suppr.	Suppr.
Canada	3,572	12.1	4,429	14.9	969	13.1

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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

Totals used to calculate age-adjusted rates do not include cases with missing age in provinces/territories.

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

Table 3a. Summary of opioid-related poisoning hospitalizations by intention, 2016 to 2022 (Jan to Mar)

Intention	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Total	4,687	100%	5,203	100%	5,052	100%	4,514	100%	5,240	100%	6,273	100%	1,350	100%
Accidental	2,596	55%	3,027	58%	3,213	64%	2,805	62%	3,572	68%	4,429	71%	969	72%
Intentional	1,370	29%	1,388	27%	1,247	25%	1,170	26%	1,068	20%	1,159	18%	236	17%
Unknown	600	13%	651	13%	561	11%	531	12%	596	11%	679	11%	148	11%

Note(s)

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

The total number include opioid-related poisoning hospitalizations for which the intent was not recorded. Intention categories may sum to greater than the total number due to multiple intentions being recorded on the same record.

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



Table 3b. Summary of total opioid-related poisoning hospitalizations in Canada, 2016 to 2022 (Jan to Mar)

		2016	2017	2018	2019	2020	2021	2022 (Jan to Mar)
Total	Number	4,687	5,203	5,052	4,514	5,240	6,273	1,350
	Crude rate	16.8	18.4	17.6	15.5	17.8	21.2	18.3
	Age adjusted rate	16.8	18.4	17.6	15.5	17.8	21.1	18.3
Percent by sex	Male	50%	55%	55%	54%	60%	62%	65%
	Female	50%	45%	45%	46%	40%	38%	35%
Percent by age group	0 to 19	6%	6%	7%	6%	5%	5%	5%
	20 to 29	17%	18%	18%	17%	17%	17%	16%
	30 to 39	16%	19%	19%	20%	21%	23%	22%
	40 to 49	15%	14%	16%	14%	16%	18%	17%
	50 to 59	20%	19%	18%	18%	18%	16%	16%
	60 or more	27%	25%	23%	25%	22%	22%	24%
Percent involving (categories not mutually exclusive)	Fentanyl or fentanyl analogues	n/a	n/a	16%	21%	28%	32%	32%
	Co-occurring non-opioid poisonings	36%	36%	35%	35%	33%	28%	28%
	Co-occurring stimulant poisonings	16%	18%	20%	19%	20%	17%	17%
	Co-occurring non-stimulant/ non-opioid poisonings	28%	25%	23%	22%	20%	17%	18%
Median total length of stay (in days)		3	3	3	3	3	3	3

Note(s):

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

Totals used to calculate age-adjusted rates do not include cases with missing age. 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. Data on opioid-related and stimulant-related poisoning hospitalizations are not mutually exclusive. A proportion of poisoning hospitalizations involving a stimulant also involved an opioid. Adding up those numbers would result in an overestimation of the burden of opioids and stimulants.

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

Table 3c. Summary of intentional opioid-related poisoning hospitalizations in Canada, 2016 to 2022 (Jan to Mar)

		2016	2017	2018	2019	2020	2021	2022 (Jan to Mar)
Total	Number	1,370	1,388	1,247	1,170	1,068	1,159	236
	Crude rate	4.9	4.9	4.4	4.0	3.6	3.9	3.2
	Age adjusted rate	4.9	4.9	4.4	4.0	3.6	3.9	3.2
Percent by sex	Male	43%	46%	41%	41%	45%	46%	50%
	Female	57%	54%	59%	59%	55%	54%	50%
Percent by age group	0 to 19	9%	10%	12%	11%	9%	10%	10%
	20 to 29	18%	19%	18%	18%	20%	17%	14%
	30 to 39	17%	19%	17%	18%	19%	19%	19%
	40 to 49	18%	16%	17%	17%	16%	16%	16%
	50 to 59	22%	20%	18%	18%	16%	15%	18%
	60 or more	16%	16%	18%	18%	19%	23%	24%
Percent involving (categories not mutually exclusive)	Fentanyl or fentanyl analogues	n/a	n/a	7%	11%	14%	18%	19%
	Co-occurring non-opioid poisonings	51%	49%	48%	50%	48%	43%	40%
	Co-occurring stimulant poisonings	16%	17%	18%	20%	21%	16%	16%
	Co-occurring non-stimulant/ non-opioid poisonings	44%	41%	39%	39%	35%	34%	31%

Note(s):

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

Totals used to calculate age-adjusted rates do not include cases with missing age. 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. Data on opioid-related and stimulant-related poisoning hospitalizations are not mutually exclusive. A proportion of poisoning hospitalizations involving a stimulant also involved an opioid. Adding up those numbers would result in an overestimation of the burden of opioids and stimulants.

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 2022

Province or territory	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BC	304	269	278	305	338	375	358	336	293	382	380	363	315	308	314	259
AB	229	239	239	223	235	235	256	221	202	229	271	220	171	174	214	150
SK	75	59	72	58	55	60	64	65	52	65	61	51	56	73	67	68
MB	25	35	26	37	40	49	32	40	30	27	23	28	18	17	21	28
ON	402	500	458	514	493	537	578	516	481	566	519	529	515	573	454	439
QC	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
NB	24	26	46	33	29	28	19	25	24	22	22	19	30	20	27	27
NS	18	23	32	28	28	17	18	20	13	33	16	18	23	19	18	19
PE	Suppr.	6	7	Suppr.	7	Suppr.	Suppr.	6	7	Suppr.	7	Suppr.	Suppr.	8	6	Suppr.
NL	15	16	14	11	21	24	28	17	19	20	19	9	9	16	19	8
Territories	Suppr.	13	Suppr.	8	10	8	6	6	11	Suppr.	8	Suppr.	5	8	Suppr.	Suppr.
Canada	1,092	1,186	1,172	1,217	1,256	1,333	1,359	1,252	1,132	1,344	1,326	1,237	1,142	1,216	1,140	998

