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Epidemiology Network on Drug Use des toxicomanies

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CCENDU Bulletin, August 2015

CCENDU Bulletin

Deaths Involving Fentanyl in Canada, 2009–2014

Summary

- Between 2009 and 2014, there were at least 655 deaths in Canada where fentanyl was
 determined to be a cause or a contributing cause. This represents an average of one fentanylimplicated death every three days over this time period. This figure is likely an underestimate.
- Between 2009 and 2014, there were at least 1,019 drug poisoning deaths in Canada where post-mortem toxicological screening indicated the presence of fentanyl. More than half of these deaths occurred in the latter two years, 2013 and 2014. On average, this represents almost two deaths every three days over these two years. This figure is likely an underestimate.
- Within the last six years, the number of deaths involving fentanyl in Canada's four largest provinces has increased markedly. Increases across the years examined have ranged from almost doubling to an increase of over 20 times (see Table 1).
- Due to jurisdictional differences in legislation, regulation and customs for reporting, investigating and classifying deaths, extreme caution is advised when making comparisons across provincial and territorial boundaries.
- To allow for more accurate national estimates of drug poisoning deaths in the future, this bulletin recommends that jurisdictions collaborate to standardize information reported on for drug poisoning deaths.
- Collection of data on deaths involving fentanyl occurring in illicit circumstances is essential to
 understanding this rapidly evolving situation. This data is important because anecdotal reports
 suggest that many fentanyl overdoses occurred in individuals who thought they were using
 heroin, oxycodone, cocaine or another substance, but mistakenly took fentanyl.
- Naloxone is a medicine that reverses overdoses due to opioids, such as fentanyl, and can save lives in overdose situations.
- In addition to overdose mortality, other significant harms associated with fentanyl include nonfatal overdoses and substance use disorders.
- Collecting data on overall overdose deaths and overdose deaths involving other opioids would provide useful context for interpreting the trends in deaths involving fentanyl.

Background

In June 2013, CCENDU first detected and advised network members and subscribers of the appearance of and potential for harms associated with fentanyl or fentanyl analogues that were for sale in the illegal marketplace (CCENDU, 2013). This first CCENDU alert about fentanyl was followed by a second in February 2014 warning of the dangers of the increasing availability of counterfeit oxycodone tablets containing fentanyl (CCENDU, 2014) and a third in February 2015 notifying CCENDU subscribers that deaths involving fentanyl in British Columbia Alberta, and Saskatchewan had increased (CCENDU, 2015). Data provided by Health Canada's Drug Analysis Services indicate

that seizures of fentanyl, both diverted prescription and illicitly produced combined, increased over 30 times from 29 in 2009 to 894 in 2014 (see Figure 1).1

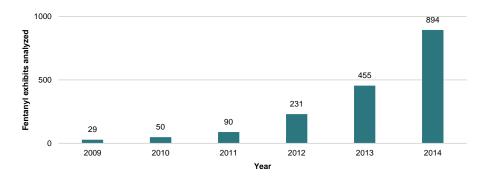


Figure 1. Number of fentanyl seizures analyzed by Health Canada's Drug Analysis Service

According to the RCMP, fentanyl is finding its way to the Canadian illicit drug market via two means: (1) diversion of pharmaceutical fentanyl products (primarily transdermal patches) from domestic supply and distribution channels; and (2) by way of importation or smuggling of pharmaceutical-grade fentanyl and fentanyl analogues into Canada from abroad, notably China. Fentanyl and fentanyl analogues arrive in powdered form, and Canadian-based organized crime use these substances to produce illicit fentanyl products: powdered fentanyl marketed as such or combined with illicit drugs (e.g. heroin); and illicit synthetic drug tablets manufactured in domestic clandestine tableting operations, notably those produced to resemble OxyContin. Synthesis of illicit fentanyl has occurred in Canada, but indicators point to a low incidence.

