

CCENDU Bulletin

Changes in Stimulant Use and Related Harms: Focus on Methamphetamine and Cocaine

Summary

In response to recent reports of increasing harms related to methamphetamine use in Canada, this bulletin summarizes recent changes in stimulant-related harms in Canadian communities. It is intended for a broad audience of health professionals, law enforcement, harm reduction and health service providers, policy makers, and people who use drugs.

The stimulants causing the greatest harms in Canada are **methamphetamine** and **cocaine powder and crack cocaine**.

- Methamphetamine availability and harms associated with use are **increasing**, especially in British Columbia, Alberta, Saskatchewan and Manitoba.
- Cocaine and crack cocaine are still widely used by people who use drugs. However, in some areas of the country, availability, use and harms associated with cocaine appear to be **decreasing**, and in some cases are being replaced by availability, use and harms associated methamphetamine.

Stimulants can contain adulterants, such as opioids or other toxic substances, so harm reduction efforts need to include strategies used in response to the opioid crisis.

CCSA and CCENDU made several recommendations about how to address the increased use of stimulants (specifically methamphetamine) to the House of Commons Standing Committee on Health for its study on the impacts of methamphetamine in Canada (Canadian Centre on Substance Use and Addiction, 2018b). These include the following recommendations:

- Continue prioritizing and investing in the collection and dissemination of better quality and timely data on drug use and related harms in Canada through the continued development of the Canadian Drugs and Substances Observatory and support for CCENDU;
- Continue supporting research on drug use and related harms in Canada;
- Invest upstream to reduce inequities in the social determinants of health and increase resiliency and self-efficacy in youth;
- Reduce stigma by promoting the understanding of substance use as a health issue;
- Increase the availability and accessibility of an evidence-informed, client-centred continuum of services and supports;
- Support interventions to reduce harms specific to methamphetamine use, such as outreach education, needle distribution, safer smoking supplies, pipes that reduce burns and cuts, and other methods to reduce the spread of communicable diseases; and
- Invest in low-threshold housing.



Background

Stimulants are a broad category of psychoactive substances that act to increase the level of activity of the central nervous system (CNS). Some stimulants, such as pseudoephedrine or methylphenidate (Ritalin®), are used as medication and can be found over the counter as well as by prescription from health practitioners. Other stimulants have limited or no recognized medical use and are available only through the illicit market (e.g., cocaine and methamphetamine).

In contrast to people under the influence of opioids or other depressive-sedative drugs, individuals using methamphetamine can be animated and energetic early on and feel increasingly lethargic, dysphoric, irritable, depressed and hopeless, with intense craving as the drug wears off (Canadian Centre on Substance Use and Addiction, 2018a). These feelings and behaviours mean that people who use methamphetamine can be challenging to treat and when in public spaces can attract attention from the public or authorities.

Motivations for using stimulants vary by individual circumstances. For example, people have reported functional stimulant use to boost energy and stay awake for work or school performance, and to enable them to perform multiple tasks at one time (Hunter et al, 2012; Murphy, Murphy, Sales, & Lau, 2018; Lende, Leonard, Sterk, & Elifson, 2007). Stimulants are also used to increase confidence and sociability and enhance sexual activities (Hunter et al, 2012).

Stimulant-related Harms in Canada

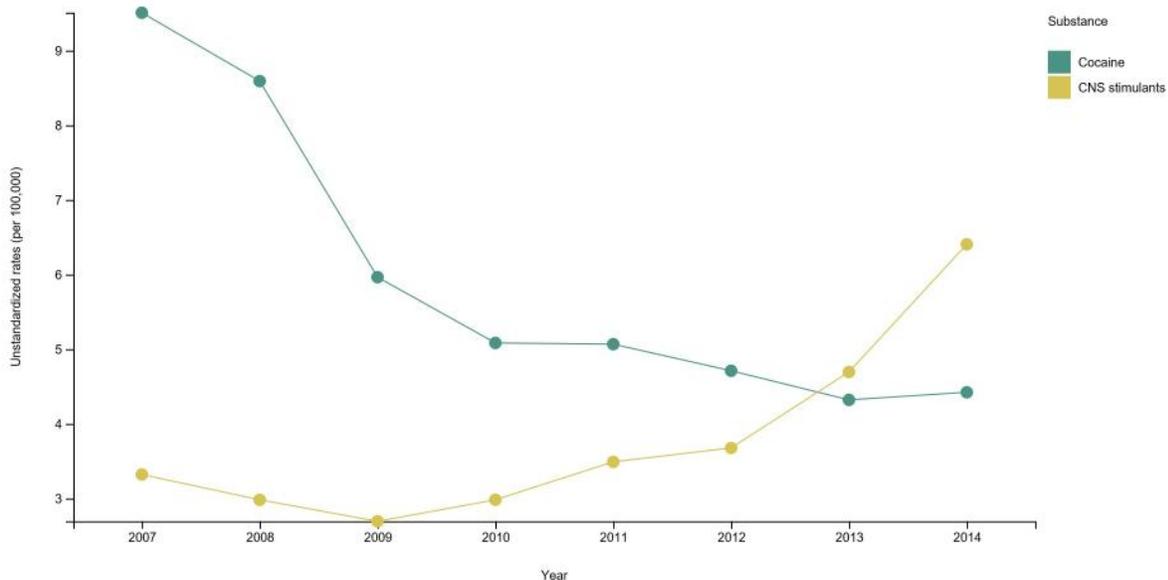
Between 2015 and 2017, the estimated number of Canadians aged 15 years and older who reported either medical or non-medical past-year stimulant use¹ in the Canadian Tobacco, Alcohol, and Drugs (CTADS) survey generally increased, although the proportion remains small (Health Canada, 2017; Health Canada, 2018). In 2017, the prevalence of reported lifetime use of cocaine or methamphetamine was significantly higher among males compared to females (Health Canada, 2018).

