Cocaine

Introduction

Cocaine is a white powder that is often mixed with substances similar in appearance, such as corn starch. Crack is derived from cocaine and takes the form of a whitish, opaque crystal. Commonly used street names for cocaine* include “coke,” “coca,” “blow,” “snow,” “Charlie,” “dust” and “powder,” while “freebase” and “rock” are terms often used for crack.\(^1\)

Cocaine in powdered form can be taken through the nose by snorting or dissolved and injected. Crack or freebase cocaine can be smoked or dissolved and injected. Using other drugs with cocaine, particularly opiates, either at the same time (“speedballs”) or consecutively, is associated with an increased risk of overdose.

Effects of Cocaine Use

**Short term:** Cocaine use can cause increased energy and alertness; euphoria; increased body temperature; increased heart rate and blood pressure;\(^2,3,4\) agitation; paranoia; suppressed appetite; muscle spasms; stroke; fainting; and overdose. An overdose can involve a seizure, heart failure and respiratory suppression.\(^4\)

**Long term:** Longer term effects of cocaine use are sleep disturbance; weight loss; tolerance to the drug; depression; cardio-vascular problems;\(^2,3\) nasal damage (through snorting); throat and bronchial damage (through crack smoking);\(^5\) headaches; hallucinations; seizure; and attention and memory disruptions. Maternal use of cocaine during pregnancy can also result in low birth weight (and related long-term health complications) for newborns.\(^6\)

Legal Status of Cocaine in Canada

Cocaine is a Schedule I drug under the Canadian Controlled Drugs and Substances Act. Possession of the drug can result in seven years’ imprisonment, while trafficking and production of the drug can result in life imprisonment. Driving while impaired by cocaine is also a criminal offence under the Criminal Code of Canada, as is refusing to comply with drug tests enforced by police officers; penalties for those convicted are equivalent to those for alcohol impairment.

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\(^*\) Unless otherwise specified, use of the term “cocaine” in the remainder of this document also encompasses “crack.”
Past-Year Use of Cocaine in Canada

**General population (age 15+):** According to data collected from the Canadian Tobacco, Alcohol and Drugs Survey (CTADS), 0.9% of Canadians aged 15 and older reported using cocaine during the past year in 2013, which is comparable to the 1.1% who reported such use in 2012 (Figure 1). This pattern aligns with a levelling-off or slight rebound seen internationally during this time period. Because of methodological differences between CTADS and the Canadian Alcohol and Drug Use Monitoring Survey (CADUMS), comparisons of prevalence estimates between CADUMS (2008–2012) and CTADS (2013) data should be made with caution.

**Adults (age 25+):** 0.6% of Canadian adults report past-year cocaine use according to the 2013 CTADS. This level of use has remained fairly stable since 2008, with the exception of a reduction to 0.3% in 2010.

**Youth (age 15-24):** Youth in Canada, including students as well as those not in school, reported past-year rates of cocaine use of 2.4% in 2013 (1.5% in 15–19 year olds, 3.3% in 20–24 year olds), representing a continued decrease in trends over time, though rates from 2011 and 2012 are not available.

**Students (grades 7-12):** The Youth Smoking Survey 2012–2013 indicated that 1.8% of youth in grades 7–12 reported past-year cocaine use, compared to 2.3% in 2010–2011. The Ontario Student Drug Use and Health Survey (OSDUHS) also noted declines in the use of both cocaine (2.6% in 2009 to 2.4% in 2013) and crack (1.1% in 2009 to 0.7% in 2013) among students in grades 9–12. Rates of past-year use in the Atlantic provinces ranged from 2.9% in Prince Edward Island to 4.1% in Nova Scotia to 4.5% in New Brunswick and 5.8% in Newfoundland and Labrador for students in grades 7, 9, 10 and 12. Rates of use increased with grade level in all provinces.

**Gender:** The prevalence of past-year use of cocaine among males has been consistently decreasing over the past several years (2.3% in 2008 versus 1.3% in 2013) though rates remain higher than among females (0.5% in 2013).

