

Prescription Sedatives

Key Points

- The use of prescription sedatives among the Canadian general population is about 10% and has remained relatively stable since 2008.
- In Canada, the rate of prescription sedative use is highest among seniors.
- There is little Canadian data available on the harms associated with prescription sedatives use and misuse.

Introduction

Prescription sedatives are central nervous system depressants, meaning that they depress or slow down the body's functions. These medications are mainly used to relieve anxiety and assist with sleep problems. Other medical uses include inducing sedation for surgical and other medical procedures, treatment of alcohol withdrawal, seizure control and relaxation of skeletal muscles. There are three different classes of sedatives: benzodiazepines, non-benzodiazepine sleep medications and barbiturates. Examples of drugs in each of these three classes are listed in Table 1 with their corresponding generic, trade and street names.

Table 1. Common generic, trade and street names for sedatives

Drug Class	Generic name	Trade name	Street names
Benzodiazepines	Alprazolam	Xanax®	Z-bars, bars
	Clonazepam	Rivotril®	K-pins
	Diazepam	Valium®	Vs, tranks, downers
	Flurazepam	Dalmane®	tranks, downers, nerve pills
	Lorazepam	Ativan®	nerve pills, tranks, downers
	Temazepam	Restoril®	rugby balls, tems, jellies
	Triazolam	Halcion®	Up Johns, tranks, downers
Non-benzodiazepine sleep medication	Zopiclone	Imovane®	Z-drug
Barbiturates	Pentobarbital	Nembutal®	barbs, M&Ms, nembies
	Amobarbital	Amytal®	angels, blue heavens

Prescription sedatives are usually taken in pill form; however, some are available as suppositories or prepared as a solution for injection. Some people tamper with the medication to misuse it for the drug's euphoric effects. Tampering involves changing the form of the medication or the route by which it is taken or both.



Effects of Prescription Sedatives

Short-term: These medications increase the activity of the neurotransmitter gamma-aminobutyric acid (GABA), which causes a decrease in brain activity. Low to moderate doses of sedatives can relieve mild to moderate anxiety and have a calming and relaxing effect. Higher doses of these medications can relieve insomnia and severe states of emotional distress, and result in drowsiness and impaired coordination. Other short term effects of sedatives include dilated pupils, slurred speech, irregular breathing, decreased heart rate and blood pressure, loss of inhibition, and impaired judgment, learning and memory. These medications can also cause side-effects such as confusion, disorientation, amnesia, depression and dizziness, and, more rarely, agitation and hallucinations. These medications can affect the ability to drive a motor vehicle, and increase the risk of collision, especially if they are taken in combination with alcohol or other drugs.

Long-term: The long-term effects of sedatives can include chronic fatigue, vision problems, mood swings, aggressive behaviour, slowed reflexes, breathing problems, liver damage, sleep problems and sexual dysfunction. Long-term use can lead to the development of tolerance, which serves to reduce the effects of the drug and prompts users to increase the dose to reinstate the desired effects. The potential for dependence and addiction increases with repeated use of higher doses.

Long-term regular use of these drugs should be reduced gradually, with medical supervision. People who are physically dependent on a sedative will experience withdrawal symptoms if they stop using the drug abruptly. The severity of withdrawal symptoms depends on the type of medication used, the amount used, the duration of use and whether the drug was stopped abruptly. Withdrawal symptoms can include headache, insomnia, tension, sweating, difficulty concentrating, tremors, sensory disturbances, fear, fatigue, stomach upset and loss of appetite. Severe withdrawal symptoms from regular use of sedatives in high doses can include agitation, paranoia, delirium and seizures.

Sedatives should generally not be combined with any other medication or substance that causes reduced activity of the central nervous system, including alcohol, prescription opioids and some over the counter cold and allergy medications. Possible overdose symptoms include slurred speech, confusion, severe drowsiness, weakness and staggering, slow heartbeat, breathing problems and unconsciousness.