However, national survey data only tells a very small part of the story. For example, there is considerable variation across jurisdictions in rates of methamphetamine use, and problematic use tends to be concentrated among populations that are under-represented in national surveys. Further, trends in stimulant use appear to vary by different stimulants. For example, between 2007 and 2014, healthcare costs associated with cocaine decreased 57% from \$180 billion to \$78 billion, whereas costs associated with other CNS stimulants increased 110% from \$51 billion to \$107 over the same time period (Canadian Substance Use Costs and Harms Scientific Working Group, 2018). Indeed, while inpatient hospitalizations due to cocaine declined between 2007 and 2014, inpatient hospitalizations due to other CNS stimulants, including methamphetamine, increased over that time. (See Figure 1.)

¹ Non-medical stimulants use includes (1) use of illicit stimulants and (2) use of prescription stimulants without a prescription, for purposes other than those indicated when prescribed (e.g., for euphoric effect) or in ways other than prescribed (e.g., different route of administration or dose).



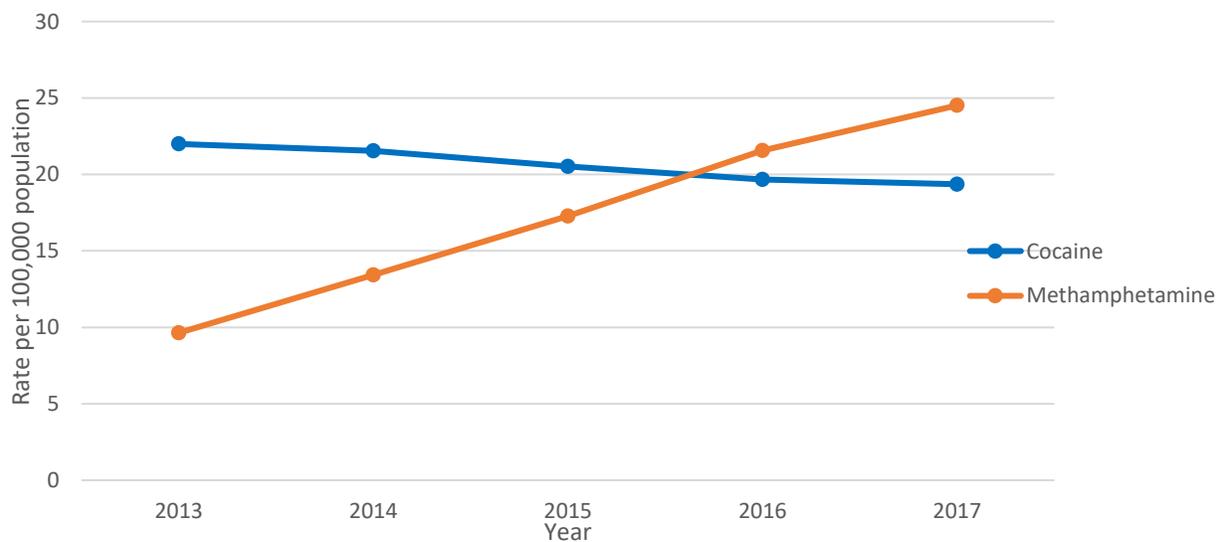
Figure 1: Rate of inpatient hospitalizations in Canada for cocaine and other CNS stimulants, 2007–2014



Source: Canadian Substance Use Costs and Harms Scientific Working Group. (2019). Canadian substance use costs and harms data visualization tool, 1.0.0. (Prepared by the Canadian Institute for Substance Use Research and the Canadian Centre on Substance Use and Addiction.) Ottawa, Ont.: Canadian Centre on Substance Use and Addiction.

Further, the rate of methamphetamine possession charges more than doubled between 2013 and 2017, from 9.64 incidents per 100,000 to 24.51 incidents per 100,000 (Statistics Canada, 2019). However, during the same period, there were decreases in the rate of cocaine possession charges. (See Figure 2.)

Figure 2. Rate of incidents for cocaine or methamphetamine possession in Canada, 2013 to 2017



Source: Statistics Canada, 2019.



In addition to these national statistics, there have been numerous anecdotal reports from CCENDU site coordinators and CCSA partners in western Canada about increased methamphetamine use as well as harms associated with its use. These reports prompted the House of Commons Standing Committee on Health to investigate the impacts of methamphetamine use in Canada. In November 2018, CCSA and CCENDU [presented to this committee](#) on recent trends in methamphetamine use and related harms (Canadian Centre on Substance Use and Addiction, 2018b).