**Figure 1: Prevalence of self-reported past year cocaine use among Canadians, by age category**

![Figure 1: Prevalence of self-reported past year cocaine use among Canadians, by age category](chart)

**Source:** CADUMS 2008–2012; CTADS 2013

**Note:** Figures identified with an asterisk (*) should be interpreted with caution because of the small sample size. Figures for youth are not available for 2011 and 2012 due to data suppression. Because of methodological differences between CADUMS and CTADS, comparisons of prevalence estimates between CADUMS (2008–2012) and CTADS (2013) data should be made with caution.
Ranking Among Top Five Substances

According to CTADS 2013 data, cocaine was the third most used substance after alcohol and cannabis among both the general population and adults. In contrast, youth were almost as likely to report the use of cocaine as hallucinogens, although alcohol and cannabis use were substantially more prevalent (Table 1).

Table 1: Top five substances used in the past year by Canadians

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<tbody>
<tr>
<td>General Population (15+)</td>
<td>Alcohol (75.9%)</td>
<td>Cannabis (10.6%)</td>
<td>Cocaine/Crack (0.9%)*</td>
<td>Hallucinogens (0.6%)*</td>
<td>Ecstasy (0.4%)*</td>
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<tr>
<td>Youth (15-24)</td>
<td>Alcohol (72.6%)</td>
<td>Cannabis (24.4%)</td>
<td>Hallucinogens (2.7%)*</td>
<td>Cocaine/Crack (2.4%)*</td>
<td>Ecstasy (1.9%)*</td>
</tr>
<tr>
<td>Adults (25+)</td>
<td>Alcohol (76.5%)</td>
<td>Cannabis (8.0%)</td>
<td>Cocaine/Crack (0.6%)*</td>
<td>N/A (suppressed)</td>
<td>N/A (suppressed)</td>
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Source: CTADS, 2013

Note: Figures identified with an asterisk (*) should be interpreted with caution because of the small sample size.

High-Risk Populations

In Canada, cocaine use is concentrated among specific groups, such as homeless or street-involved adults, and youth in urban centres. Data from Phase 3 of the i-Track survey (2010–2012) found that among those who had injected drugs in the past six months, 64% had first injected cocaine before the age of 16.

Health Canada’s Monitoring of Alcohol and Drug Use among High-Risk Populations Study (HRPS), a survey monitoring drug use among high-risk populations, found that in 2013 cocaine was the second most commonly used illicit substance after cannabis among both street-entrenched and recreational adult drug users. The prevalence of past-year use of cocaine powder in these respective groups ranged from 20.0% in Winnipeg to 61.3% in Montreal and Toronto among street-entrenched adult users, and from 47.5% in Winnipeg to 76.3% in Vancouver among recreational adult users (Figure 2). Also of note, use among street-involved youth ranged from 40.0% in Regina to 62.5% in Halifax and Winnipeg.

† To be included in the HRPS study, individuals from each of these groups had to have used at least one drug (excluding alcohol and tobacco) at least once in each of the last six months prior to each of the interviews.

Street-entrenched adults include individuals 19 years of age or older with no permanent shelter.

Recreational drug users include individuals recruited at an event-specific site (e.g., rave, warehouse party) or permanent night club sites.

Street-involved youth include individuals 15–24 years of age who might be experiencing total homelessness; have temporary, but not permanent, shelter; use services oriented to street youth; or were identified by local stakeholders as “street-involved.”
Past-Year Use of Cocaine Internationally

According to the United Nations Office on Drugs and Crime (UNODC), past-year prevalence of cocaine use among the general population in Canada is relatively high at 1.3% compared to the global average of 0.4%; however, rates remain lower than in the United States (2.2%), England and Wales (2.0%), and Australia (2.2%) (Figure 3).\(^9\)

*Note*: International prevalence rates are not directly comparable due to variations in survey dates and population age ranges.

