



Halifax Regional Municipality Drug Use Report 2012

Canadian Community Epidemiology Network on Drug Use

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Executive Summary

The Canadian Community Epidemiology Network on Drug Use (CCENDU) is a monitoring and surveillance project that fosters and promotes networking among agencies that have common interests in local, national, and international drug trends and patterns. Information on the prevalence, trends and patterns of use among Canada's drug using populations is currently considered deficient. This may reflect, in part, the fact that the design of many national and provincial/territorial surveys (telephone based surveys) is exclusionary of the drug-using populations (e.g. persons in prisons, the homeless, persons using illicit drugs and who may be unwilling to divulge such information).

The Halifax Regional Municipality (HRM) site of the CCENDU last produced a Report in 1997. As part of the revitalization of CCENDU, the HRM site was provided funding from CCSA to produce a Report to:

- 1. Develop an understanding of the current state of drug use in the HRM, Nova Scotia.
- 2. Identify a network of individuals and organizations directly interfacing with local populations of drug users. These individuals and organizations will establish, preliminarily, a network of future Halifax CCENDU partners capable of contributing to and using information/data from the Halifax CCENDU site on an ongoing basis.

The purpose of the Report is to collect and exchange current information on the drug using population in the HRM. This Report is not intended to provide comprehensive statistical information but rather to provide current perspectives on drug use patterns and trends in the HRM based on the knowledge and experience of front line workers, agencies and organizations.

Data for this Report was collected using an online questionnaire comprised of both fixed-response and open-ended questions. Questions covered topics related to the problematic nature of drug use in the HRM and pertained to alcohol, amphetamines, cannabis, cocaine/crack, ecstasy, hallucinogens, heroin, illicit methadone, inhalants, non-potable substances, opioid prescription drugs, other prescription drugs, and steroids. Information on the demographics of "typical" users, seriousness of drug use, drug use associated crimes, drug use associated morbidity and mortality and, pregnancy and drug use were collected. The survey questionnaire was completed by 65 respondents from various drug-related sectors in the HRM and included physicians (emergency room, addiction treatment, and community), treatment professionals, drug enforcement officers, drug users, individuals in addiction treatment, nurses, social workers, health managers and directors, and representatives from non-profit organizations all of whom were recruited using convenience sampling methods.

The following are highlights from the findings of the survey

- Ninety two percent (92%) of respondents indicated that alcohol was a serious problem in the HRM while Inhalants were the least reported as being problematic at 20%.
- When asked about prescription opioids 88% of respondents indicated that hydromorphone (e.g. Dilaudid) was a serious problem while only 20% identified meperidine (e.g. Demerol) as being problematic.
- When asked about changes in purity and cost Cannabis was most identified as having increased in purity (45%) and decreased in price (13%) during the past year.
- Alcohol (44%) was identified as the most common drug responsible for individuals accessing alcohol and drug treatment services while solvents (4%) was the least reported.



- Alcohol (43%) was identified as the most common drug responsible for individuals accessing medical services while hallucinogens, solvents and steroids were the least reported (2%).
- Thirty-nine percent (39%) of survey respondents identified Prescription Opioids as being responsible for an increase in deaths in the HRM while 50% stated that they did not know. Thirty-nine (39) survey respondents provided information on their perceptions on issues associated with an increase in mortality which included difficulty in accessing treatment (41%), decreasing health and wellness of individuals (36%) and poor public health policies (33%).
- Drugs and alcohol (7%-14%) were the most commonly reported factor believed to be associated with increases in HIV and the Hepatitis C Virus cases.
- When asked about intravenous drug use in the HRM 30% of respondents reported an increase in use, 3% reported a decrease, 11% reported no change and 57% reported they did not know. Prescription Opioids (67%) and Cocaine/Crack (63%) were the drugs most commonly reported drugs being injected in the HRM.
- Prescription Opioids (48%) and cocaine/crack (42%) were the most commonly identified drugs associated with an increase in trafficking with Heroin (4%) as the least reported.
- Traffic crime (40%) was the most reported crime associated with alcohol use. The rates of alcohol use (51%) was the most commonly reported factor believed to be associated with the increase in traffic crime.