Reports from CCENDU Partners

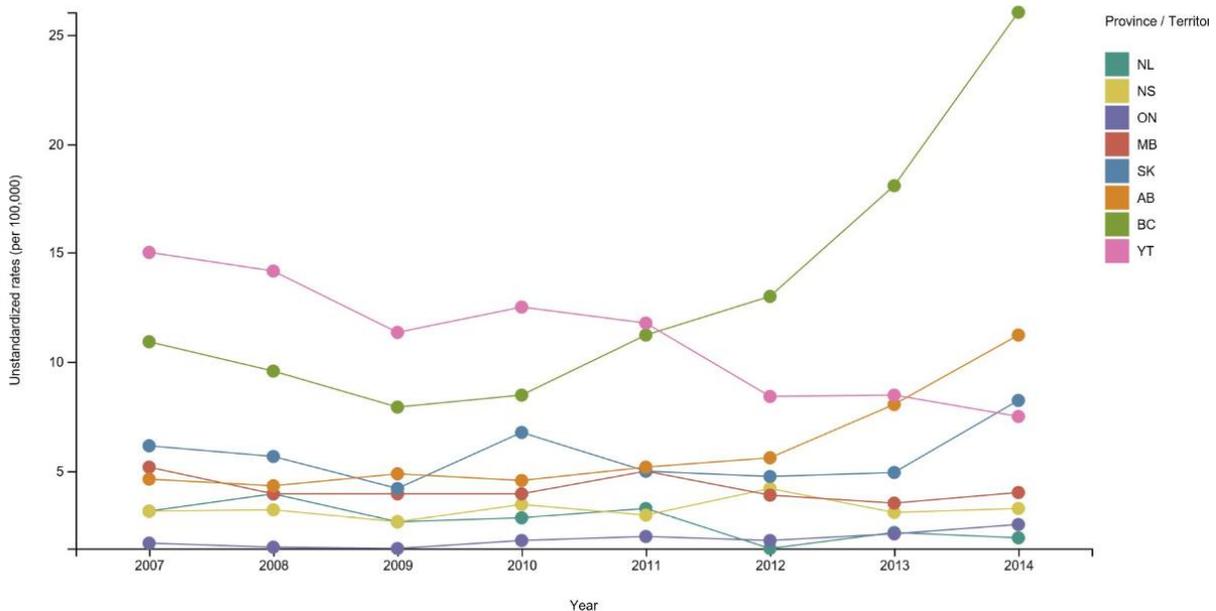
CCENDU is a pan-Canadian, sentinel surveillance network led by CCSA that is made up of municipal, provincial and territorial representatives from British Columbia, Alberta, Saskatchewan, Manitoba, Toronto, Quebec, Nova Scotia, Prince Edward Island, St. John’s, and the Yukon. Each representative collects quantitative information on drug harms from local data sources and anecdotal reports from people who use drugs and those directly working with people who use drugs (e.g., law enforcement, harm reduction programs, etc.). The information is collated and then risk is assessed at the national level. If warranted, CCENDU issues alerts to advise first responders, healthcare practitioners, treatment providers, people who use drugs, law enforcement officials and others about drug-related health threats and what can be done to prevent and reduce harms.

A request for information about the harms associated with stimulants was distributed to CCENDU members. As with past requests of this nature, CCENDU site coordinators were asked to provide whatever data they had access to.

Summary of Data from CCENDU Sites

Given the heterogeneity of data collected across CCENDU sites, it is challenging to aggregate the data and provide a clear national summary of the stimulant situation in Canada. Figure 3 presents unstandardized rates of hospitalizations attributable to CNS stimulants (excluding cocaine).

Figure 3: Rate of inpatient hospitalizations attributable to CNS stimulants (excluding cocaine) among reporting CCENDU provincial and territorial sites (excluding Quebec), 2007–2014



Source: Canadian Substance Use Costs and Harms Scientific Working Group. (2019). Canadian substance use costs and harms data visualization tool, 1.0.0. (Prepared by the Canadian Institute for Substance Use Research and the Canadian Centre on Substance Use and Addiction.) Ottawa, Ont.: Canadian Centre on Substance Use and Addiction.



Table 1 summarizes the changes in stimulant-related harms in Canada across the reporting CCENDU sites. Increases are predominantly related to increased harms associated with methamphetamine.

Table 1: Summary of changes in stimulant-related harms

Region	Changes in stimulant ^{2,3} harms
British Columbia	↑↑
Alberta	↑↑
Saskatchewan	↑↑
Manitoba	↑↑
Toronto	↑↑
Quebec	↑
Nova Scotia	↑
St. John's	↑
Yukon	unknown

Note. A small arrow indicates some increase in stimulant-related harms, while a large arrow indicates that available harms indicators have at least doubled in the past ten years. The specific numbers used in these assessments are provided in the narrative summaries.

British Columbia

Stimulant use is a growing concern across British Columbia (B.C.). The B.C. Centre for Disease Control (BCCDC) has surveyed clients at harm reduction sites across B.C., with the most recent cycle of the survey in 2018. Survey results indicated that the most commonly reported illicit substance used in the past seven days was crystal methamphetamine (69%), reflecting an increase since the last survey in 2015 (47%; Davis, Amlani, & Buxton, 2016). Other data sources, including the Vancouver drug users surveys, which include the Vancouver Injection Drug Users Study, the AIDS Care Cohort to Evaluate Access to Survival Services and the At-Risk Youth Study, have shown trends of crystal methamphetamine use increasing, while crack use and cocaine use have been decreasing. In addition, Insite, the first officially sanctioned supervised injection site in Canada, reported that methamphetamine was identified as the substance used in 25% of injection visits between January and December 2017 (22% in 2016 and 23% in 2015). However, Insite does not allow substances to be smoked in the facility.