In early 2015, increases in fentanyl-related harms prompted a media campaign in British Columbia (Know your source, 2015), a public alert by Alberta law enforcement (RCMP, 2015) and an alert by the Drug Enforcement Agency in the United States (Drug Enforcement Administration, 2015). As of August 2015, concerns about the number of deaths involving fentanyl from both illicit and pharmaceutical sources continue, especially in western Canada where deaths involving fentanyl have continued to occur throughout the summer.

Given increasing concerns about harms associated with fentanyl from both illicit and pharmaceutical sources, and the lack of national data on deaths involving fentanyl, the CCENDU network decided to collect and collate the number of deaths involving fentanyl from across Canada over the years spanning 2009 to 2014 to better understand this evolving situation and to plan for appropriate interventions, as needed. Monitoring of future data as it become available will also be important.

Data Collection

In February 2015, a request for information about deaths involving fentanyl was distributed to CCENDU members and the offices of the chief coroner or chief medical examiner in all Canadian provinces and territories. The request specifically asked for accidental and undetermined deaths for

¹Health Canada's Drug Analysis Service (DAS) is responsible for testing suspected controlled substances that are seized by law enforcement agencies and the Canada Border Services Agency. DAS asks that exhibits be submitted only when verification of the actual substances is required for court or other purposes. For each exhibit, the test results are entered into the Laboratory Information Management System (LIMS), which captures information such as the date that the exhibit was submitted to the laboratory, the substances found in the exhibit (including other adulterants if analyzed), and law enforcement detachment or Canada Border Services Agency office location. It is not uncommon for multiple exhibits to be submitted from the same seizure, nor is it uncommon for multiple results (more than one substance found) to be entered in the LIMS for the same exhibit. LIMS data allows reporting of the number and type of exhibits received by DAS for analysis. Exhibits analysed by DAS likely represent a subset of the substances seized by law enforcement agencies, which would also be a subset of the substances found on the illicit market. As well, fentanyl can be pharmaceutical or non-pharmaceutical.

the years 2009–2014 inclusive where fentanyl was either detected (including all deaths for which post-mortem toxicological testing detected the presence of fentanyl), or where fentanyl was identified as the cause or a contributing cause of death (fentanyl-implicated). Jurisdictions were advised that CCENDU would accept whatever data was accessible to them within the timeframe requested even if it did not match the request.

Unless otherwise specified, all deaths are either: (1) **fentanyl-implicated**, a death in which fentanyl was determined to be the cause or a contributing cause of death, or (2) **fentanyl-detected**, a drug poisoning death in which fentanyl was detected in the body during post-mortem toxicological screening. For many deaths, substances in addition to fentanyl were present. This fact has been indicated in the summaries below when the information was provided by jurisdictions. Unless otherwise specified, all data are finalized cases for accidental² and undetermined³ fentanyl-implicated or fentanyl-detected deaths, where fentanyl-detected deaths have been retrieved from a drug-related death category (see the Glossary for further explanation of the categories).

Results

Deaths Involving Fentanyl by Jurisdiction

Data for deaths involving fentanyl were provided by 12 of the 13 jurisdictions that were sent the request. Since the data submitted by the jurisdictions were heterogeneous, the data are presented below by jurisdiction. The presentation of the jurisdictional data is based on geography, moving from west to east.

British Columbia

British Columbia was the only province to collect data on accidental or undetermined fentanyl-detected deaths occurring specifically in illicit circumstances.4 Between 2012 and 2014, there were 152 such deaths (Figure 2). Preliminary data, which includes pending cases, indicate that there have been approximately 90 of these deaths in 2014. This number represents 25% of all illicit drug deaths in British Columbia in 2014, an increase from 5% in 2012. The increase in deaths from 13 in 2012 to 90 in 2014 represents close to a seven-fold increase over these four years. While the number of cases where fentanyl was detected did increase significantly, the role of fentanyl in overall illicit drug overdose deaths cannot be determined at this time. The majority of fentanyl-detected deaths in British Columbia involved mixed illicit drug overdose circumstances.