Province or territory	2020				2021				2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
BC	281	379	452	474	461	474	497	522	446
AB	188	226	235	241	210	272	350	307	267
SK	50	83	87	95	72	79	77	93	65
MB	26	30	41	29	31	26	33	32	31
ON	455	519	543	527	595	618	619	614	485
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	23	28	29	25	27	26	25	20	23
NS	15	22	13	22	18	20	14	19	18
PE	6	Suppr.	Suppr.	7	5	Suppr.	5	Suppr.	Suppr.
NL	16	22	12	14	11	17	24	16	15
Territories	7	6	Suppr.	Suppr.	8	Suppr.	Suppr.	12	Suppr.
Canada	1,067	1,315	1,412	1,434	1,438	1,532	1,644	1,635	1,350

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Q1 = January to March; Q2 = April to June; Q3 = July to September; Q4 = October to December

Note(s):

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

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

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



Table 5. Number of accidental opioid-related poisoning hospitalizations by quarter and province or territory, January 2016 to March 2022

Province or territory	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BC	164	147	155	197	204	236	221	225	190	280	266	252	212	204	190	162
AB	135	140	156	127	151	146	169	158	138	165	168	165	114	129	149	98
SK	42	37	51	33	28	36	42	40	31	36	37	35	22	42	39	42
MB	12	17	15	23	16	27	18	20	16	15	12	18	9	12	10	15
ON	220	267	243	284	256	307	356	284	269	370	327	311	336	363	269	279
QC	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
NB	7	13	15	10	Suppr.	Suppr.	6	6	8	9	8	6	8	6	11	13
NS	7	11	22	13	10	5	8	8	Suppr.	20	Suppr.	8	8	5	9	12
PE	Suppr.	Suppr.	Suppr.	Suppr.	0	0	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	6	Suppr.	Suppr.
NL	Suppr.	5	Suppr.	Suppr.	5	6	Suppr.	Suppr.	Suppr.	7	Suppr.	Suppr.	6	Suppr.	6	Suppr.
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	7	Suppr.	5	Suppr.	Suppr.	Suppr.	0	Suppr.
Canada	587	637	657	687	670	763	820	741	659	902	823	795	715	767	683	621

Province or territory	2020				2021				2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
BC	177	258	327	359	317	355	375	380	347
AB	124	164	168	194	160	225	279	256	209
SK	30	58	58	70	52	46	55	74	50
MB	11	13	25	17	19	16	24	22	18
ON	310	364	379	335	386	423	411	420	323
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	11	14	13	11	12	15	15	9	12
NS	8	12	7	12	7	14	6	9	10
PE	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	0	Suppr.
NL	6	13	Suppr.	Suppr.	Suppr.	6	Suppr.	Suppr.	Suppr.
Territories	5	Suppr.	Suppr.	Suppr.	5	0	7	6	Suppr.
Canada	682	896	977	998	958	1,100	1,172	1,176	969

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Q1 = January to March; Q2 = April to June; Q3 = July to September; Q4 = October to December

Note(s):

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

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

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



Table 6. Sex distribution of accidental opioid-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

Province or territory	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
BC	37%	63%	31%	69%	32%	68%	34%	66%	30%	70%	30%	70%	24%	76%
AB	50%	50%	43%	57%	42%	58%	46%	54%	38%	62%	37%	63%	33%	67%
SK	50%	50%	51%	49%	56%	44%	52%	48%	47%	53%	40%	60%	48%	52%
MB	52%	48%	43%	57%	59%	41%	54%	46%	39%	61%	36%	64%	44%	56%
ON	51%	49%	46%	54%	44%	56%	43%	57%	38%	62%	36%	64%	35%	65%
QC	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
NB	36%	64%	71%	29%	55%	45%	42%	58%	49%	51%	37%	63%	Suppr.	Suppr.
NS	58%	42%	45%	55%	41%	59%	53%	47%	62%	38%	47%	53%	Suppr.	Suppr.
PE	45%	55%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	100%	0%
NL	Suppr.	Suppr.	32%	68%	59%	41%	47%	53%	50%	50%	45%	55%	100%	0%
Territories	Suppr.	Suppr.	Suppr.	Suppr.	53%	47%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	100%	0%
Canada	47%	53%	41%	59%	41%	59%	42%	58%	37%	63%	35%	65%	32%	68%

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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

Does not include cases with missing sex, or other sex. Totals used to calculate Canada proportions do not include the suppressed numbers, in order to comply with privacy and confidentiality rules.

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

Table 7. Age group distribution of accidental opioid-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

2016

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	3%	20%	21%	16%	15%	24%
AB	4%	17%	12%	16%	18%	33%
SK	9%	14%	19%	14%	20%	24%
MB	Suppr.	12%	Suppr.	19%	19%	36%
ON	4%	13%	14%	11%	20%	39%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	13%	Suppr.	22%	22%	36%
NS	Suppr.	11%	Suppr.	Suppr.	15%	60%
PE	0%	Suppr.	0%	0%	Suppr.	55%
NL	Suppr.	0%	Suppr.	Suppr.	Suppr.	45%
Territories	Suppr.	Suppr.	Suppr.	0%	Suppr.	Suppr.
Canada	4%	16%	15%	13%	18%	33%