Illicit drug use has been the leading cause of unnatural deaths in B.C. for the past several years, primarily because of the presence of illicit fentanyl in the drug supply. In 2018, the B.C. Coroner's office provisionally reported 1,489 deaths associated with illicit drug use in B.C. (B.C. Coroners Service, 2019). Stimulants were among the most commonly detected drugs relevant to illicit drug overdose deaths between 2016 and 2018, with cocaine detected in 49% of cases and amphetamine

2 Stimulant-related harm includes treatment for problematic use, stimulant-related hospitalizations and emergency department visits and stimulant-related deaths.

3 In this table, stimulant harms can include harms related to cocaine, methamphetamine or other stimulant use.



or methamphetamine in 31% of cases (B.C. Coroners Service, 2019). However, while stimulants have been identified, because of polysubstance use and fentanyl prevalence in illicit drug overdose deaths (87% in 2018), it is unclear if stimulants were the primary cause of death or even a contributor.

Responses

- The BCCDC's Harm Reduction Services coordinates province-wide distribution of harm reduction supplies for safer sex and safer substance use to at least 287 active harm reduction sites.
- To ensure safer smoking and inhalation practices, Harm Reduction Services distributes wooden push sticks, vinyl mouthpieces, brass screens and alcohol swabs to reduce equipment sharing and contraction of infections such as HIV or hepatitis C. Most health authorities also purchase and distribute small quantities of heat-resistant pipes and foil for smoking crack cocaine, crystal methamphetamine or methamphetamine.
- The BCCDC will continue implementing the annual harm reduction site client survey to monitor changes in drug use and inform local and regional harm reduction planning in B.C.

Alberta

Between 2011–2012 and 2016–2017, self-reported use of stimulants increased 18%. The number of Alberta Health Services cases in which the individual was seeking help for stimulant use more than doubled since 2011–2012. From 2010 to 2017,⁴ the rate of emergency department (ED) visits related to stimulant use increased by 168% (from 112 ED visits per 100,000 in 2010 to 301 ED visits per 100,000 in 2017). On average, between 2010 and 2017, 10% per year of all ED visits related to stimulant misuse were also opioid related, with the highest proportion (12%) occurring in 2017. In 2016, 303 (38.6%) of all confirmed intentional and unintentional drug toxicity deaths involved a stimulant. Of the deaths involving a stimulant, 77.2% also involved an opioid; 76.9% of combined opioid and stimulant toxicity deaths involved fentanyl or a fentanyl analogue. Similar proportions are being reported for 2017.⁵

While cocaine remains the most common stimulant used by clients accessing the service provided through Alberta Health Services' Addiction and Mental Health division, the proportion of clients reporting crystal methamphetamine use has nearly tripled from 2011–2012 to 2015–2016. Anecdotal reports and health service provider data suggest that methamphetamine use has increased across the province, most often smoked or injected.

Responses

- Because there have been cases of methamphetamine adulterated with fentanyl, some harm reduction programs are now offering naloxone kits and discussing this risk with people who use stimulants.
- As recommended in the Alberta Mental Health Review Committee's report, Alberta Health Services is:
 - Training those who work in first point-of-contact settings to identify and support people with addiction or mental health issues (Action 10; Alberta Health Services, 2017); and
 - Incorporating harm reduction approaches in service planning and delivery for Albertans 15 years of age and older (Action 13; Alberta Health Services, 2017).

⁴ Not all ED records have been submitted for all of 2017, so these numbers are subject to change.

⁵ There is a lag in reporting confirmed deaths, as certifying cause of death can take six months or longer. Therefore, proportions from 2017 could change.



Saskatchewan

Anecdotal reports suggest that methamphetamine is the most commonly used stimulant in Saskatchewan and that while it is most commonly smoked, some individuals are also injecting it. In Regina and the surrounding area, including rural First Nations, use of methamphetamine has increased in recent years. Between 2010 and 2015, rates of those hospitalized for poisonings in Saskatchewan has doubled. According to law enforcement, organized crime groups are heavily involved in trafficking methamphetamine. Law enforcement officers are frequently called to manage people who are under the influence of methamphetamine.

In addition to methamphetamine, the use of cocaine and crack cocaine continues to be prevalent. There are fewer law enforcement reports on the non-medical use of prescription stimulants. However, anecdotally, methylphenidate (Ritalin) use is growing and is a frequent medication of concern for the Prescription Review Program.

Responses

- Local response to the use of illicit stimulants comes most notably from law enforcement agencies who work to educate the public about the potential harms associated with their use and respond to calls related to their use (e.g., property crime, crimes against persons, trafficking, overdoses, etc.).

Manitoba

Within the last five years, use of stimulants, notably methamphetamine, has increased in Manitoba. General population survey data indicate that lifetime use of cocaine among adults 15 years and over increased in Manitoba from 6% in 2013 to 10% in 2017 (Health Canada, 2014; Health Canada, 2018). While cocaine remains the most common stimulant used by youth and adult clients accessing services provided by the Addictions Foundation of Manitoba (AFM),⁶ its use has not increased as substantially as methamphetamine use. In fiscal year 2014–2015, 9% of adult clients reported using methamphetamine in the past year compared to 24% in fiscal year 2018–2019 year to date, with use more prevalent among females. Methamphetamine is now the most common primary presenting issue – not including alcohol – for why adults are seeking support and treatment.