Legal Status of Prescription Sedatives in Canada

Prescription sedatives are classified as a Schedule IV drug under the *Controlled Drugs and Substances Act* (CDSA). Their use is legal only when they are prescribed by specific licenced practitioners and are used by the person for whom they are prescribed. Possession of sedatives is not, in and of itself, illegal. However, “double doctoring” (i.e., obtaining a prescription from more than one practitioner without telling the prescribing practitioner about other prescriptions received in the past 30 days) can result in 18 months imprisonment. Trafficking, importing, exporting or the production of sedatives can result in three years imprisonment.¹

Past-Year Use of Prescription Sedatives in Canada

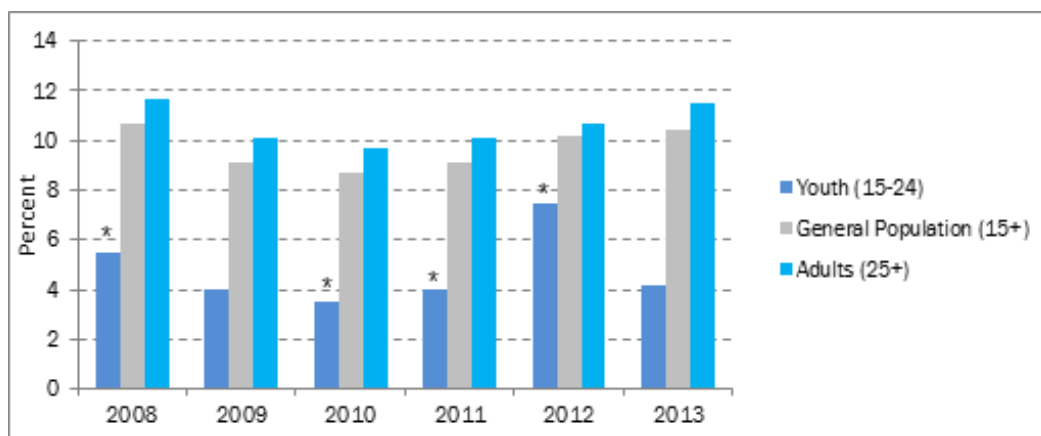
- **General population (age 15+):** The prevalence of the use of prescription sedatives among the general population was 10.4% in 2013 and has remained relatively stable since 2008.^{2,3} Because of methodological differences between the Canadian Alcohol and Drug Use Monitoring Survey (CADUMS)² and the Canadian Tobacco, Alcohol and Drugs Survey



(CTADS),³ comparisons of prevalence estimates between CADUMS (2008–2012) and CTADS (2013) data should be made with caution.

- **Youth (age 15–24):** Youth have the lowest rate of prescription sedative use among all Canadians (4.2% in 2013).³ Among youth aged 15–19, the rate of past-year prescription sedative use in 2013 was 3.6%; the corresponding use of sedatives was somewhat higher among young adults aged 20–24 (4.7%).³
- **Adults (age 25+):** The rate of past-year use of prescription sedatives among Canadian adults in 2013 (11.5%) was two to three times higher than among youth aged 15–24 (4.2%). The use of prescription sedatives among Canadian adults has not changed substantially since 2008, although in recent years there appears to be increasing use (Figure 1).^{2,3}
- **Seniors (age 65+):** Seniors have the highest rate of prescription sedative use among all Canadians (14.1% in 2013).³
- **Gender:** Data from the 2013 CTADS indicates that past-year prevalence of prescription sedative use is significantly higher among females (13.4%) compared to males (7.2%).³

Figure 1. Prevalence of self-reported prescription sedative use among Canadians by age category



Source: CADUMS 2008–2012,³ CTADS 2013²

Notes: Figures identified with an asterisk (*) should be interpreted with caution because of the small sample size. 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. Many of the prevalence estimates included in this summary are qualified because of high sampling variability and should be interpreted with caution.