2017

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	5%	22%	23%	17%	15%	18%
AB	3%	19%	21%	13%	18%	27%
SK	12%	17%	17%	15%	17%	22%
MB	9%	25%	21%	7%	12%	26%
ON	4%	14%	16%	13%	20%	34%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	0%	Suppr.	0%	Suppr.	24%	57%
NS	Suppr.	Suppr.	Suppr.	Suppr.	19%	55%
PE	0%	Suppr.	Suppr.	0%	0%	71%
NL	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					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	5%	22%	22%	17%	17%	17%
AB	4%	21%	18%	16%	17%	25%
SK	11%	18%	19%	14%	16%	22%
MB	8%	23%	11%	10%	25%	23%
ON	3%	13%	20%	14%	18%	32%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	Suppr.	Suppr.	Suppr.	19%	45%
NS	Suppr.	Suppr.	Suppr.	Suppr.	18%	51%
PE	0%	0%	0%	Suppr.	0%	Suppr.
NL	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	47%
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	33%
Canada	4%	18%	19%	15%	17%	26%

2019

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	7%	18%	24%	14%	17%	20%
AB	4%	14%	20%	12%	16%	35%
SK	15%	22%	15%	15%	13%	19%
MB	Suppr.	22%	20%	Suppr.	13%	28%
ON	3%	16%	20%	13%	18%	31%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	Suppr.	Suppr.	13%	21%	45%
NS	Suppr.	Suppr.	Suppr.	21%	Suppr.	53%
PE	0%	0%	Suppr.	Suppr.	Suppr.	77%
NL	0%	Suppr.	Suppr.	Suppr.	42%	32%
Territories	0%	Suppr.	0%	Suppr.	0%	Suppr.
Canada	5%	16%	20%	13%	17%	29%



2020

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	4%	18%	20%	19%	18%	20%
AB	4%	16%	22%	16%	18%	24%
SK	4%	14%	26%	19%	18%	19%
MB	Suppr.	17%	Suppr.	14%	26%	29%
ON	5%	15%	21%	14%	18%	26%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	Suppr.	18%	Suppr.	Suppr.	61%
NS	Suppr.	Suppr.	Suppr.	Suppr.	18%	64%
PE	0%	Suppr.	Suppr.	0%	Suppr.	60%
NL	Suppr.	Suppr.	Suppr.	Suppr.	41%	32%
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	4%	16%	21%	16%	18%	25%

2021

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	4%	15%	22%	21%	20%	18%
AB	3%	19%	26%	18%	13%	20%
SK	6%	17%	28%	17%	19%	13%
MB	Suppr.	38%	26%	Suppr.	11%	12%
ON	3%	15%	23%	17%	15%	27%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	10%	24%	18%	Suppr.	39%
NS	Suppr.	Suppr.	19%	Suppr.	14%	47%
PE	0%	Suppr.	Suppr.	0%	Suppr.	67%
NL	Suppr.	Suppr.	Suppr.	Suppr.	35%	35%
Territories	Suppr.	Suppr.	28%	Suppr.	Suppr.	Suppr.
Canada	4%	17%	23%	18%	16%	22%



2022 (Jan to Mar)

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	4%	14%	24%	18%	21%	19%
AB	5%	20%	23%	18%	11%	23%
SK	Suppr.	Suppr.	18%	20%	24%	18%
MB	0%	Suppr.	Suppr.	Suppr.	Suppr.	39%
ON	4%	14%	22%	14%	12%	33%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	Suppr.	0%	0%	Suppr.	50%
NS	Suppr.	0%	Suppr.	Suppr.	Suppr.	Suppr.
PE	0%	0%	Suppr.	0%	0%	Suppr.
NL	0%	0%	0%	100%	0%	0%
Territories	0%	0%	0%	0%	0%	100%
Canada	4%	15%	22%	17%	16%	26%

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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

Does not include cases with missing age. Totals used to calculate Canada proportions do not include the suppressed numbers, in order to comply with privacy and confidentiality rules.

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

Table 8a. Number of total opioid-related poisoning hospitalizations in Canada, sex by age group, 2016 to 2022 (Jan to Mar)

Sex by age group	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0 to 19	151	111	186	117	207	123	149	128	157	127	178	138	39	30
20 to 29	289	490	318	620	335	571	289	476	305	565	343	712	59	158
30 to 39	295	450	325	641	309	641	346	552	363	744	505	922	96	199
40 to 49	371	341	316	437	345	457	278	370	320	541	386	739	66	169
50 to 59	467	466	494	471	445	441	404	401	361	581	352	640	73	144
60 or more	754	499	678	598	644	533	614	507	595	578	627	720	144	181

Note(s):

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

Totals for sex by age group may not match those from other tables as they do not include cases with missing sex, other sex or missing age.

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



Table 8b. Number of intentional opioid-related poisoning hospitalizations in Canada, sex by age group, 2016 to 2022 (Jan to Mar)

Sex by age group	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0 to 19	93	37	107	24	113	41	91	33	78	22	92	28	19	5
20 to 29	124	121	127	136	128	96	122	93	111	103	89	107	14	19
30 to 39	124	115	117	142	102	110	123	86	108	100	108	116	19	25
40 to 49	154	88	113	115	121	93	100	100	89	82	113	73	17	20
50 to 59	164	136	172	112	145	75	132	84	92	84	86	83	21	21
60 or more	128	85	114	108	121	102	119	87	111	87	130	130	29	27

Note(s):

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

Totals for sex by age group may not match those from other tables as they do not include cases with missing sex, other sex or missing age.

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

Table 8c. Number of accidental opioid-related poisoning hospitalizations, sex by age group, 2016 to 2022 (Jan to Mar)

Sex by age group	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0 to 19	49	62	64	76	77	69	54	85	68	95	77	94	19	23
20 to 29	120	282	154	378	169	398	135	321	166	395	214	516	37	110
30 to 39	141	247	156	410	173	454	181	383	206	536	345	693	66	152
40 to 49	157	198	160	260	184	299	137	234	193	384	238	572	40	122
50 to 59	236	240	252	282	255	299	230	240	239	413	228	487	45	109
60 or more	517	345	460	374	460	375	436	369	432	443	444	519	108	142

Note(s):

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

Totals for sex by age group may not match those from other tables as they do not include cases with missing sex, other sex or missing age.