Emergency room visits related to methamphetamine use have increased in Winnipeg from 11 visits in January of 2013 to 187 visits in December of 2017, an increase of 1,600% (Winnipeg Regional Health Authority, 2018).

Reports from law enforcement and people who use drugs suggest that high potency methamphetamine is widely available and inexpensive in Manitoba. The Winnipeg Police Service reported seizing 27 kilograms of methamphetamine in 2018, more than double what was obtained the year before (“Crackdown on mid-level dealers,” 2019). The Winnipeg Police Service also reported increases in crime, due “in large part to growing use of methamphetamine and the patterns of violence associated with the illicit drug trade” (Winnipeg Police Service, 2018).

Between 2016 and 2017, deaths where methamphetamine was the primary cause increased approximately three times (three to eight) and deaths where methamphetamine was a contributing factor increased two times (16 to 27). Increases were also observed among cases where cocaine was the primary or contributing cause of death for the same time period (J. Younes, personal communication, January 22, 2019).

⁶ Although the AFM is the largest agency in Manitoba offering prevention, education and treatment services for individuals and families experiencing issues with substance use and gambling, there are many other organizations and their information is not presented in this bulletin. The data presented for AFM was analyzed by the Data & Evaluation unit. For more information, contact progeval@afm.mb.ca.



Responses

- The AFM launched a prevention and education campaign throughout the province.
- Manitoba Addiction Knowledge Exchange has created and posted several resources for community members and service providers.⁷
- Bear Clan Patrols serve nearly 46 communities nationwide. The latest expansion (December, 2018) of Bear Clan Patrol is in Sioux Valley Dakota Nation in Manitoba. Bear Clan Patrols work to provide personal security to Indigenous people living in cities.⁸
- Since the fall of 2018, five Rapid Access to Addiction Medicine clinics have opened throughout the province.
- Recently, paramedics began to be equipped with olanzapine to treat agitated patients at risk of developing methamphetamine psychosis.
- A crystal methamphetamine working group, which includes representatives from the health care, social services and law enforcement, has been formed.
- Federal, provincial and municipal leaders have formed an Illicit Drug Task Force to respond to the increase in the distribution and use of methamphetamine and other substances in Manitoba.
- Manitoba Health, Seniors and Active Living is collaborating with provincial and regional partners to establish a provincial surveillance system for methamphetamine use and related harms.

Toronto

While cocaine and crack cocaine predominate, harm reduction workers have noted an increase in methamphetamine use. Harm reduction workers have reported that people's patterns of use shift in part as the illicit drug supply changes, and that stimulant use is often purposeful. For example, occasionally people report using stimulants to help get through opioid withdrawal symptoms. A research report from the Centre for Addiction and Mental Health reports that 8.7% of Toronto adults ever used cocaine, compared with 8.8% of adults across the province. Far fewer people (2.5%) reported using cocaine in the past year (Ialomiteanu, Hamilton, Adlaf, & Mann, 2018). While there is no comparable data for other stimulant use, it is expected the numbers would be very low.

In the past year, fewer people went to treatment programs for help with crack cocaine use; however, more people than in the past sought help for cocaine powder and methamphetamine use. Between 2012–2013 and 2017–2018, the proportion of treatment admissions where crack cocaine was reported as a “problem substance” decreased (32% to 27% of all Toronto admissions),⁹ whereas the proportions increased markedly for cocaine (16% to 23%) and methamphetamine (4% to 12%).¹⁰

In preliminary data provided by the Office of the Chief Coroner for Ontario, cocaine contributed to 38% and methamphetamine contributed to 14% of accidental fentanyl-related deaths across the province between May 2017 and March 2018. The number of Ontario deaths where methamphetamine either directly caused the death or was one of drugs causing lethal toxicity has increased, with 14 deaths in 2012 rising to 217 deaths in 2017 (preliminary figures). The number of deaths by cocaine toxicity (alone or when combined with other drugs) also increased during this time period from 142

7 Resources available at makeconnections.ca/links/methamphetamine-information-resources/

8 On the Bear Clan Patrol, see www.bearclanpatrolinc.com/

9 When people go to substance use treatment programs in Ontario, they can name up to five “problem substances” at admission.

10 Statistics for Metro Toronto new substance abuse admissions, 2012–2018, are from the Drug and Alcohol Treatment Information System (DATIS). They have been provided by the Centre for Addiction and Mental Health in email correspondence, May 11, 2018.



deaths in 2012 to 587 deaths in 2017 (preliminary figures). In 2017, 90% of methamphetamine-related deaths and 86% of cocaine-related deaths had another substance also directly contributing to the death (Office of the Chief Coroner for Ontario, personal communication, January 18, 2019).

