



Misuse of Opioids in Canadian Communities

Prepared by CCSA in partnership with the Canadian Community Epidemiology Network on Drug Use

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.

CCENDU Bulletins provide timely information on new drug use trends or on topics of immediate concern, using rapidly assembled evidence ranging from scientific literature to qualitative reports from those directly serving local, high-risk populations. In January 2013, CCENDU site coordinators expressed an interest in sharing information about opioid misuse in their communities given the discontinuation of OxyContin® and the introduction of OxyNeo®. What follows is a series of short snapshots describing opioid misuse in Canadian communities.

Background

What Are Opioids?

Opioids are a class of drugs that depress the central nervous system and are primarily used in medicine as analgesics. That is, they are used to reduce or suppress the body's response to pain. Opioids also produce feelings of euphoria and are used for this purpose as well. Consuming opioids in doses larger than prescribed intensifies and prolongs the drug's effects. Furthermore, using opioids with other respiratory depressants such as benzodiazepines and alcohol exacerbates the effects. There are naturally occurring opioids, referred to as opiates (e.g., morphine); semi-synthetic opioids (e.g., heroin); and fully synthetic opioids (e.g., methadone, fentanyl, oxycodone).¹

Historically, heroin has been the best-known misused opioid and has been associated with the greatest harms. Recently, however, there has been a shift toward the misuse of prescription opioids. Oxycodone (sold commercially as OxyContin®, OxyNeo®, Percocet®, Percodan®, among others) is perhaps now the best-known misused prescription opioid and may be responsible for the greatest amount of harms.

There are several harms associated with opioid misuse. For people dependent on opioids, withdrawal is difficult and uncomfortable. If people are using "street drugs" there are risks related to content and purity. Adulterants or an especially pure drug might result in unexpected reactions or overdose, especially if the drug is used by injection. Injection drug users are at a higher risk of overdose, which may be fatal. As with any injection drug use, unsafe practices such as needle sharing might result in the transmission of infectious disease such as hepatitis C or HIV.



Local Response to Opioid Misuse

In Canada, different jurisdictions have different responses reflective of their local situation; these range from outpatient counselling to supervised injection facilities.

- Methadone maintenance and buprenorphine-naloxone are available treatment options for individuals dependent on opioids. Generally, in these maintenance programs users take an oral dose of either methadone or buprenorphine-naloxone daily to prevent opioid-related withdrawal symptoms.¹ Medication-assisted treatment, an example of responses to reduce the harms related to problematic opioid use, is frequently accompanied by psychosocial treatments.¹
- Other harm reduction responses include needle exchange programs to reduce the spread of infectious disease associated with injection drug use or supervised injection facilities where intravenous drug users are provided with safe facilities and clean needles to consume drugs (frequently opioids).
- Finally, in an attempt to reduce the number of overdose deaths associated with opioid misuse, some jurisdictions in Canada provide naloxone to users of opioids, and individuals in contact with users of opioids. Naloxone is an opioid antagonist that prevents or reverses the effects of opioids and is often used to reverse an opioid-induced overdose. It is important to note that most naloxone programs are part of a larger overdose response program that typically includes education about overdose prevention, recognition and response.

Reports from CCENDU Partners

The following are summaries from members of the CCENDU network about opioid misuse patterns and trends in their community, as well as the local responses to the trends. These summaries were compiled between February 2013 and April 2013. Please note, because of the quality, availability and accessibility of local information among CCENDU partners, the summaries might not include all local information on opioid use and frequently include anecdotal information from network members. Sources of information are cited when possible. For consistency, this bulletin refers to the generic name of the opioid and provides the trade name in parenthesis, where applicable. The order that CCENDU partners appear in the bulletin is based on geography, moving from west to east.

Table 1: Summary of Opioid Patterns, Trends and Local Responses by CCENDU Site

Location	Frequently misused opioids and opiates	Most common route of administration	Recent changes in use or harms associated with use	Local responses
Vancouver, BC	Heroin, morphine and hydromorphone (Dilaudid®)	Varies (surveys of street-involved adults report mainly injection)	Heroin-related overdose deaths more than doubled from 2010 to 2011.	Programs providing opioid substitution treatment Methadone maintenance program Suboxone® program BC Overdose Prevention and Response Program Take Home Naloxone program (http://towardtheheart.com/naloxone/) Needle exchange programs InSite supervised injection facility Study to Assess Long-term Medication Effectiveness (SALOME) ² Referral to care