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





Table 9. Percentage of accidental opioid-related poisoning hospitalizations involving fentanyl or fentanyl analogues by province or territory, 2016 to 2022 (Jan to Mar)

Province or territory	2016	2017	2018 (Apr to Dec)	2019	2020	2021	2022 (Jan to Mar)
BC	n/a	n/a	33%	40%	42%	41%	43%
AB	n/a	n/a	16%	20%	19%	22%	29%
SK	n/a	n/a	7%	6%	25%	30%	34%
MB	n/a	n/a	11%	13%	14%	30%	Suppr.
ON	n/a	n/a	13%	23%	33%	39%	32%
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	n/a	n/a	0%	Suppr.	Suppr.	Suppr.	0%
NS	n/a	n/a	0%	0%	0%	Suppr.	0%
PE	n/a	n/a	Suppr.	0%	0%	0%	0%
NL	n/a	n/a	Suppr.	0%	0%	Suppr.	0%
Territories	n/a	n/a	40%	Suppr.	45%	Suppr.	0%
Canada	n/a	n/a	19%	25%	32%	35%	34%

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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

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.

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

Table 10. Percentage of accidental opioid-related poisoning hospitalizations by substances involved, in Canada, 2016 to 2022 (Jan to Mar)

	2016	2017	2018	2019	2020	2021	2022 (Jan to Mar)
Total number	2,596	3,027	3,213	2,805	3,572	4,429	969
Percent involving co-occurring non-opioid poisonings	29%	30%	30%	28%	29%	24%	25%
Percent involving co-occurring stimulant poisonings	16%	18%	20%	18%	20%	17%	16%
Percent involving co-occurring non-stimulant/ non-opioid poisonings	20%	19%	18%	17%	16%	13%	15%

Note(s):

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

Data on opioid-related and stimulant-related poisoning hospitalizations are not mutually exclusive. A proportion of poisoning hospitalizations involving a stimulant also involved an opioid. Adding up those numbers would result in an overestimation of the burden of opioids and stimulants.

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



Table 11a. Number and crude rate of total stimulant-related poisoning hospitalizations by province or territory, 2016 to 2021

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
BC	480	9.9	583	11.8	548	10.9	524	10.3
AB	370	8.8	401	9.5	399	9.3	321	7.4
SK	120	10.6	108	9.4	126	10.8	159	13.6
MB	66	5.0	82	6.1	64	4.7	58	4.2
ON	722	5.2	916	6.5	1,107	7.7	975	6.7
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	51	6.7	54	7.0	53	6.9	56	7.2
NS	32	3.4	37	3.9	27	2.8	32	3.3
PE	5	3.4	9	6.0	6	3.9	6	3.8
NL	28	5.3	33	6.2	31	5.9	36	6.9
Territories	11	9.2	12	9.8	12	9.7	12	9.6
Canada	1,885	6.8	2,235	7.9	2,373	8.3	2,179	7.5

Province or territory	2020		2021		2022 (Jan to Mar)	
	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population
BC	606	11.7	663	12.7	155	11.9
AB	425	9.6	402	9.0	79	7.1
SK	143	12.1	162	13.7	28	9.5
MB	56	4.1	54	3.9	17	4.9
ON	1,111	7.5	1,002	6.8	217	5.9
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	59	7.5	60	7.6	12	6.1
NS	46	4.7	34	3.4	15	6.0
PE	7	4.3	Suppr.	Suppr.	Suppr.	Suppr.
NL	43	8.2	32	6.1	9	6.9
Territories	20	15.8	13	10.2	Suppr.	Suppr.
Canada	2,516	8.5	2,422	8.2	532	7.2

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.
Not available (n/a) Data were not available.

Note(s):

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 11b. Number and age adjusted rate of total stimulant-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

Province or territory	2016		2017		2018		2019	
	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
BC	480	9.9	583	11.9	548	11.0	524	10.4
AB	370	8.5	401	9.1	399	9.0	321	7.2
SK	120	10.5	108	9.4	126	11.0	159	13.5
MB	66	5.1	82	6.2	64	4.7	58	4.2
ON	722	5.2	916	6.5	1,107	7.8	975	6.7
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	51	7.2	54	7.9	53	7.7	56	8.0
NS	32	3.7	37	4.2	27	3.0	32	3.5
PE	5	3.8	9	6.6	6	4.3	6	4.1
NL	28	6.0	33	7.0	31	6.9	36	7.8
Territories	11	9.5	12	8.9	12	8.9	12	8.7
Canada	1,885	6.8	2,235	7.9	2,373	8.3	2,179	7.5

Province or territory	2020		2021		2022 (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
BC	606	11.8	663	13.0	155	12.2
AB	425	9.3	402	8.9	79	7.0
SK	143	12.3	162	13.9	28	10.0
MB	56	4.0	54	3.9	17	4.9
ON	1,111	7.6	1,002	6.8	217	5.9
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	59	8.3	60	8.3	12	6.8
NS	46	5.0	34	3.8	15	6.4
PE	7	4.4	Suppr.	Suppr.	Suppr.	Suppr.
NL	43	9.3	32	7.0	9	8.0
Territories	20	14.8	13	15.1	Suppr.	Suppr.
Canada	2,516	8.6	2,422	8.3	532	7.3

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.
Not available (n/a) Data were not available.

Note(s):

Data on hospitalizations from Quebec are not included in the dataset used for analysis. As a result, Quebec is excluded.
Totals used to calculate age-adjusted rates do not include cases with missing age, in provinces/territories.
Refer to [Technical Notes](#) for more information.