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**Figure 2. Prevalence of self-reported past-year cocaine use among high-risk populations by city (2013)**

**Source**: HRPS 2012–2013\(^{20,21,22}\)

**Figure 3. Prevalence of self-reported past-year cocaine use among the general population by country**

**Source**: UNODC 2015\(^9\)
Associated Harms

Hospital data provide an important measure of the impact of substance use on the healthcare system. Data produced by the Canadian Institute for Health Information (CIHI) indicate that the rate of hospital separations or visits (defined as the number of inpatient events ending in discharge or death) where cocaine use was recorded doubled between 1996 and 2005, from 22 to 45 per 100,000 discharges. However, more recent data provided by CIHI have shown a 55% decrease in the number of cocaine-related hospital separations between 2006 and 2011, mainly due to a drop in admissions among 25–44 year olds.

Treatment

According to 2012-2013 data from the National Treatment Indicators report, 28.7% of treatment episodes in Ontario were for individuals who identified cocaine as one of the primary substances for which they were seeking treatment. In Nova Scotia, cocaine was reported as the primary reason for accessing treatment in 4% of episodes.

Although research is ongoing, at present there is no evidence to support the use of pharmacological treatments (i.e., anticonvulsants, antidepressants, antipsychotics or dopamine agonists) or vaccines for treating cocaine use or dependence. Further, there is no strong evidence for any single type of psychosocial treatment; however, cognitive-behavioural approaches, particularly those with a contingency-management component where decreased usage or abstinence are rewarded, have shown the greatest effect on treatment retention and reduction in use.

There are initiatives in place to reduce the harms associated with the use of cocaine, including:

- Needle exchanges that provide sterile injection equipment, which are present in urban centres and many rural locations across Canada;
- Crack kit dispensaries that provide sterile pipes and stems for inhaling crack cocaine, which are present in a limited number of Canadian urban centres; and
- Supervised injection facilities where people can inject cocaine under the supervision of health professionals, which are present in Vancouver, British Columbia, and several European countries.

Enforcement

According to the UNODC, Canada reported the seizure of some 1,030 kilograms of cocaine by law enforcement in 2013, a decrease of about 20% compared to seizures in the previous year. Also in 2013, a reported 16% of all police-reported drug offences in Canada involved cocaine, with some 29% of adult drug cases involving cocaine, compared to 9% among youth. A total of 17,445 violations (50 per 100,000 population) occurred, representing a 7% decrease in the rate from 2012. Saskatchewan had the highest rate of cocaine-related offences (136 per 100,000) of any province, although both the Northwest Territories and Yukon had even higher rates (305 and 210 per 100,000, respectively). While for most illicit drugs the greatest proportion of offences were due to possession, the reverse was true for cocaine with supply-related offences (56%) (i.e., trafficking, import, export and production) exceeding those for possession (44%).
Driving Following Cocaine Use

A 2012 roadside survey conducted in five communities in British Columbia found that cocaine was the second-most commonly detected illegal drug, following cannabis. Cocaine showed the greatest increase in percentage of drug-positive samples, moving from 24.3% in 2010 to 33% in 2012. In addition, an ongoing cross-sectional telephone survey of Ontario adults over five years (2002–2004, 2006 and 2008) found that the prevalence of self-reported collision involvement in the past year was significantly higher among those reporting cocaine use in the past 12 months compared to those who had not used cocaine (18.9% versus 7.4%, respectively).

Federal Initiatives to Address the Problem

Bill C-10, known as the Safe Streets and Communities Act, received royal assent in March 2012. This bill introduced mandatory minimum sentences for trafficking in cocaine when aggravating factors such as violence (one year) or proximity to a school (two years) are present. Judges are not required to impose these mandatory minimums if offenders complete a drug treatment court or other court-approved addiction treatment program.

Additional Resources

- The Impact of Substance Use Disorders on Hospital Use (Technical Report)
- Licit and Illicit Drug Use during Pregnancy: Maternal, Neonatal and Early Childhood Consequences (Substance Abuse in Canada Report)
- National Treatment Indicators Report: 2012–2013 Data
- Stimulants, Driving and Implications for Youth (Topic Summary)