Location	Frequently misused opioids and opiates	Most common route of administration	Recent changes in use or harms associated with use	Local responses
Saskatoon, SK	Hydromorphone and morphine	Injection	Recent availability of heroin has raised concerns that experimentation with heroin by opioid users accustomed to prescription opioids might result in overdose deaths	<p>Programs providing opioid substitution treatment</p> <p>Methadone maintenance programs</p> <p>Buprenorphine-naloxone (specifically Suboxone®) programs</p> <p>Harm reduction programs</p> <p>Fixed and mobile needle exchange programs</p> <p>Counselling</p> <p>Testing for sexually transmitted infections</p> <p>Referrals for care</p> <p>Concurrent care</p>
Winnipeg, MB	Oxycodone (specifically OxyContin®)	Orally, nasally and via injection	There has been an increase in number of clients seeking treatment for use of opioids over the last few years	<p>Programs providing opioid substitution treatment</p> <p>Methadone maintenance programs</p> <p>Buprenorphine-naloxone programs</p> <p>Regular meeting of methadone providers</p> <p>Manitoba Monitoring Review Committee</p> <p>Recent changes to provincial <i>Prescription Drug Cost Assistance Act</i> to strengthen monitoring and improve prescribing patterns for narcotics and other controlled drugs</p> <p>Recently implemented a priority admissions model to decrease treatment wait times for opioid dependent patients</p>
Toronto, ON	Oxycodone, hydromorphone, heroin and fentanyl	None identified, as there is significant variation by person and substance being used	<p>Increase in availability of several varieties of heroin</p> <p>Increase in use of hydromorphone and fentanyl</p> <p>Emergence of generic oxycodone</p>	<p>Some additional staff funded at treatment services to support medication-assisted treatment (e.g., methadone maintenance treatment, etc.)</p> <p>Overdose prevention training by Toronto Harm Reduction Task Force and partners</p> <p>The POINT (Preventing Overdose in Toronto) program, Toronto Public Health</p> <p>Take home naloxone program</p>
Ottawa, ON	Hydromorphone, morphine and fentanyl	Orally, nasally and some via injection, but varies by person and substance	There has been a recent increase in fentanyl abuse particularly among young people	<p>Community programs providing opioid substitution treatment</p> <p>Methadone maintenance programs</p> <p>Buprenorphine-naloxone programs</p> <p>Withdrawal management programs</p> <p>Regional opioid intervention services</p> <p>Royal Ottawa Substance Use and Concurrent Disorders Assessment and Stabilization Unit</p> <p>The Royal's Regional Opioid Intervention Service</p> <p>The Peer Overdose Prevention Program (POPP)</p> <p>Naloxone program</p> <p>Harm reduction programs</p> <p>Needle exchange</p>
St. John's, NL	Morphine, hydromorphone and oxycodone (specifically Percocet®)	Injection (morphine) Nasal (oxycodone)	<p>There are reports of increased use of morphine, hydromorphone and heroin by injection</p> <p>Percentage of people seeking treatment for OxyContin® decreased 14% between 2010-2011 and 2011-2012</p>	<p>Programs providing medication-assisted treatment</p> <p>Methadone maintenance programs</p> <p>Withdrawal management programs</p> <p>Harm reduction programs</p> <p>Needle exchange</p> <p>Outpatient counselling services</p>



Vancouver

The Situation

Opioid misuse and abuse is a serious problem in Vancouver and across British Columbia (BC). In Vancouver, heroin is the most commonly used opioid reported by street-involved youth; while street-involved adults report methadone as the commonest opioid used, followed by heroin in one Vancouver drug user study.³ The BC Centre for Disease Control piloted a study in 2012 for clients using harm-reduction supplies: participants reported heroin was the most commonly used illicit opioid consumed in the past week in Vancouver followed by morphine. Crack cocaine was the only illicit drug reported to be used more commonly than heroin by participants in the Vancouver Coastal Health region.⁴ Furthermore, over 78% of harm reduction clients surveyed across BC reported using an opioid in the last seven days.

The Centre for Addictions Research of BC (CARBC) administers a survey, in six-month waves, to a convenience sample of 50 people in three high-risk populations. In the second wave of 2012 in Vancouver, past month heroin use was reported by 13% of street-involved youth and 36 percent of street-involved adults. None of the adults using recreational drugs reported using heroin in the past 30 days. Furthermore, among the 187 street-involved adults and youth on methadone maintenance therapy participating in the CARBC survey from 2009 to 2012, 58% reported using heroin, 23% used morphine, 21% used hydromorphone (Dilaudid®) and 11% used oxycodone, in the past 30 days.