Table 12a. Number and crude rate of accidental stimulant-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

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
BC	295	6.1	342	6.9	378	7.5	288	5.7
AB	191	4.6	228	5.4	223	5.2	188	4.3
SK	60	5.3	58	5.0	69	5.9	63	5.4
MB	33	2.5	46	3.4	27	2.0	28	2.0
ON	333	2.4	457	3.2	583	4.1	550	3.8
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	11	1.4	5	0.7	5	0.6	14	1.8
NS	9	1.0	9	0.9	7	0.7	10	1.0
PE	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
NL	Suppr.	Suppr.	Suppr.	Suppr.	6	1.1	6	1.1
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	940	3.4	1,145	4.1	1,298	4.6	1,147	4.0

Province or territory	2020		2021		2022 (Jan to Mar)	
	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population	Number	Crude rate per 100,000 population
BC	375	7.3	425	8.1	92	7.1
AB	261	5.9	246	5.5	52	4.7
SK	72	6.1	78	6.6	13	4.4
MB	25	1.8	32	2.3	11	3.2
ON	670	4.5	576	3.9	109	2.9
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	27	3.4	20	2.5	0	0.0
NS	14	1.4	14	1.4	Suppr.	Suppr.
PE	Suppr.	Suppr.	Suppr.	Suppr.	0	0.0
NL	5	1.0	5	1.0	Suppr.	Suppr.
Territories	Suppr.	Suppr.	6	4.7	0	0.0
Canada	1,449	4.9	1,402	4.7	277	3.8

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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 12b. Number and age-adjusted rate of accidental stimulant-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

Province or territory	2016		2017		2018		2019	
	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
BC	295	6.1	342	7.0	378	7.6	288	5.7
AB	191	4.4	228	5.2	223	5.0	188	4.2
SK	60	5.2	58	5.0	69	6.1	63	5.4
MB	33	2.5	46	3.5	27	2.0	28	2.0
ON	333	2.4	457	3.3	583	4.1	550	3.8
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	11	1.5	5	0.8	5	0.7	14	2.0
NS	9	1.0	9	1.0	7	0.8	10	1.1
PE	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
NL	Suppr.	Suppr.	Suppr.	Suppr.	6	1.3	6	1.4
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Canada	940	3.4	1,145	4.1	1,298	4.6	1,147	4.0

Province or territory	2020		2021		2022 (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
BC	375	7.3	425	8.2	92	7.1
AB	261	5.7	246	5.4	52	4.5
SK	72	6.3	78	6.7	13	4.8
MB	25	1.9	32	2.4	11	3.2
ON	670	4.6	576	3.9	109	3.0
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	27	3.7	20	2.7	0	0
NS	14	1.5	14	1.5	Suppr.	Suppr.
PE	Suppr.	Suppr.	Suppr.	Suppr.	0	0
NL	5	1.2	5	1.1	Suppr.	Suppr.
Territories	Suppr.	Suppr.	6	4.0	0	0
Canada	1,449	5.0	1,402	4.8	277	3.8

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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

Totals used to calculate age-adjusted rates do not include cases with missing age in provinces/territories.

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



Table 13a. Summary of stimulant-related poisoning hospitalizations by intention, 2016 to 2022 (Jan to Mar)

Intention	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Total	1,885	100%	2,235	100%	2,373	100%	2,179	100%	2,516	100%	2,422	100%	532	100%
Accidental	940	50%	1,156	52%	1,305	55%	1,151	53%	1,456	58%	1,402	58%	277	52%
Intentional	649	34%	699	31%	696	29%	703	32%	730	29%	698	29%	177	33%
Unknown	288	15%	382	17%	376	16%	329	15%	327	13%	334	14%	78	15%

Note(s):

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

The total number include stimulant-related poisoning hospitalizations for which the intent was not recorded. Intention categories may sum to greater than the total number due to multiple intentions recorded on the same record.

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

Table 13b. Summary of total stimulant-related poisoning hospitalizations in Canada, 2016 to 2022 (Jan to Mar)

		2016	2017	2018	2019	2020	2021	2022 (Jan to Mar)
Total	Number	1,885	2,235	2,373	2,179	2,516	2422	532
	Crude rate	6.8	7.9	8.3	7.5	8.5	8.2	7.2
	Age adjusted rate	6.8	7.9	8.3	7.5	8.6	8.3	7.3
Percent by sex	Male	60%	62%	61%	60%	61%	60%	59%
	Female	40%	38%	39%	40%	39%	40%	41%
Percent by age group	0 to 19	14%	14%	13%	16%	14%	16%	18%
	20 to 29	32%	29%	29%	27%	25%	23%	24%
	30 to 39	24%	26%	27%	26%	28%	25%	22%
	40 to 49	16%	16%	15%	14%	17%	19%	20%
	50 to 59	11%	10%	11%	12%	11%	11%	10%
	60 or more	4%	5%	5%	6%	6%	6%	6%
Percent involving <small>(categories not mutually exclusive)</small>	Cocaine	49%	52%	52%	46%	50%	49%	46%
	Other psychostimulants (excl. cocaine)	62%	59%	58%	65%	62%	64%	68%
	Co-occurring non-stimulant poisonings	61%	62%	63%	60%	62%	61%	61%
	Co-occurring opioid poisonings (incl. fentanyl or analogues)	40%	42%	42%	39%	42%	43%	43%
	Co-occurring fentanyl or analogues poisonings	n/a	n/a	11%	14%	18%	24%	22%
	Co-occurring non-stimulant/ non-opioid poisonings	40%	38%	38%	35%	35%	33%	35%
Median total length of stay (in days)		2	2	2	2	2	3	3

Note(s):

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

Totals used to calculate age-adjusted rates do not include cases with missing age. 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. Data on opioid-related and stimulant-related poisoning hospitalizations are not mutually exclusive. A proportion of poisoning hospitalizations involving a stimulant also involved an opioid. Adding up those numbers would result in an overestimation of the burden of opioids and stimulants.