These data were provided by the Vancouver CCENDU site coordinator using information obtained from the British Columbia Coroners Service.

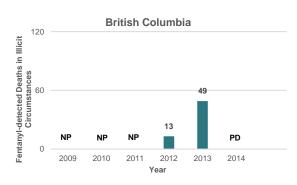


Figure 2. Number of accidental or undetermined, fentanyldetected deaths in illicit circumstances in British Columbia from 2012 to 2014

Notes: NP=data not provided. PD=preliminary data provided in text summary

² **Accidental death:** A death where an injury initiated the chain of events ending in death and there is no element of intent in the circumstances leading to the injury.

³ Undetermined death: A death where there is significant doubt as to which manner of death the death should be attributed.

⁴ Fentanyl-detected deaths were determined to be in illicit circumstances after examination of scene evidence and interviews with friends and family of the deceased.



Alberta

Between 2011 and 2014 there were a total of 162 fentanyl-detected and 61 fentanyl-implicated deaths in Alberta from the "unclassified" manner of death category (Figure 3).5 When including pending cases, the number of fentanyl-detected deaths for 2014 is 120. Thus, if pending cases are included, the number of fentanyl-detected deaths increased almost 20 times between 2011 and 2014, resulting in a total of 221 fentanyl-detected deaths in Alberta for this time period. By mid-May 2015, the Office of the Chief Medical Examiner of Alberta reported 110 deaths where fentanyl was detected and implicated in an "abuse" situation. In response to the growing number of fentanyl overdose deaths, Alberta Health is funding a province-wide take home naloxone program to be initiated in the summer of 2015.

These data were provided by the Alberta CCENDU site coordinator using information obtained from the Office of the Chief Medical Examiner for Alberta.

Saskatchewan

Between 2010 and 2014 there were 25 fentanyl-implicated accidental deaths in Saskatchewan (Figure 4). In at least three of the 19 deaths occurring in 2013–2014, counterfeit oxycodone tablets were either found at the scene or the deceased was linked to a recent death where counterfeit oxycodone was found at the scene. Of the 19 deaths in 2013-2014, the information provided indicated that at least eight individuals had no valid prescription for fentanyl, at least 12 had a history of drug abuse and at least 12 had additional substances such as alcohol, cocaine, stimulants or other opioids. involved in the death.

These data were provided by the Saskatoon CCENDU site coordinator and the Office of the Chief Coroner for Saskatchewan.

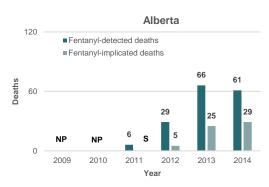


Figure 3. Number of unclassified,5 fentanyl-detected and fentanyl-implicated deaths in Alberta from 2011 to 2014

Notes: NP=data not provided. S=data suppressed in graph for number of deaths between 1 and 4



Figure 4. Number of accidental fentanyl-implicated deaths in Saskatchewan from 2011 to 2014

Notes: NP=data not provided. S=data suppressed in graph for number of deaths between 1 and 4

⁵ Alberta provided data for the "unclassified" manner of death category, which includes deaths directly caused by a drug of abuse, including alcohol, or caused by the long-term effects of alcohol or drug abuse or both. It does not include suicides (see the Glossary).



Manitoba

The number of accidental or undetermined fentanyl-detected and fentanyl-implicated deaths in Manitoba has remained relatively unchanged between 2009 and 2013 (Figure 5). During this period, there were a total of 48 fentanyl-detected and 27 fentanyl-implicated deaths in Manitoba. In 13 of the fentanyl-implicated deaths, fentanyl overdose or fentanyl toxicity was listed as the only cause of death. Of the 48 fentanyl-detected deaths, 30 involved additional substances such as cocaine, amitriptyline, benzodiazepines and other opioids.