The issue of opioid misuse and abuse extends beyond Vancouver and across the province. In the first four months of 2011, the BC Coroner's office reported over 20 cases of heroin-related overdoses, which was more than double that seen in the same period in 2010.⁵ The increase was observed in the Vancouver and adjacent Fraser health regions. The RCMP confirmed an increase in the purity of the heroin on the street. There were 299 provisional illicit drug overdose deaths (IDDs) reported in BC in 2011, up from 224 in 2010. In 2012, provisional IDD numbers have declined to 256 cases. However, many cases in 2011 and 2012 are not complete so IDD numbers reported by the BC Coroners Service will likely change with time.

Local Responses

Vancouver has a number of programs designed to decrease harms associated with opioid abuse. These programs include, but are not limited to, participating in the BC Overdose Prevention and Response Program, including Take Home Naloxone; InSite, Vancouver's first supervised injection facility; the Study to Assess Long-term Medication Effectiveness (SALOME), a clinical trial to determine if hydromorphone benefits people with chronic opioid addiction; and numerous other medical and social service programs available throughout the city.

As of March 2013, nine sites were participating in the Overdose Prevention and Response Program in Vancouver, and another five sites were part of the program in other parts of the province. The program has supplied 730 naloxone kits to participating sites. As of February 2013, 167 clients have been prescribed naloxone and trained in its administration. To date, 12 overdose reversals have been reported as attributable to the provision of naloxone and training provided under this program. Additionally, BC Ambulance Services report administering 2,377 doses of naloxone in 2,020 ambulance response events throughout BC in 2012.

This summary was compiled by the Vancouver CCENDU site coordinator using information provided by the BC Drug Overdose and Alert Partnership.



Saskatoon

The Situation

Given the lack of readily available quantitative data, information regarding opioid use and abuse in Saskatoon comes mainly from anecdotal reports of members of the Saskatoon CCENDU network. According to these reports, hydromorphone and morphine are the two most commonly abused opioids in Saskatoon. The most common route of administration for hydromorphone and morphine is via intravenous injection. Anecdotal reports also suggest a recent increase in the use of street methadone, which is more readily available and reportedly cheaper than other prescription opioids. Interestingly, this increased use does not appear to be accompanied by methadone naïve overdoses, suggesting increased knowledge about its use, and might be related to people wanting to manage withdrawal symptoms.

Additionally, there are increasing reports of heroin being available in Saskatoon. There is a concern among the treatment community that, given opioid users are used to injecting pharmaceutical grade opioids of a known potency, heroin of an unknown grade might cause unexpected overdoses.

Local Responses

Saskatoon does not currently offer a naloxone program. However, intranasal naloxone was promoted by the College of Physicians and Surgeons of Saskatchewan. Saskatoon does, however, offer a Methadone Assisted Recovery Program and recently added capacity to increase access to methadone treatment and counselling support. A collaborative information network is also currently being developed to receive information on individuals suspected of selling their prescriptions. This information will be shared with the individual's prescribing physician or physicians through the Prescription Review Program, requesting that they ensure all safeguards are in place, such as treatment agreements, including urine drug screens, to minimize the opportunity of misuse that could result in harm. This network also plans to monitor prescription drug overdose deaths using provincial coroner's data.

This summary was compiled by the Saskatoon CCENDU site coordinator using information provided by the Saskatchewan CCENDU network (<http://TinyURL.com/CCENDUSK>).

Winnipeg

The Situation

While reports from members of the Winnipeg CCENDU network suggest that opioid use in their community represents a concern, from a health services perspective, alcohol, cannabis and cocaine are also significant issues at the forefront. However, Winnipeg has seen continued demand for methadone programs over the last several years. Wait lists to access drug treatment are a consistent concern and the number of clients seeking treatment for use of opioids has increased in recent years.⁶ The majority of clients being treated for oxycodone (specifically OxyContin®) during the 2011–2012 fiscal year were 34 years of age or younger, male, regular smokers and from lower incomes.⁷ Based on a review of one program in Winnipeg, OxyContin® was being consumed orally, nasally and via injection (27.3%, 36.4% and 36.4% respectively).⁸

Local Responses

Winnipeg does not currently have a publicly funded addictions-specific naloxone program. However, methadone maintenance and buprenorphine-naloxone programs are available to those seeking treatment for opioid dependence. Additionally, Winnipeg has implemented a priority admissions



model in an attempt to decrease wait times for those seeking treatment for opioid dependence. In May 2012, changes were made to the provinces *Prescription Drugs Cost Assistance Act* to strengthen monitoring and improve prescribing patterns for narcotics and other controlled drugs.