Stimulant-related poisoning hospitalizations involving cocaine and other psychostimulants may exceed 100% as poisonings may co-occur.

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



Table 13c. Summary of intentional stimulant-related poisoning hospitalizations in Canada, 2016 to 2022 (Jan to Mar)

		2016	2017	2018	2019	2020	2021	2022 (Jan to Mar)
Total	Number	649	699	696	703	730	698	177
	Crude rate	2.3	2.5	2.4	2.4	2.5	2.4	2.4
	Age adjusted rate	2.3	2.5	2.4	2.4	2.5	2.4	2.5
Percent by sex	Male	46%	49%	43%	44%	39%	39%	32%
	Female	54%	51%	57%	56%	61%	61%	68%
Percent by age group	0 to 19	25%	24%	27%	28%	30%	38%	42%
	20 to 29	30%	29%	27%	27%	25%	25%	25%
	30 to 39	21%	20%	21%	18%	21%	17%	12%
	40 to 49	13%	15%	13%	12%	13%	11%	10%
	50 to 59	9%	9%	7%	10%	7%	6%	Suppr.
	60 or more	2%	3%	5%	5%	4%	3%	Suppr.
Percent involving (categories not mutually exclusive)	Cocaine	37%	40%	36%	33%	31%	29%	28%
	Other psychostimulants (excl. cocaine)	69%	68%	70%	75%	75%	78%	80%
	Co-occurring non-stimulant poisonings	62%	65%	63%	61%	57%	51%	46%
	Co-occurring opioid poisonings (incl. fentanyl or analogues)	35%	34%	32%	34%	30%	26%	21%
	Co-occurring fentanyl or analogues poisonings	n/a	n/a	3%	5%	5%	8%	5%
	Co-occurring non-stimulant/non-opioid poisonings	47%	48%	46%	41%	39%	35%	33%

Note(s):

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

Totals used to calculate age-adjusted rates do not include cases with missing age. 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. Data on opioid-related and stimulant-related poisoning hospitalizations are not mutually exclusive. A proportion of poisoning hospitalizations involving a stimulant also involved an opioid. Adding up those numbers would result in an overestimation of the burden of opioids and stimulants.

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

Table 14. Number of total stimulant-related poisoning hospitalizations by quarter and province or territory, January 2016 to March 2022

Province or territory	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BC	123	107	146	104	123	152	141	167	113	146	142	147	134	138	135	117
AB	80	101	97	92	100	109	99	93	96	103	108	92	72	81	86	82
SK	29	34	28	29	21	29	28	30	23	37	33	33	45	32	33	49
MB	18	21	13	14	20	25	25	12	17	15	10	22	13	14	11	20
ON	138	206	202	176	189	245	247	235	251	302	299	255	238	294	221	222
QC	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
NB	16	9	17	9	11	11	11	21	10	14	18	11	16	12	16	12
NS	Suppr.	Suppr.	11	11	10	8	10	9	Suppr.	9	Suppr.	8	8	9	8	7
PE	Suppr.	Suppr.	Suppr.	Suppr.	0	Suppr.	5	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	0	Suppr.	Suppr.	Suppr.
NL	5	8	10	5	6	7	8	12	7	Suppr.	Suppr.	15	Suppr.	Suppr.	13	12
Territories	Suppr.	6	Suppr.	Suppr.	5	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	7
Canada	409	492	524	440	485	586	574	579	517	626	610	583	526	580	523	528



Province or territory	2020				2021				2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
BC	110	151	177	168	133	166	218	146	155
AB	78	131	110	106	87	115	96	104	79
SK	24	40	32	47	28	48	41	45	28
MB	6	17	20	13	11	18	12	13	17
ON	241	332	264	274	227	265	261	249	217
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	14	14	19	12	15	15	14	16	12
NS	Suppr.	21	Suppr.	11	7	11	9	7	15
PE	0	0	Suppr.	Suppr.	0	Suppr.	0	Suppr.	Suppr.
NL	7	11	12	13	8	5	13	6	9
Territories	Suppr.	5	7	Suppr.	5	Suppr.	Suppr.	Suppr.	Suppr.
Canada	480	722	641	644	521	643	664	586	532

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Q1 = January to March; Q2 = April to June; Q3 = July to September; Q4 = October to December

Note(s):

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

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

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

Table 15. Number of accidental stimulant-related poisoning hospitalizations by quarter and province or territory, January 2016 to March 2022

Province or territory	2016				2017				2018				2019			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
BC	69	57	100	69	66	98	76	102	71	99	107	101	85	69	78	56
AB	39	54	51	47	54	58	62	54	53	61	54	55	34	53	57	44
SK	11	19	14	16	14	11	17	16	13	18	18	20	16	17	10	20
MB	10	10	8	5	8	16	16	6	7	10	Suppr.	Suppr.	Suppr.	8	Suppr.	13
ON	65	87	99	82	81	113	139	124	113	165	172	133	123	174	122	131
QC	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
NB	5	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	0	0	Suppr.	Suppr.	Suppr.	Suppr.	7	Suppr.	Suppr.
NS	Suppr.	0	Suppr.	5	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	5	0	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
PE	Suppr.	Suppr.	0	Suppr.	0	0	Suppr.	Suppr.	0	Suppr.	Suppr.	Suppr.	0	0	Suppr.	Suppr.
NL	0	Suppr.	Suppr.	0	Suppr.	Suppr.	0	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	0	Suppr.	Suppr.	0
Territories	Suppr.	Suppr.	0	0	Suppr.	Suppr.	Suppr.	0	Suppr.	Suppr.	Suppr.	Suppr.	0	Suppr.	0	Suppr.
Canada	199	227	272	224	223	296	310	302	257	358	351	309	258	328	267	264