Past-Year Use among High-Risk Populations

Health Canada's Monitoring of Alcohol and Drug Use among High-Risk Populations Study (HRPS)⁴ investigated drug use in seven Canadian cities in three different high risk groups: recreational drug users, street-involved youth drug users and street-entrenched adult drug users.* Among recreational

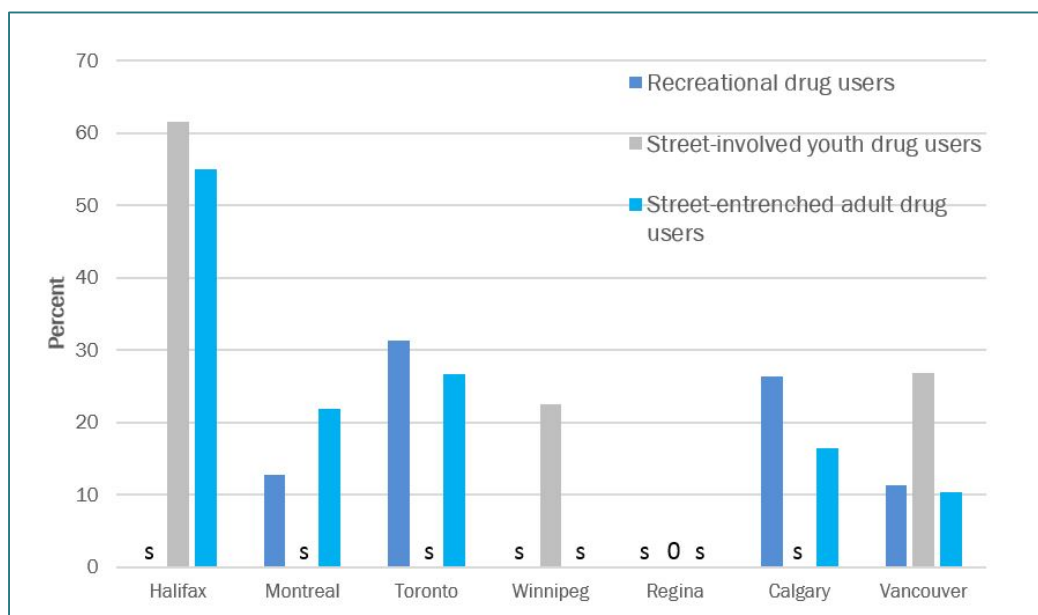
* **Recreational drug users** include individuals of legal drinking age in their provinces who were recruited at an event-specific site (e.g., rave, warehouse party) or a permanent night club site. To be included in the study, they had to have used at least one drug (excluding alcohol and tobacco) at least once in each of the last six months prior to each of the interviews. Proof of age was not asked at the time of recruitment and some respondents younger than the legal drinking age participated in the study.

Street-entrenched adult drug users include individuals 19 years of age or older with no permanent shelter. To be included in the study, they 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.



drug users surveyed across Canada in 2013, the past-year use of benzodiazepines ranged from very low use in Halifax, Winnipeg and Regina (data suppressed due to low numbers) to 31.3% in Toronto (Figure 2). Among the sample of street-involved youth, it was found that 61.5% of those from Halifax had used sedatives in the past year, whereas no youth from Regina had reported using benzodiazepines over the same time period.⁴ Among street-entrenched adult drug users, 55% of those surveyed from Halifax had used benzodiazepines in the past year, whereas in Winnipeg and Regina, past-year use was very low (data was suppressed due to low numbers).

Figure 2. Prevalence of self-reported past year use of benzodiazepines by city (2013)



Abbreviations: S = data was suppressed when the number of respondents was between 1 and 5. 0 = no drug use

Source: Monitoring of Alcohol and Drug Use among High-Risk Populations Study (HRPS), 2012–2013⁴

Past-Year Misuse of Prescription Sedatives

Sedatives have the potential to be misused because of their psychoactive properties. The risk for psychological and physical dependence (addiction) is increased through accessibility, multiple opportunities for diversion along the supply chain (i.e., the means through which prescription medicines make their way to patients, which can include manufacturers, wholesale distributors and pharmacies), and perceptions of relative safety compared with illicit drugs, among other factors. Those who misuse sedatives might take the drug in ways other than prescribed (e.g., using more than prescribed or mixing the medication with alcohol) or tamper with the medication to achieve a more rapid and intense effect.