These data were provided by the Winnipeg CCENDU site coordinator using information obtained from the Office of the Chief Medical Examiner for Manitoba.

Ontario

Between 2009 and 2013 there were 466 accidental or undetermined fentanyl-implicated deaths in Ontario (Figure 6). Over this period. fentanyl-implicated deaths increased about 1.7 times from 63 in 2009 to 111 in 2013. Between 2011 and 2013, a fentanyl-implicated death occurred in Ontario about every three to four days.

These data were provided by the Office of the Chief Coroner for Ontario with the assistance of the Toronto CCENDU site coordinator.

Quebec

In Quebec, between 2009 and 2013, there were 62 fentanyl-detected and 40 fentanyl-implicated deaths that were classified as accidental or undetermined (Figure 7). Fentanyl-detected and fentanyl-implicated deaths increased in 2012 and 2013 compared to previous years. Preliminary data for 2014 indicates there have been an additional 15 finalized fentanyl-detected and six finalized fentanyl-implicated deaths; however, there remain many pending cases (53.9% of cases have been finalized). Including preliminary data for 2014, there have been at least 77 fentanyl-detected deaths and at least 46 fentanylimplicated deaths in Quebec since 2009.

These data were provided by the Quebec CCENDU site coordinators using information obtained from the Office of the Chief Coroner for Quebec.

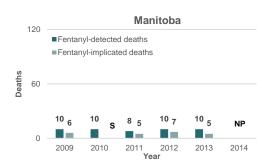


Figure 5. The number of accidental or undetermined, fentanyl-detected and fentanyl-implicated deaths in Manitoba from 2009 to 2013

Notes: NP=data not provided. S=data suppressed in graph for number of deaths between 1 and 4

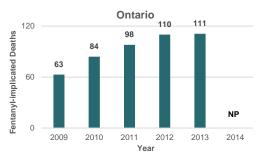


Figure 6. The number of accidental or undetermined, fentanyl-implicated deaths in Ontario from 2009 to 2013

Notes: NP=data not provided

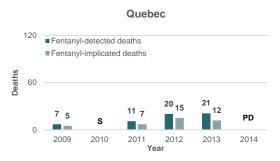


Figure 7. The number of accidental or undetermined, fentanyl-detected and fentanyl-implicated deaths in Ouebec from 2009 to 2013.

Notes: PD=preliminary data provided in text summary. S=data suppressed in graph for number of deaths between 1 and 4

New Brunswick

Over the period from 2009 to 2014, New Brunswick reported five accidental, fentanyl-implicated deaths. There were no undetermined deaths. One death involved fentanyl patches and two deaths involved fentanyl and at least one additional substance. Note that these data are preliminary and could change once all cases for 2014 have been concluded.

These data were provided by the Office of the Chief Coroner for New Brunswick.

Nova Scotia

In Nova Scotia there were 13 fentanyl-implicated deaths between 2009 and 2014. For Nova Scotia, fentanyl-implicated deaths included deaths classified as suicide in addition to those classified as accidental. There were no undetermined deaths. Fentanyl-implicated deaths were slightly higher from 2012 to 2014 compared to earlier years; however, the number of deaths was relatively low each year, over the full six-year period. About half of the total fentanyl-implicated deaths involved at least one additional substance.

These data were provided by the Nova Scotia Medical Examiner Service with the assistance of the Nova Scotia CCENDU site coordinators.

Prince Edward Island

Over the period from 2010 to 2014, Prince Edward Island reported two accidental or undetermined fentanyl-implicated deaths. One death involved injected fentanyl that was extracted from prescribed fentanyl patches.

These data were provided by the Office of the Chief Coroner for Prince Edward Island.

Newfoundland

Over the period from 1997 to 2013, Newfoundland reported five accidental or undetermined fentanyl-implicated deaths. One death was an overdose due to fentanyl alone, where no other drugs were involved. The other four deaths were as a result of ingestions of multiple drugs where drugs other than fentanyl were also present. All cases involved fentanyl patches. In one of the cases, the patches were wrapped around a cigarette and smoked.