Province or territory	2020				2021				2022
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
BC	58	100	121	96	85	106	149	85	92
AB	47	82	64	68	47	72	64	63	52
SK	8	18	17	29	12	20	24	22	13
MB	Suppr.	10	6	Suppr.	5	10	8	9	11
ON	136	203	163	168	125	154	153	144	109
QC	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
NB	6	8	7	6	6	7	Suppr.	Suppr.	0
NS	Suppr.	5	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
PE	0	0	Suppr.	Suppr.	Suppr.	Suppr.	0	0	0
NL	Suppr.	Suppr.	Suppr.	0	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Territories	Suppr.	Suppr.	Suppr.	0	Suppr.	Suppr.	Suppr.	Suppr.	0
Canada	255	426	378	367	280	369	398	323	277

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Q1 = January to March; Q2 = April to June; Q3 = July to September; Q4 = October to December

Note(s):

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

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

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

Table 16. Sex distribution of accidental stimulant-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

Province or territory	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
BC	29%	71%	25%	75%	28%	72%	31%	69%	24%	76%	31%	69%	27%	73%
AB	39%	61%	34%	66%	36%	64%	33%	67%	33%	67%	34%	66%	27%	73%
SK	35%	65%	43%	57%	38%	62%	52%	48%	39%	61%	44%	56%	Suppr.	Suppr.
MB	52%	48%	41%	59%	37%	63%	43%	57%	32%	68%	34%	66%	Suppr.	Suppr.
ON	32%	68%	30%	70%	31%	69%	32%	68%	29%	71%	29%	71%	27%	73%
QC	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
NB	Suppr.	Suppr.	Suppr.	Suppr.	0%	100%	Suppr.	Suppr.	41%	59%	30%	70%	0%	0%
NS	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	36%	64%	71%	29%	Suppr.	Suppr.
PE	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	0%	0%
NL	Suppr.	Suppr.	Suppr.	Suppr.	0%	100%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
Territories	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	0%	0%
Canada	33%	67%	31%	69%	31%	69%	33%	67%	29%	71%	32%	68%	27%	73%

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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

Does not include cases with missing sex, or other sex. Totals used to calculate Canada proportions do not include the suppressed numbers, in order to comply with privacy and confidentiality rules.

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





Table 17. Age group distribution of accidental stimulant-related poisoning hospitalizations by province or territory, 2016 to 2022 (Jan to Mar)

2016

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	11%	28%	23%	17%	15%	6%
AB	9%	40%	22%	15%	8%	7%
SK	18%	27%	28%	20%	Suppr.	Suppr.
MB	Suppr.	36%	15%	21%	15%	Suppr.
ON	5%	30%	31%	16%	13%	5%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	0%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
NS	Suppr.	Suppr.	Suppr.	0%	Suppr.	0%
PE	0%	Suppr.	0%	Suppr.	0%	0%
NL	0%	0%	Suppr.	Suppr.	0%	Suppr.
Territories	0%	Suppr.	Suppr.	0%	0%	0%
Canada	9%	32%	26%	17%	12%	5%

2017

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	8%	29%	28%	19%	9%	6%
AB	11%	29%	29%	14%	10%	6%
SK	17%	36%	24%	Suppr.	12%	Suppr.
MB	11%	37%	22%	20%	Suppr.	Suppr.
ON	8%	26%	29%	18%	12%	6%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	Suppr.	Suppr.	0%	0%	0%
NS	Suppr.	Suppr.	Suppr.	Suppr.	0%	0%
PE	0%	Suppr.	0%	0%	0%	Suppr.
NL	0%	Suppr.	Suppr.	0%	0%	0%
Territories	0%	Suppr.	0%	Suppr.	0%	0%
Canada	9%	29%	29%	17%	11%	5%



2018

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	4%	30%	27%	17%	15%	7%
AB	7%	35%	26%	17%	8%	7%
SK	16%	33%	23%	16%	Suppr.	Suppr.
MB	Suppr.	26%	37%	19%	Suppr.	0%
ON	4%	28%	33%	16%	15%	4%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	0%	0%	Suppr.	Suppr.	0%	0%
NS	0%	Suppr.	Suppr.	Suppr.	0%	Suppr.
PE	Suppr.	0%	Suppr.	0%	0%	0%
NL	Suppr.	Suppr.	0%	0%	Suppr.	0%
Territories	0%	Suppr.	Suppr.	Suppr.	0%	0%
Canada	5%	30%	30%	17%	13%	5%

2019

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	11%	23%	31%	14%	13%	8%
AB	16%	24%	32%	14%	9%	5%
SK	17%	33%	25%	11%	Suppr.	Suppr.
MB	Suppr.	36%	39%	18%	0%	Suppr.
ON	6%	31%	28%	16%	14%	5%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	Suppr.	Suppr.	Suppr.	36%	0%
NS	Suppr.	Suppr.	50%	0%	0%	Suppr.
PE	Suppr.	0%	0%	0%	0%	Suppr.
NL	0%	Suppr.	Suppr.	0%	Suppr.	0%
Territories	Suppr.	0%	0%	0%	Suppr.	0%
Canada	10%	28%	30%	15%	12%	5%



2020

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	6%	21%	27%	21%	16%	10%
AB	8%	33%	32%	15%	9%	4%
SK	13%	29%	32%	19%	Suppr.	Suppr.
MB	Suppr.	28%	24%	32%	Suppr.	0%
ON	9%	24%	30%	18%	13%	7%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	Suppr.	19%	26%	22%	Suppr.	Suppr.
NS	0%	Suppr.	Suppr.	Suppr.	0%	Suppr.
PE	0%	Suppr.	Suppr.	0%	0%	0%
NL	Suppr.	0%	Suppr.	Suppr.	0%	0%
Territories	0%	0%	Suppr.	Suppr.	Suppr.	0%
Canada	8%	25%	30%	19%	12%	6%