Responses

Several agencies in Toronto provide dedicated support to people who use stimulants, including:

- Harm reduction programs provide safer drug use education and safer use supplies, including crack and methamphetamine smoking pipes. Some agencies provide training and education about preventing and responding to stimulant overdoses.
- The AIDS Committee of Toronto provides a range of supports related to crystal methamphetamine and other drug use to provide information and resources for gay, bi and queer men, and the people who support them.¹¹
- People can use stimulants at supervised consumption and overdose prevention services. Between the opening of the supervised injection service on August 21, 2017, and March 25, 2018, most visits were for opioid use (61%), although 35% were to use methamphetamine.
- St. Stephen's Community House began a pilot Crystal Meth Project for people who frequently use withdrawal management services and hospital emergency departments. The program provides peer interim case management support to participants in Toronto's downtown west, and trains workers on the impacts of methamphetamine use. The project is also training frontline workers on the impacts of methamphetamine use.
- The Ontario Harm Reduction Network has worked with partners and people with lived experience to produce webinars on methamphetamine and crack smoking supplies.

Quebec

In 2014–2015, cocaine was the most frequent stimulant used in the province of Quebec, with 1.9% of the general population (aged 15 and older) reporting use of cocaine in the past 12 months (Camirand, Traoré, & Baulne, 2016). Cocaine was followed by ecstasy (1.4% past-year use), amphetamines (1.3% past-year use) and methamphetamine (approximately 0.2% past-year use). Among high school students in 2016–2017, MDMA was the most frequent stimulant reported, with 2.7% reporting past-year use, followed by amphetamines or methamphetamine (2.5% past-year use) and cocaine (2.4% past-year use) (Traoré, 2018).

From 2011 to 2017, hospital visits for cocaine intoxication were stable, while those for other psychostimulants as a whole almost doubled. For the same period, the number of overdose deaths caused by cocaine was stable and those for other psychostimulants as a whole doubled, mostly due to increases in 2016 and 2017.

The SurvUDI Network monitors injection drug use at eight locations in the province of Quebec and in the city of Ottawa. Between 2004 and 2016, the proportion of respondents who reported injecting cocaine or crack at least once in the past six months decreased from 89% to 70%. During the same period, the proportion of respondents who reported injecting other stimulants, including amphetamines and methamphetamine, at least once had increased from 5% to 14%. Cocaine is the drug most often injected in the four supervised injection services in Montreal. During the first year following their opening in June 2017, 42% of visits were for cocaine injection.

¹¹ Resources include a booklet, [Staying Off Crystal for a Day or Longer](#), and a website focused on crystal methamphetamine (www.himynameistina.com).



A project conducted in Montreal in 2018 tested the urine of people who had used drugs in the past three days. The drug used by the largest proportion of respondents was cocaine, with 74% reporting cocaine or crack cocaine, and cocaine metabolites detected in the urine of 87% of respondents. Levamisole was detected in the urine of 64% of respondents who reported having used cocaine or crack. Use of “speed” was reported by 25% of respondents. Laboratory analyses showed that speed was generally methamphetamine. Conversely, methamphetamine and crystal meth use was reported by 15% of participants, and methamphetamine or its metabolites detected in the urine of 94% of those reporting its use.

Stimulant use was prevalent among participants recruited in Montreal for ENGAGE, a study on HIV and sexual health among gay, bi and queer men, and other men who have sex with men (MSM). An adjusted proportion of 22% reported use of cocaine in the past six months, 17% of ecstasy or MDMA, 11% of amphetamines (speed), 8% of methamphetamine or crystal meth, 8% of crack and 7% of non-prescribed Ritalin, Adderall or Concerta. Among the MSM population in Montreal, stimulants, particularly methamphetamine, are reported as being used by people attending sex parties referred to as “chemsex” or “party and play.” Use of these drugs can create conditions in which individuals engage in sex without a condom and sex with multiple partners, which in turn can increase the risk of sexually transmitted infections.

Responses

- Across the province, harm reduction services distribute sterile injection and inhalation equipment (e.g., syringes, crack pipes). In Montreal, some harm reduction programs also distribute crystal meth pipes (to prevent transition from smoking to injecting crystal meth) and “slam kits” (equipment for crystal meth injection for MSM) and training workshops on “chemsex” are offered by the public health department to frontline workers.
- Naloxone is available for free to any citizen 14 and older, including people who use stimulants since all street drugs might be adulterated with fentanyl or other opioids, in all community pharmacies and many community organizations in the province.
- In Montreal, use of fentanyl detection strips is encouraged among all people who use drugs, including those who use stimulants, for the same reason.

Nova Scotia

Prevalence data available from the most recently released Canadian Tobacco, Alcohol and Drugs Survey (February–December 2017) indicates approximately 12% of individuals 15 and older reported using cocaine or crack in their lifetime. This estimate has increased from 7% as reported in the same survey in 2015.

Based on the information obtained from the available inpatient discharge data (Discharge Abstract Database), among stimulants, cocaine is the most common stimulant used. In the last four calendar years, the relative percentage of discharges for stimulants as the most responsible diagnosis has increased. For cocaine as the most responsible diagnosis, the volume of discharges increased from 4% in 2015 to 7% in 2018 (January–November 2018). With respect to other stimulants as the most responsible diagnosis, the volumes of discharges have increased from 0.3% in 2015 to 2% of the overall volume of inpatient discharges in 2018. When looking at all inpatient discharges in which stimulants were reported (not just the most responsible diagnosis), the relative percentage of cocaine discharges has increased from 10% in 2015 to 14% in 2018 (January–November 2018), and for other stimulants from 1.3% to 3%.