These data were provided by the CCENDU site coordinator for St. John's using information obtained from the Office of the Chief Medical Examiner for Newfoundland.

Yukon

Over the period from 2009 to 2014, Yukon reported one accidental or undetermined fentanyl-implicated death. The cause of death was listed as "mixed drug toxicity," indicating that at least one other drug in addition to fentanyl was also implicated in the death.

These data were provided by the Yukon Coroners Service.

Northwest Territories

Over the period from 2009 to 2014, the Northwest Territories reported four fentanyl-implicated deaths. There were three accidental deaths and one undetermined death. Fentanyl toxicity was the primary cause of death in two of the cases; one in combination with cocaine. The cause of death in the other two cases was multiple drug toxicity; one in combination with ethanol toxicity.

These data were provided by the Northwest Territories Coroner Service.

Discussion

The data reported by the different jurisdictions were not comparable due to different definitions used for deaths involving fentanyl, different manners of death included in the count of deaths, and differences in missing data over the years examined.

In June 2015, the National Forum of Chief Coroners and Chief Medical Examiners held their annual meeting. During the meeting, they discussed the development of this bulletin and issued the following statement about data comparability:

The medicolegal investigation of death is an important public service that occurs under provincial or territorial mandate. Coroners and medical examiners are obliged to obey provincial or territorial legislation, regulation and customs with respect to the reporting, investigation, and classification of deaths. This means that there are important differences in how death investigation is managed across Canada, and that the data thus collected may not be directly comparable across provincial and territorial boundaries. We respectfully remind our partners and stakeholders to interpret and report these data with appropriate caution.

Nonetheless, several noteworthy findings emerge from this first national collection of data on involving fentanyl.

Key Findings

Between 2009 and 2014, there were at least 655 fentanyl-implicated deaths in Canada. This represents an average of one fentanyl-implicated death every three days over this time period.

Despite challenges comparing data across jurisdictions, we attempted to determine an approximate national estimate for fentanyl-implicated deaths in Canada by pooling the number of fentanyl-implicated deaths across jurisdictions. Fentanyl-implicated deaths are deaths where fentanyl was a cause or contributing cause of the death, and are the most direct measure of mortality due to fentanyl overdose. Based on this analysis, there were at least 655 fentanyl-implicated deaths between 2009 and 2014 (the deaths for Newfoundland also included the years 1997–2008).

Although 11 out of the 12 jurisdictions reported fentanyl-implicated deaths, definitions for fentanyl-implicated deaths were not homogeneous in that different manners of death were included in the tally of deaths. In addition, the data were not complete across jurisdictions for all the years examined, and, British Columbia, a jurisdiction with a high number of fentanyl-detected deaths in illicit circumstances, did not report fentanyl-implicated deaths. Because of these limitations, the figures in this report underestimate the true number of fentanyl-implicated deaths in Canada, although the magnitude of this underestimation is not known.⁶

Between 2009 and 2014, there were at least 1,019 fentanyl-detected deaths in Canada. More than half of the deaths (525) occurred in 2013–2014. On average, this represents almost two fentanyl-detected deaths every three days over these two years.

Four jurisdictions reported fentanyl-detected death data, and one of these, British Columbia, reported fentanyl-detected deaths specifically in illicit circumstances. For the other eight jurisdictions, fentanyl-implicated death data was used in the absence of data on fentanyl-detected deaths. Since fentanyl-implicated deaths are a subset of fentanyl-detected deaths, the estimate of 1,019 fentanyl-detected deaths likely underestimates the total fentanyl-detected deaths in Canada for this period (the deaths for Newfoundland also included the years 1997–2008).

⁶ We did not present rates of fentanyl-implicated deaths by population since comparisons of rates between jurisdictions would be inappropriate because of the lack of comparability of the data.