This Report will serve as an important resource in taking the first steps towards developing an understanding of the current state of drug use in the HRM and identifying a network of individuals and organizations to establish a future HRM CCENDU.



Introduction

The Canadian Community Epidemiology Network on Drug Use (CCENDU) is a monitoring and surveillance project that fosters and promotes networking among agencies that have common interests in local, national, and international drug trends and patterns (Canadian Centre on Substance Abuse (CCSA), 2011). Historically, the CCSA has helped coordinate and facilitate the organization and dissemination of qualitative and quantitative information on drug use collected by local, national and international CCENDU sites and partners. CCENDU has undergone several changes since its inception in 1995; in 2007, CCSA was asked by Health Canada to revitalize the national CCENDU model to make it more relevant and sustainable.

The information collected via CCENDU differs from that of other monitoring and surveillance activities such as national telephone surveys or treatment data collected provincially in that CCENDU sites collect data from agencies and organizations directly serving local, high-risk populations. CCENDU is intended to function as an early-warning system by disseminating this information in a timely manner to professionals working in fields related to substance use.

At the community level, CCENDU permits agencies, organizations and professionals to exchange knowledge, experience and information. For example, CCENDU allows municipal law-enforcement officers to communicate what they witness among drug-using populations to local treatment centres or homeless shelters.

At the national level, key findings from each CCENDU site are distributed among other CCENDU sites/partners across Canada. For example, by alerting an emergency room physician in Saskatoon of a new contaminant identified in heroin being consumed in Vancouver, CCENDU enables that physician to be on the lookout for negative health outcomes associated with contaminants among his or her patients.

Finally, CCENDU serves as an early-warning system at the international level through its connections with other international monitoring systems such as the Community Epidemiology Working Group in the United States and the European Monitoring Centre for Drugs and Drug Addiction. These connections enable CCENDU to contribute information to international networks and to distribute important information emanating from these networks to those working at the community level.

Demographics of the Halifax Regional Municipality

The Halifax Regional Municipality (HRM) is the largest urban area in the Atlantic Canada region. The HRM is made up of four municipalities: Halifax, Dartmouth, Bedford and Halifax County (Halifax Regional Municipality, 2008). The current HRM population, based on Statistics Canada data for 2011, is 390,096 (Statistics Canada, 2012). Based on the 2006 Census of Population the HRM had a population of 372,679, 4.2% higher than in 1996. In 2006, 22.7% of the population was under the age of 20 and 12.1% was 65 years of age or older. In comparison, Nova Scotia has a population of 921,727, which is 0.5% higher than in 1996. Nearly 23% of the population was under the age of 20 and 15.1% were 65 years of age or older.

In Nova Scotia, family structure has shifted from the traditional larger married families to smaller married families and there has been an increase in both common-law and lone-parent families. In 2006, for the HRM, the total number of census families was 105,185 (up 8.7% from the previous census). The number of reported married families increased by 4.7% while common law families increased 54.3% and lone-parent families increased 16.9%. Lone female parent families were 13.8% of all families while lone male parents were 2.8% of all families. In Nova



Scotia, total census families increased 5.3% to 267,415. Married families decreased by 1.4% while common law families increased 43.2% and lone-parent families increased 14.1%. Lone female parent families were 13.9% of all families while lone male parents were 3.0% of all families.

The HRM has a relatively high immigrant population. In the 2006 Census of Population, 27,405 residents of the HRM (7.3% of the HRM population) identified as immigrants. In comparison, 5% of the total Nova Scotia population identified as immigrants. 97.5% of HRM residences were Canadian citizens compared to 98.3% for Nova Scotia. 67.5% of HRM's population was born in Nova Scotia. In the HRM, 40.9% of the population moved within the last five years. 27.3% moved within the municipality, 3.8% moved within the Province, 7.5% moved within Canada, and 2.3% moved from outside of Canada. A higher percentage of residents moved in the last five years than in Nova Scotia (33.2%). This may reflect, in part, the high proportion of university students residing in the HRM.