Historical treatment data for years prior to 2015 indicated that crack cocaine was most often reported by individuals seeking treatment in the Halifax area, Eastern Shore and West Hants, while individuals seeking treatment in other parts of the province more often reported cocaine powder.

Responses

- In April 2017, the Nova Scotia take-home naloxone program was established, which provides naloxone administration training and free take-home naloxone kit to Nova Scotians at risk of or most likely to witness or respond to opioid overdose. The kits are distributed through emergency departments, withdrawal management services, opioid treatment replacement programs, harm reduction organizations and community retail pharmacies. The program is a response to the increasing risk that stimulants could be adulterated with fentanyl or other opioids.

St. John's, Newfoundland and Labrador

Stimulant use is a growing concern in St. John's. Cocaine continues to be the most commonly used stimulant. Cocaine is most often distributed and used in powder form. Reports suggest that some individuals choose to consume methylphenidate (Ritalin), as it is typically less expensive than cocaine. Eastern Health treatment data suggests that cocaine was the most commonly used stimulant reported by individuals seeking treatment in the St. John's area.

Data available from the Canadian Tobacco, Alcohol and Drugs Survey (February–December 2017) indicates approximately 7.2% of individuals 15 years of age and older reported using cocaine or crack in their lifetime as compared to the 5.1% who reported such use in the same survey in 2015 (Health Canada 2017; Health Canada 2018). Preliminary numbers from the Office of the Chief Medical Examiner show cocaine-related deaths rose significantly between January and June 2018.

Responses

- Harm reduction programs provide safer drug use education and safer use supplies, including crack and methamphetamine smoking pipes. Agencies continue to provide training and education about preventing and responding to stimulant overdoses.
- Because there have been reported cases of adulterated cocaine containing fentanyl, various services and community organizations are now offering naloxone kits and discussing this risk with people who use stimulants.

Yukon

Data regarding stimulant use in the Yukon is available from the most recently released Canadian Community Health Survey (Statistics Canada, 2016).¹² In 2015–2016, 18.6% of the population aged 12 and over reported having used cocaine at least once. Of those who reported ever having used cocaine, approximately 13% had used it once, while the remainder had used it more than once. Only an estimated 2% of the Yukon population reported using cocaine in the past year.

Regarding other stimulants, an estimated 13.5% of Yukon residents aged 12 and over reported ever having used ecstasy. Estimates for lifetime use of other stimulants, including amphetamines and gas, glue or solvents, had high sampling variability and are not reported here. However, it can be noted that, similar to cocaine, a much smaller share of the population identified as having used these substances in the past 12 months compared to the number who indicated ever having used these substances in their lives.

¹² Data with high sampling variability (coefficient of variation higher than 0.15) have not been reported due to poor quality of those estimates.



Responses

- Work is currently underway on a surveillance plan for opioid and cannabis use in the Yukon. While this does not include a focus on stimulants, there might be opportunities to better understand use of stimulants with other drugs through improved routine and systematic data collection and analysis.
- In 2018 the Government of Yukon integrated three branches (Alcohol and Drug Services, Child and Adolescent Therapeutic Services, and Mental Health Services) into a single Mental Wellness and Substance Use branch. Four Mental Wellness and Substance Use hubs were also opened outside of Whitehorse, to increase access to streamlined services across the territory.
- The planned introduction of an electronic medical record for the new branch is anticipated to improve surveillance and monitoring of critical mental wellness and substance use issues in the Yukon.¹³

Discussion

Implications of an Unregulated, Illicit Market

In addition to public health concerns about dependence and other health harms directly arising from its use, methamphetamine and cocaine are bought and sold in an unregulated market. Therefore, they can contain adulterants and contaminants that can cause health harms. There is evidence from drug-checking programs that there have been samples of stimulants testing positive for opioids (e.g., British Columbia Centre on Substance Use, 2018; Sandy Hill Community Health Centre, 2019). This fact is a concern as overdoses are more likely among people who are opioid naïve and have not built a tolerance to opioids, or among those who are not expecting to use an opioid and therefore do not take appropriate precautions. However, we do not know how common this problem is or why it might be occurring. Between April 2018 and January 2019, fentanyl and related analogues were detected in 2% of samples analyzed by Health Canada's Drug Analysis Service¹⁴ that contained cocaine or methamphetamine. During this period, samples containing either cocaine or methamphetamine and also fentanyl or related analogues and derivatives were most frequently found in British Columbia, Alberta, Saskatchewan, Manitoba and Ontario. British Columbia had the highest proportion of cocaine or methamphetamine samples containing fentanyl or related analogues and derivatives.

Limited Data on Harms at the National Level

The data we have at the national level is limited and data that we have at the provincial/territorial level is often very different and difficult to compare. As a result, not only is it difficult to assess accurately the level of harms associated with stimulant use in Canada, but it is challenging to know where to target efforts aimed at reducing these harms.

¹³ For further information, visit www.hss.gov.yk.ca/mwsu_communities.php and yukon.ca/en/news/official-launch-mental-wellness-and-substance-use-services-branch

¹⁴ Health 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 a further detail, the fentanyl detected can be pharmaceutical or non-pharmaceutical.



Stigma

Finally, it is important to note that stimulant use is a stigmatized behaviour, not only among the general population, but also among service providers and people who use drugs. This stigma further increases the marginalization experienced by people who use stimulants and places additional barriers to seeking and accessing help.