This summary was compiled by the Winnipeg CCENDU site coordinator using information provided by the Winnipeg CCENDU network.

Toronto

The Situation

The increase in opioid use in Ontario in recent years has been well-documented and is reflected in Toronto. In the 2011 CAMH Monitor survey,⁹ prescription opioid use was reported by over one-fifth of Toronto adults (22%), consistent with use in 2010. However non-medical use reported by Toronto adults increased to 4%, from 2% in 2009.

Following the delisting of OxyContin® in March 2012, people using drugs and service agency staff noted its continued availability from Toronto dealers into the winter, although with massive price increases in early summer 2012. They also report that generic oxycodone emerged in spring 2013 and is increasingly used in addition to other opiates and opioids, including hydromorphone (e.g., Dilaudid®), heroin and fentanyl. A local harm reduction program noted that 57 percent of people using their services use opiates or opioids.¹⁰ Several varieties of heroin have been described, including “black tar,” “grey pebbles” and others, some of which have been reported to be especially strong. Law enforcement agency staff report a rise in heroin importation into Toronto and the Greater Toronto Area. In addition to an increase in heroin, community members also report more use of hydromorphone (e.g., Dilaudid®) and fentanyl, with fentanyl increasingly used by injection. A rise in benzodiazepine use has also been noted. While this report is focused on opiates and opioids, poly-drug use is common.

The number of Toronto resident admissions¹¹ into substance use treatment programs noting prescription opioids as a problem remained relatively stable over 2012, with a slight increase in admissions late March–early April 2012, coincident with the delisting of OxyContin®. Prescription opioids were noted as a problem in 13.1% (median) of Toronto admissions over the year from February 15, 2012, to March 19, 2013, which is less than for all Ontario (18%). The number of Toronto and Ontario residents noting any type of opiate or opioid as a problem substance at admission were comparable (medians: Toronto 21%, Ontario 22.7%). However, Toronto residents had more admissions in which heroin was noted as a problem; 7% (median) of admissions compared with 3.6% for Ontario.

Local Responses

As of January 2013, there were 87 physicians providing methadone maintenance treatment (MMT) to 5,186 patients in Toronto.¹² Ontario-wide, 360 physicians provide MMT to 38,025 people.¹³ There has been considerable concern in communities about opioid overdoses. In the fall of 2011, The Works (Toronto Public Health) began training people who use opiates and opioids to reverse overdose situations using naloxone kits. This program is referred to as the POINT program (Preventing Overdose in Toronto). To date there have been 81 reports of overdose “reversals” owing to naloxone administration;¹⁴ however, this number is low because of substantial underreporting.

This summary was compiled by the Toronto CCENDU site coordinator using information provided by the Toronto Research Group on Drug Use and partners.



Ottawa

The Situation

Reports from Ottawa CCENDU partners suggest that prescription opioids in pill format, such as morphine, hydromorphone and oxycodone (primarily OxyContin®), are the most commonly misused or abused opioids in Ottawa. OxyContin® is still available on the street, but the amount appears to be dwindling. Ottawa Public Health's Site Needle and Syringe Program reported 7,666 service encounters with individuals between the ages of 15 and 85 in 2012. The top reported drugs of choice listed by clients visiting the Site Needle and Syringe Program were morphine (1,424), heroin (952), hydromorphone, specifically Dilaudid, (897), oxycodone, specifically OxyContin® (154), and other forms of opioids (2,939).

Recently fentanyl abuse became problematic in some of the city's west-end high schools. Students were committing break and enters to support their fentanyl addictions. Dealers would pay thieves in fentanyl patches. Fentanyl patches are allegedly coming from out of town (Montreal in the east and Petawawa in the west).¹⁵

Ottawa police report a recent drop in pharmacy robberies, where OxyContin® was being targeted) and an increase in fentanyl and hydromorphone abuse. There have also been anecdotal reports of new, very potent, "brick style" heroin available in Ottawa.¹⁶ In addition, some community services have reported seeing an increase in the number of opioid users experiencing pneumonia, bronchitis or lung infections; however, it is uncertain whether these illnesses are drug related.¹

Local Responses

Ottawa has several programs to address opioid abuse. These programs include, but are not limited to, community medication-assisted treatment (methadone, buprenorphine-naloxone); residential and inpatient withdrawal management programs; regional opioid intervention services (Royal Ottawa Substance Use and Concurrent Disorders Assessment and Stabilization Unit, and the Royal's Regional Opioid Intervention Service). In addition to these programs, the City of Ottawa also administers the Peer Overdose Prevention Program (POPP), which provides naloxone kits to reverse opioid-related overdoses. To date, the POPP has trained twenty-three individuals to administer naloxone and two kits have been used to date through a health promotion strategy known as "Topic of the month." This program also monitors and reports known overdoses, drug price fluctuations and changes in availability of drugs. In addition to the POPP, Ottawa has the Site Needle and Syringe Program, a needle exchange program, which has increased access to clinical services.