In the HRM, 98.7% of residents speak only English in the home and 95.9% speak only English at work. This compares to 97.8% and 96% respectively for Nova Scotia. 0.7% of people in the HRM speak only French at home and 0.3% speak French and English at home. For Nova Scotia, 1.4% speaks only French at home while 0.4% speaks English and French at home. 2.7% of people in the HRM report that French is their mother tongue. This compares to 3.6% for Nova Scotia. 12.1% of people in HRM report that they have knowledge of both French and English, compared to 10.5% for Nova Scotia (Government of Nova Scotia, 2012).

HRM Historical Involvement with CCEN DU

CCENDU was created in response to an identified need for a surveillance system spanning Canada, bringing together locally-relevant information on drug use, health and legal consequences of use, treatment and law enforcement. A steering committee was created in the summer of 1994, consisting of Canada's Drug Strategy Secretariat, the CCSA, the Canadian Public Health Association, Health Canada and the RCMP. The Canadian Association of Chiefs of Police joined the initiative in the fall (Adlaf, 1995).

Six cities took part in this one-year pilot project: Vancouver, Calgary, Winnipeg, Toronto, Montreal and Halifax. Activities were overseen by local coordinating committees, as well as a national Steering Committee. CCSA was responsible for overall coordination, and research direction was provided by Dalhousie University through Dr. Christiane Poulin who was also a member of the HRM CCENDU site. The HRM CCENDU Site produced reports in 1996 and 1997 and attended and presented at numerous national CCENDU meetings (Canadian Community Epidemiology Network on Drug Use, 2008). Dr. Christiane Poulin authored the Inaugural National Report of CCENDU. In addition, the HRM Site presented an International Report at the 2002 United States Community Epidemiology Working Group (CEWG) in Philadelphia, PA (National Institute on Drug Abuse, 2002).



Purpose of the Report

The purpose of this report is to collect and exchange current information on the drug using population in the HRM. This report is not intended to provide comprehensive statistical information but rather to provide current perspectives on drug use patterns and trends in the HRM based on the knowledge and experience of front line workers, agencies and organizations. Such information is important as it provides a platform for sharing, discussing and investigating relevant issues. The audiences intended for exchange are organizations and individuals within HRM who are associated with issues of problem substance use and similar organizations within other jurisdictions in Canada.

The primary objectives of this project are:

- 1. To develop an understanding of the current state of drug use in the HRM, Nova Scotia. This will be accomplished by collecting quantitative and qualitative information from a variety of individuals working in agencies/organizations related to substance use, as well as current and former individuals who have used drugs.
- 2. To identify a network of individuals and organizations directly interfacing with local populations of drug users. These individuals and organizations will establish, preliminarily, a network of future Halifax CCENDU partners capable of contributing to and using information/data from the Halifax CCENDU site on an ongoing basis.



Methods

Survey Questionnaire

Data for this report was collected using the survey questionnaire developed by Bell et al. (Bell, Dell, & Duncan, 2011; Canadian Community Epidemiology Network on Drug Use, 2010). Minor modifications have been made to adapt the survey to the HRM context and to expand the scope of the tool for collecting information on the influence of social factors on drug use (see Appendix A for information on obtaining a copy of the survey questionnaire).

The 113-question survey was pre-tested by two individuals, and included a combination of fixed-response and open-ended questions covering topics spanning the problematic nature of various drugs in the HRM (Alcohol, Amphetamines, Cannabis, Cocaine/Crack, Ecstasy, Hallucinogens, Heroin, Illicit Methadone Use, Inhalants, Non-potable Substances, Opioid Prescription Drugs, Other Drugs and Substances, Other Prescription Drugs, and Steroids), demographics of "typical" users of each drug, crimes related to drug use, rates of treatment episodes, morbidity and mortality, HIV/AIDS/Hepatitis C Virus and pregnancy in the context of drug use. With the focus on emerging trends, participants were asked to contemplate the past 12 months when answering the questions. They were also asked to indicate which, if any, of a list of social factors might be driving an increase and/or decrease in drug use-related crime, treatment, morbidity, and mortality.