Next Steps

This bulletin summarizes the diversity of responses by various provincial and territorial partners. It is hoped that it will be used as a resource by provincial and territorial partners responding to stimulant use and harms. The information the bulletin contains will enable partners to compare responses and share lessons learned to more effectively prevent and reduce harms associated with stimulant use in Canada, and ultimately strengthen the efforts of the CCENDU network at the national level.

CCENDU will continue to monitor the use of stimulants and their associated harms in Canada. If you have any questions, comments, information to contribute or corrections to the information contained in this bulletin or if you wish to subscribe and receive updates as new information becomes available, please contact CCENDU@ccsa.ca.

For more information on CCENDU and to review previous CCENDU Alerts and Bulletins please visit www.CCENDU.ca.



References

- Alberta Health Services. (2017). *Valuing Mental Health: Next Steps*. Edmonton, Alta.: Government of Alberta.
- B.C. Coroners Service. (2019). *Illicit Drug Overdose Deaths in BC January 1, 2008 – December 31, 2018*. Victoria, B.C.: Ministry of Public Safety and Solicitor General.
- British Columbia Centre on Substance Use. (2018). Drug checking reveals more than half of all substances on the street not what expected [news release]. Retrieved from www.bccsu.ca/news-release/drug-checking-reveals-more-than-half-of-all-substances-on-the-street-not-what-expected/
- Camirand, H., Traoré, I., & Baulne, J. (2016). *L'Enquête québécoise sur la santé de la population, 2014-2015: pour en savoir plus sur la santé des Québécois : Résultats de la deuxième édition*. Quebec City, Quebec: Institut de la statistique du Québec.
- Canadian Centre on Substance Use and Addiction. (2018a). *Methamphetamine*. Ottawa, Ont.: Author.
- Canadian Centre on Substance Use and Addiction. (2018b). *Presentation on the Impacts of Methamphetamine Use in Canada to the House of Commons Standing Committee on Health*. Ottawa, Ont.: Author.
- Canadian Substance Use Costs and Harms Scientific Working Group. (2018). *Canadian substance use costs and harms (2007–2014)*. (Prepared by the Canadian Institute for Substance Use Research and the Canadian Centre on Substance Use and Addiction.) Ottawa, Ont.: Canadian Centre on Substance Use and Addiction.
- Crackdown on mid-level dealers leads to seizures of \$1M worth of meth in Winnipeg: police. (2019, January 11). *CBC News*. Retrieved from www.cbc.ca/news/canada/manitoba/winnipeg-police-drug-seizures-1.4974792
- Davis, A., Amlani, A., & Buxton, J.A. (2016) *Substance use trends in BC: A survey of harm reduction clients. Overall results for British Columbia: 2015*. Vancouver, B.C.: B.C. Centre for Disease Control.
- Health Canada. (2014). Canadian Tobacco, Alcohol and Drugs (CTADS) Survey: 2013 supplementary tables. Retrieved from www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2013-supplementary-tables.html
- Health Canada. (2017). Canadian Tobacco, Alcohol and Drugs (CTADS) Survey: 2015 supplementary tables. Retrieved from www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2015-supplementary-tables.html
- Health Canada. (2018). Canadian Tobacco, Alcohol and Drugs (CTADS) Survey: 2017 detailed tables. Retrieved from www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2017-summary/2017-detailed-tables.html
- Hunter, C., Strike, C., Barnaby, L., Busch, A., Marshall, C., Shepherd, S., & Hopkins, S. (2012). Reducing widespread pipe sharing and risky sex among crystal methamphetamine smokers in Toronto: Do safer smoking kits have a potential role to play? *Harm Reduction Journal*, 9, 9.
- Ialomiteanu, A.R., Hamilton, H.A., Adlaf, E.M., & Mann, R.E. (2018). *CAMH monitor e-report 2017: Substance use, mental health and well-being among Ontario adults*. Toronto, Ont.: Centre for Addiction and Mental Health.



- Lende, D.H., Leonard, T., Sterk, C.E., & Elifson, K. (2007). Functional methamphetamine use: The insider's perspective. *Addiction Research and Theory*, 15(5), 465–477.
- Murphy, F., Murphy, S., Sales, P., & Lau, N. (2018). Examining social supply among nonmedical prescription stimulant users in the San Francisco Bay Area. *International Journal of Drug Policy*, 54, 68–76.
- Sandy Hill Community Health Centre. (2019). Drug checking results. Retrieved from www.shchc.ca/programs/oasis/drug-checking
- Statistics Canada. (2016). Canadian Community Health Survey. Ottawa, Ont.: Author.
- Statistics Canada. (2019). Table: 35-10-0177-01, Incident-based crime statistics. Accessed on December 1, 2018.
- Traoré, Issouf. (2018). Consommation d'alcool et de drogues. In *Enquête Québécoise sur la santé des jeunes du secondaire 2016-2017. Résultats de la deuxième édition. La santé physique et les habitudes de vie des jeunes* (Tome 3, pp. 219–261). Quebec City, Quebec: Institute de la statistique du Québec.
- Winnipeg Police Service. (2018). *Winnipeg Police Service 2017. Annual statistical report*. Winnipeg, Man.: Author.
- Winnipeg Regional Health Authority. (2018). *Methamphetamine presentations to WRHA emergency departments*. Winnipeg, Man.: Author.

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