2021

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	8%	16%	26%	21%	18%	11%
AB	11%	27%	27%	22%	7%	6%
SK	22%	31%	22%	15%	Suppr.	Suppr.
MB	Suppr.	34%	22%	Suppr.	16%	Suppr.
ON	5%	24%	29%	24%	11%	7%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	0%	Suppr.	Suppr.	40%	Suppr.	Suppr.
NS	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
PE	0%	0%	100%	0%	0%	0%
NL	0%	Suppr.	Suppr.	Suppr.	20%	0%
Territories	Suppr.	0%	Suppr.	0%	0%	0%
Canada	8%	22%	27%	22%	13%	8%



2022 (Jan to Mar)

Province or territory	Age group					
	0 to 19	20 to 29	30 to 39	40 to 49	50 to 59	60 or more
BC	Suppr.	14%	22%	29%	18%	Suppr.
AB	10%	31%	31%	21%	Suppr.	Suppr.
SK	0%	Suppr.	Suppr.	Suppr.	Suppr.	Suppr.
MB	0%	Suppr.	Suppr.	Suppr.	0%	Suppr.
ON	9%	20%	31%	19%	13%	7%
QC	n/a	n/a	n/a	n/a	n/a	n/a
NB	0%	0%	0%	0%	0%	0%
NS	0%	0%	Suppr.	Suppr.	0%	0%
PE	0%	0%	0%	0%	0%	0%
NL	0%	0%	0%	100%	0%	0%
Territories	0%	0%	0%	0%	0%	0%
Canada	6%	20%	28%	23%	13%	9%

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

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

Note(s):

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

Does not include cases with missing age. Totals used to calculate Canada proportions do not include the suppressed numbers, in order to comply with privacy and confidentiality rules.

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

Table 18a. Number of total stimulant-related poisoning hospitalizations in Canada, sex by age group, 2016 to 2022 (Jan to Mar)

Sex by age group	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0 to 19	156	117	179	135	186	114	207	135	234	127	265	125	74	21
20 to 29	233	363	241	411	262	432	227	365	227	389	211	352	58	69
30 to 39	143	301	184	395	207	430	187	371	244	453	233	367	35	82
40 to 49	114	181	112	245	146	219	102	205	145	280	145	317	29	76
50 to 59	78	120	84	141	91	179	93	166	74	198	77	179	14	42
60 or more	33	45	38	68	43	64	56	64	44	98	39	109	9	23

Note(s):

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

Totals for sex by age group may not match those from other tables as they do not include cases with missing sex, other sex or missing age.

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

Table 18b. Number of intentional stimulant-related poisoning hospitalizations in Canada, sex by age group, 2016 to 2022 (Jan to Mar)

Sex by age group	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0 to 19	113	48	112	57	137	54	146	54	167	53	209	51	62	12
20 to 29	103	91	105	98	106	81	93	94	105	79	90	83	35	10
30 to 39	56	79	60	82	62	82	65	63	80	71	57	64	11	11
40 to 49	41	41	42	60	53	38	38	44	48	45	36	43	7	11
50 to 59	31	29	27	33	20	31	32	41	31	21	18	21	Suppr.	Suppr.
60 or more	8	8	10	12	16	16	21	12	13	15	11	12	Suppr.	Suppr.

Suppressed (Suppr.) Data may be suppressed in provinces or territories with low numbers of cases in order to comply with privacy and confidentiality rules.

Note(s):

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

Totals for sex by age group may not match those from other tables as they do not include cases with missing sex, other sex or missing age.

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



Table 18c. Number of accidental stimulant-related poisoning hospitalizations, sex by age group, 2016 to 2022 (Jan to Mar)

Sex by age group	2016		2017		2018		2019		2020		2021		2022 (Jan to Mar)	
	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male
0 to 19	30	54	48	61	35	40	50	66	53	63	49	62	10	8
20 to 29	97	200	101	237	108	284	99	219	100	260	93	221	19	38
30 to 39	66	175	88	237	112	276	105	238	123	304	142	241	17	63
40 to 49	55	100	53	146	73	144	51	119	80	194	87	220	15	50
50 to 59	40	71	43	78	58	111	47	93	38	144	49	129	10	26
60 or more	22	30	21	42	22	42	26	38	27	69	24	84	7	18

Note(s):

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

Totals for sex by age group may not match those from other tables as they do not include cases with missing sex, other sex or missing age.

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

Table 19. Percentage of accidental stimulant-related poisoning hospitalizations by substances involved, in Canada, 2016 to 2022 (Jan to Mar)

	2016	2017	2018	2019	2020	2021	2022 (Jan to Mar)
Total number	940	1,156	1,305	1,151	1,456	1,402	277
Percent involving cocaine	55%	57%	59%	54%	58%	56%	58%
Percent involving other psychostimulants (excl. cocaine)	59%	56%	53%	59%	57%	58%	61%
Percent involving co-occurring non-stimulant poisonings	65%	63%	67%	61%	66%	67%	71%
Percent involving co-occurring opioid poisonings (including fentanyl or fentanyl analogues)	45%	47%	49%	43%	49%	53%	57%
Percent involving co-occurring fentanyl or fentanyl analogues poisoning	n/a	n/a	16%	20%	26%	32%	34%
Percent involving co-occurring non-stimulant/ non-opioid poisonings	39%	34%	36%	33%	34%	33%	37%

Note(s):

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

Stimulant-related poisoning hospitalizations involving cocaine and other psychostimulants may exceed 100% as poisonings may co-occur.

Data on opioid-related and stimulant-related poisoning hospitalizations are not mutually exclusive. A proportion of poisoning hospitalizations involving a stimulant also involved an opioid. Adding up those numbers would result in an overestimation of the burden of opioids and stimulants.

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.

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