This summary was compiled by the Ottawa CCENDU site coordinator using information provided by the Ottawa CCENDU Partnership (OCP).

St. John's

The Situation

Members of the St. John's Working Group on Drug Use indicate that the misuse and abuse of opioids is a very serious problem in their community. After alcohol, opioids are the second most common reason that a person seeks treatment. Currently, the most frequently misused or abused opioids in St. John's are morphine, hydromorphone and oxycodone (specifically Percocet®). The most common opioid used by young adults 19 to 24 is oxycodone (specifically Oxycontin®). Reports indicate that morphine and hydromorphone are typically injected, while Percocet® pills are typically crushed and inhaled nasally. Some report increased use of morphine, hydromorphone and heroin by injection. Among the prison population, significantly fewer offenders are reporting the use of oxycodone owing



to reduction in its availability. Treatment program data are mixed. Some treatment programs report a slight (8%) increase in admissions for people seeking help for opioid withdrawal, while others report that rates have remained constant. The percentage of treatment seeking individuals reporting OxyContin® as their primary drug of use decreased 14% between 2010–2011 and 2011–2012.

Local responses

St. John's does not currently have a naloxone program. However, St. John's does offer a methadone maintenance program, detox treatment and a needle exchange program.

This summary was compiled by the St. John's CCENDU site coordinator using information provided by the St John's Working Group on Drug Use.

¹ McKim, William A. (2007). *Drugs and behavior: An introduction to behavioral pharmacology*, 6th ed.

² For more information about SALOME, see <http://www.providencehealthcare.org/salome/about-us.html>.

³ Data provided by Centre for Addictions Research of British Columbia Alcohol and Other Drug Monitoring Project, High Risk Populations.

⁴ Kuo, M. and Buxton, J. (2012). Survey on drug use among harm reduction clients. Pilot project report prepared by BC Harm Reduction Strategies and Services and BC Centre for Disease Control. Retrieved from http://www.bccdc.ca/NR/rdonlyres/46530CD9-C01A-4AE1-8D12-DB67AE9ED7FA/0/2012_09_21_BCMargotSurveyreport_FINAL.pdf.

⁵ Ministry of Public Safety and Solicitor General. (2011). BC Coroners Service warns of rise in heroin-related deaths. Retrieved from http://www2.news.gov.bc.ca/news_releases_2009-2013/2011PSSG0059-000493.pdf.

⁶ Treatment data included in this summary were drawn from one large provincial public funded treatment provider. It should be noted that other treatment agencies may see clients who are using opioids and these would not be included in this summary.

⁷ Annual Statistical Review, Addiction Foundation of Manitoba, 2011–2012.

⁸ Addictions Foundation of Manitoba. 2012.

⁹ Ialomiteanu, IA, Adlaf, EM, Hamilton H, Mann, RE. (2012). Addictions and mental health indicators among Ontario adults, 1977–2011. Centre for Addiction and Mental Health, 2012. Retrieved from http://www.camh.ca/en/research/Documents/www.camh.net/Research/Areas_of_research/Population_Life_Course_Studies/CAMH_Monitor/CM2009_eReport_Final.pdf.

¹⁰ Data provided by staff, CounterFIT/South Riverdale Community Health Centre, February 15, 2013.

¹¹ Note that “admissions” are not unique individuals, as a person can be admitted multiple times to multiple services. People can name up to five substances as “presenting problems.”

¹² College of Physicians and Surgeons of Ontario. Communication with Toronto Drug Strategy staff, January 2013.

¹³ College of Physicians and Surgeons of Ontario. (2012). Methadone maintenance treatment program. Retrieved from [http://www.cpso.on.ca/uploadedFiles/homepage/homepageheadlines/MethadoneFactSheet\(1\).pdf](http://www.cpso.on.ca/uploadedFiles/homepage/homepageheadlines/MethadoneFactSheet(1).pdf).

¹⁴ Data provided by staff, The Works, Toronto Public Health, April 24, 2013.

¹⁵ Information provided by the Ottawa Police Service, 2013.

¹⁶ Information provided by the AIDS Committee of Ottawa, 2013.

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