Survey Participants

A total of 82 individuals were invited to participate in this survey. Potential participants were selected on the basis of their familiarity with problematic drug using populations in the HRM. To be included, survey respondents must have met either criteria one or two:

- 1. Worked/participated in a program where front-line interactions with drug using populations in the HRM occur within the previous 12 months.
- 2. Be a person recovering from or currently involved in substance use. Potential survey participants were first approached by telephone or by email and a brief introduction to the survey and its objectives was provided. Individuals interested in participating were directed by hyperlink to an online questionnaire hosted by Fluid SurveyTM. For invited participants failing to respond within seven to ten days, a second attempt was made to contact them by follow-up email. The survey was run between March 8 and April 5, 2012.

Additional Data Sources

The 2007 Student Drug Use Survey in the Atlantic Provinces

The Student Drug Use Survey in the Atlantic Provinces is a collaborative initiative of Nova Scotia, New Brunswick, Newfoundland and Labrador, Prince Edward Island, and Dalhousie University. A total of 17,545 students in grades 7, 9, 10 and 12 in the four provinces participated in the 2007 survey (Poulin & Elliott, 2007). A total of 4,486 Nova Scotia students participated in the 2007 survey. Selected information was retrieved to gain further perspectives on the use of psychoactive drugs by Nova Scotia students as well as students in the Capital Health District.

Addiction Prevention and Treatment Services, Capital Health

Addiction Prevention and Treatment Services' mission is to promote, maintain and improve the health of Nova Scotians, providing specialized addiction prevention, intervention

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and treatment services to individuals, families and communities. Selected information on client demographics and drug use was graciously provided for comparison and discussions purposes.



Results

Survey Response Rate and Demographics of Respondents

A total of 82 individuals were approached to participate in the survey of which 65 completed for a response rate of 79%. The majority of survey respondents worked in health occupations (46%) or in occupations in education, law, social, community or government services (28%). Of those employed in these positions, 96% had full time employment while 2% were part time and 2% were casually employed. Fifty four percent of respondents had been employed in their current position for more than five years, 20% for three to five years, 11% for one to two years, 11% for six months to one year and 5% for less than six months. On average, it took 46 minutes for participants to complete the survey.

Health services for the HRM are provided by the Capital District Health Authority (CDHA), which is comprised of 7 Community Health Boards (CHB). Six of these CHBs (Southeastern, Cobequid, Eastern Shore - Musquodoboit, Dartmouth, Chebucto West, and Halifax) align within the HRM boundaries (see Figure 1). Each of these CHBs is defined by a collection of neighbourhoods. Survey participants were asked to identify those neighbourhoods and therefore the CHBs in which they work. Table 1 shows the number of Community Health Boards in which the survey respondents worked. Eighty eight percent of respondents reported that they worked in only one CHB area.

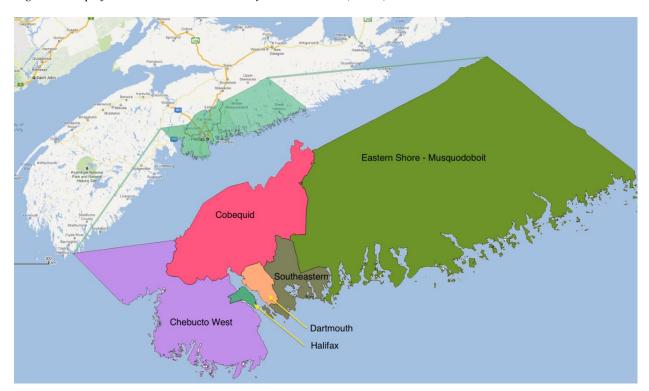


Figure 1: Map of Nova Scotia and Community Health Boards (CHBs)



Table 1: Number of Survey Respondents Working in One or More Community Health Board

Number of Community Health Boards	Number of Respondents
1	49
2	2
3	5
6 (all CHBs)	9
Total	65

Table 2 shows the number of survey respondents who worked in each CHB. Please note that some survey respondents worked in multiple CHBs.