Within the last six years, the number of fentanyl-implicated and fentanyl-detected deaths in Canada's largest four provinces has increased markedly (Table 1).

Table 1. Increase in fentanyl-implicated and fentanyl-detected deaths in the four largest provinces in Canada.

Province	Fentanyl-implicated deaths (fentanyl was a cause or contributing cause of the death)	Fentanyl-detected deaths (fentanyl was detected in the body irrespective of cause)	Comments
British Columbia	Data not provided	Increased close to 7 times from 13 in 2012 to 90 in 2014	Accidental and undetermined deaths in illicit circumstances; 2014 data includes pending cases; data for 2009–2011 not provided.
Alberta	Increased more than 14 times from 2011 (data suppressed) to 29 in 2014	Increased more than 20 times from 6 in 2011 to 120 in 2014	"Unclassified" deaths; 2014 data included pending cases for fentanyl-detected deaths; data for 2009–2010 not provided.
Ontario	Increased more than 1.7 times from 63 in 2009 to 111 in 2013	Data not provided	Accidental and undetermined deaths; data for 2014 not provided.
Quebec	More than doubled from 5 in 2009 to 12 in 2013	Increased three times from 7 in 2009 to 21 in 2013	Accidental and undetermined deaths.

It is not clear why the trend did not appear in the data from the other jurisdictions that contributed to this bulletin. However, it is recommended that these provinces and territories remain vigilant and be prepared if the situation changes.⁸

Implications

To allow for more accurate national estimates of drug poisoning deaths in the future, this bulletin recommends that jurisdictions collaborate to standardize information reported on for drug poisoning deaths.

Health Canada has recently funded the Canadian Institute for Health Information (CIHI) to coordinate a national approach for the monitoring and surveillance of prescription drug abuse, working with provinces, territories and other stakeholders. This initiative will improve the comparability of data among jurisdictions. Further, collecting data on drug poisoning deaths will facilitate evaluation of interventions aimed at preventing overdose deaths, such as take-home naloxone programs.

Given the unique dangers posed by illicit use of fentanyl, collection of data on fentanyl-implicated and fentanyl-detected deaths occurring specifically in suspected illicit circumstances is essential.

Anecdotal reports suggest that many overdoses appear to be in illicit circumstances, in individuals who thought they were using heroin, oxycodone, cocaine or another substance, but mistakenly took fentanyl. However, except for British Columbia, no data on deaths specifically related to fentanyl in illicit circumstances were reported. A health advisory from the Centers for Disease Control and Prevention in the United States (2013) recommends specific testing to screen specimens from all suspected illegal opioid overdose deaths for fentanyl or fentanyl analogues.

Naloxone is a medicine that reverses overdoses due to opioids, such as fentanyl, and can save lives in overdose situations.

Immediate use of naloxone can reverse the effects of fentanyl temporarily, but a high dose might be needed. As with other opioids, in large doses fentanyl can take a long time to metabolize and the overdose can return when the naloxone wears off. Therefore, it is important to call 911 after giving naloxone. More information can be found at the B.C. Drug and Poison Information Centre website (www.dpic.org/article/professional/fentanyl-information-health-care-providers).

⁷See note 5, above.

⁸ For suggestions about what can be done to prepare, see CCENDU, 2015, and Know your source, 2015.

Mortality, while very serious, is only a small part of the harms associated with fentanyl.

Collecting data on the number of non-fatal overdoses or the number of individuals seeking treatment for substance use disorders related to fentanyl would provide a more comprehensive accounting of fentanyl-related harms. Collecting data on overall overdose deaths and overdose deaths involving other opioids would provide useful context for interpreting the trends in deaths involving fentanyl.

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References

The CCENDU alerts cited below can be found on the CCENDU Alerts and Bulletins page.

CCENDU. (2013). CCENDU drug alert: Illicit fentanyl. Ottawa, Ont.: Canadian Centre on Substance Abuse.