Street-involved youth drug users 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.” To be included in the study, they 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.

Note that there is overlap in the age range of the two street populations because most youth services are provided to clients up to the age of 24 years. Respondents aged 19–24 were considered to be adults or youth depending on the site where they were recruited.



Past-Year Prevalence of Misuse in Canada

- In 2012–2013, 0.4% of Canadian students in grades 7 to 9 and 1.8% of students in grades 10 to 12 reported past-year use of tranquillizers to get high and not for medical purposes. With respect to the use of sleeping medicine to get high, 1.2% of students in Grades 7 to 9 and 2.9% of students in Grades 10 to 12 reported such use in 2012–2013.⁵
- Data from the spring 2013 National College Health Assessment Survey, which is drawn from a convenience sample of 32 post-secondary institutions in Canada, and therefore not representative of all post-secondary students in Canada, indicate that 4.4% of post-secondary students had used sedatives that were not prescribed to them in the past 12 months.⁶
- Among First Nations individuals aged 18 and older living on-reserve or in northern First Nations communities across Canada, 5.7% reported past-year use of sedatives or sleeping pills without a prescription in 2008–2010.⁷
- Among First Nations youth aged 12–17 years, 2.2% reported non-prescribed use of sedatives or sleeping pills during 2008–2010.⁷
- A 2012 survey of Nova Scotia students in grades 7, 9, 10, and 12 reported that 5.0% of students reported non-medical tranquillizer use in the previous 12 months.⁸
- Among students in grades 7, 9, Level I and Level III[†] in Newfoundland and Labrador in 2012, 3.6% reported using tranquillizers for non-medical purposes.⁹
- In 2013, 2.4% of Ontario students in grades 7–12 reported using prescription sedatives for non-medical purposes.¹⁰

Past-Year Prevalence of Misuse Internationally

- **United States:** In 2013, the past-year prevalence of the non-medical use of prescription tranquillizers and sedatives was 0.2% among those aged 12 and older.¹¹
- **Australia:** In 2013, the past-year prevalence of the non-medical use of prescription tranquillizers and sleeping pills was 1.6% among those aged 14 and older.¹²

Additional Resources

- [First Do No Harm: Responding to Canada's Prescription Drug Crisis](#)
- [Topic Summary: Sedatives, Driving and Implications for Youth](#)

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[†] In Newfoundland and Labrador, Levels I, II and III refer to the last three years of study of a thirteen-year, kindergarten-to-senior-high education system (i.e., grades 10, 11 and 12 in some other provinces).



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- ¹ Controlled Drugs and Substances Act, S.C. 1996, c. 19, <http://laws-lois.justice.gc.ca/eng/acts/C-38.8/index.html>.
- ² Health Canada. (2012). *Canadian Alcohol and Drug Use Monitoring Survey (CADUMS)*. Ottawa, Ont.: Author. Retrieved from www.hc-sc.gc.ca/hc-ps/drugs-droguies/cadums-esccad-eng.php.
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- ⁵ Health Canada. (2014). *Youth Smoking Survey 2012–2013 — Supplementary Tables*. Retrieved from http://www.hc-sc.gc.ca/hc-ps/tobac-tabac/research-recherche/stat/_survey-sondage_2012-2013/table-eng.php.
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- ⁷ First Nations Information Governance Centre. (2012). *First Nations Regional Health Survey (RHS) 2008/10: National report on adults, youth and children living in First Nations communities*. Ottawa, Ont.: Author.
- ⁸ Asbridge, M., & Langille, D. (2013). *2012 Nova Scotia Student Drug Use Survey. Technical report*. Halifax: Nova Scotia Department of Health and Wellness and Dalhousie University.
- ⁹ Newfoundland and Labrador Department of Health and Community Services (2013). *2012 Student Drug Use Survey: Highlights report*. St. Johns: Author.
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