CCENDU. (2014). CCENDU drug alert: Increasing availability of counterfeit oxycodone tablets containing fentanyl. Ottawa, Ont.: Canadian Centre on Substance Abuse.

CCENDU. (2015). CCENDU drug alert: Fentanyl-related overdoses. Ottawa, Ont.: Canadian Centre on Substance Abuse.

Centers for Disease Control and Prevention. (2013). Recommendations for laboratory testing for acetyl fentanyl and patient evaluation and treatment for overdose with synthetic opioid. Atlanta GA: Author. Retrieved from emergency.cdc.gov/han/han00350.asp

Drug Enforcement Administration. (2015). DEA issues nationwide alert on fentanyl as threat to health and public safety. Washington, DC: Author. Retrieved from www.dea.gov/divisions/hq/2015/hq031815.shtml

Know your source. (2015). Know your source. Retrieved from knowyoursource.ca/

RCMP. (2015). Growing use of illicit fentanyl cause for concern in Alberta. Edmonton, Alta.: Author. Retrieved from www.rcmp-grc.gc.ca/ab/news-nouvelles/2015/150318-fentanyl-eng.htm

Glossary

Definition of Deaths Involving Fentanyl

Two main definitions for deaths involving fentanyl were used by reporting jurisdictions:

Fentanyl-implicated death: A death where fentanyl was determined to be the cause or a contributing cause of death.

Fentanyl-detected death: A death in which fentanyl was detected in the body during post-mortem toxicological screening (irrespective of cause). For all jurisdictions, fentanyl-detected deaths were identified out of a category of drug-related deaths such as "drug-poisoning," "acute drug toxicity" or "intoxications," rather than out of all deaths. This ensures that the fentanyl-detected deaths represent situations of drug overdose. For example, identifying fentanyl-detected deaths in this way excludes deaths due to motor vehicle accident where fentanyl was also detected in the body.

Fentanyl-detected deaths represent the broadest category of deaths reported in this bulletin. Fentanyl-implicated deaths are a subset of fentanyl-detected deaths. More deaths are included in the category of fentanyl-detected deaths compared to fentanyl-implicated deaths.

Manner of Death

The following categories for manner of death used by Statistics Canada in reporting deaths are pertinent to this bulletin (see www.statcan.gc.ca/pub/82-214-x/2012001/gen-eng.htm#ma).

Accidental: A death where an injury initiated the chain of events ending in death and there is no element of intent in the circumstances leading to the injury.

Undetermined: A death where there is significant doubt as to which manner of death the death should be attributed.

Unclassified: A category used by Alberta when a death is directly caused by a drug of abuse, including alcohol, or caused by the long-term effects of alcohol or drug abuse (it does not include suicide). Some other jurisdictions use an "unclassified" category for different circumstances not relevant to this bulletin.

Most jurisdictions provided data for accidental and undetermined manners of death. However, Alberta codes all overdose deaths as "unclassified" so data was provided for the unclassified manner of death in this case. Saskatchewan provided data for accidental deaths only; although there were undetermined deaths, these were not included in the numbers reported. The data provided by Nova Scotia included suicide deaths in addition to accidental deaths, and there were no undetermined cases. British Columbia reported accidental and undetermined deaths specifically in illicit circumstances, based on scene evidence and interviews with friends and family by the coroner.

Finalized and Pending Cases

Finalized cases are those where the death investigation has been completed and the case has been closed. Pending cases are those where the investigation is open and still ongoing. Unless otherwise specified, data reported in this bulletin relate to finalized cases.

Prepared by the CCSA in partnership with the Canadian Community Epidemiology Network on Drug Use (CCENDU) using data provided by provincial and territorial coroners and medical examiner offices across Canada.

The Canadian Community Epidemiology Network on Drug Use (CCENDU) is a nation-wide network of community level partners who share information about local trends and emerging issues in substance use and exchange knowledge and tools to support more effective data collection.

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