Table 2: Number of Survey Respondents Working in Each of the Six Community Health Boards

Community Health Board	Number of Respondents Working in the CHB
Dartmouth	28
Halifax	28
Chebucto West	18
Eastern Shore - Musquodoboit	16
Cobequid	13
Southeastern	11
None identified	8
Total	122

The CHBs of Halifax and Dartmouth were most represented by the survey respondents. The Cobequid and Southeastern CHBs had the lowest representation. Eight survey respondents did not identify any work CHB, indicating they were unemployed.

Description of Drug Use in the Halifax Regional Municipality

Seriousness of the Drug Problem

Table 3 summarizes the responses to questions that asked survey respondents to describe how serious of a problem individual drugs have been in the HRM.



Table 3: Survey Respondents' Beliefs about the Seriousness of Drug Use Problems in the HRM in the Past 12 Months

Drug	Very	Somewhat	Very or somewhat	Not at all	Don't
(n=number of	Serious	Serious	serious (combined)	Serious	Know
respondents)	(%)	(%)	(%)	(%)	(%)
Alcohol (n=52)	77	15	92	2	6
Cocaine/Crack (n=59)	41	47	88	0	12
Cannabis (n=56)	38	46	84	9	7
Prescription Depressants	52	28	80	0	20
(n=54)					
Illicit Methadone (n=51)	20	37	57	2	41
Non potable (49)	12	37	49	14	37
Prescription Stimulants	13	34	47	11	42
(n=53)					
Illicit Amphetamines	14	29	43	18	39
(n=51)					
Hallucinogens (n=54)	4	26	30	26	44
Steroids (n=50)	2	24	26	20	54
Heroin (n=51)	2	20	22	43	35
Inhalants (n=50)	2	18	20	28	52

Ninety-two percent of respondents indicated that alcohol was a serious problem in the HRM while Inhalants were least reported as problematic at 20%. It should be pointed out that participants were asked to evaluate the problem associated with a drug on a drug by drug basis and did not rank the entire group at once. A higher percentage of survey respondents chose "Don't Know" when asked about the seriousness of drug use problems.

Seriousness of the Prescription Opioid Problem

Table 4 summarizes the responses to survey questions that asked respondents to describe how serious a problem individual Prescription Opioids have been in the HRM. Eighty-eight percent of respondents indicated that hydromorphone (e.g. Dilaudid) was a serious problem while meperidine (e.g. Demerol) was least reported as being problematic at 20% in the HRM.



Table 4: Survey Respondents' Beliefs about the Seriousness of Drug Use Problems for Individual Prescription Opioids in the HRM in the Past 12 Months

Drug	Very	Somewhat	Very or somewhat	Not at all	Don't
(n=number of	Serious	Serious	serious (combined)	Serious	Know
respondents)	(%)	(%)	(%)	(%)	(%)
Hydromorphone (e.g.	63	25	88	0	12
Dilaudid) (n=57)					
Oxycodone (e.g.	51	35	86	4	10
OxyContin) (n=57)					
Morphine (n=56)	32	45	77	2	21
Codeine (n=57)	9	42	51	12	37
Fentanyl (n=57)	7	19	26	20	54
Meperidine (e.g. Demerol)	4	16	20	25	55
(n57)					

Eighty-eight percent of respondents indicated that hydromorphone (e.g. Dilaudid) was a serious Prescription Opioid problem while meperidine (e.g. Demerol) was reported as being the least at 20%.

Community Health Boards Affected by Drug Use

Table 5 summarizes the overall survey respondents' beliefs about which CHBs are affected by problems associated with individual drugs. In the left hand column of Table 5, the individual drugs are listed along with the number of respondents who identified that drug as a problem in one or more of the CHBs. For example, of the 65 survey respondents, 42 of them identified cocaine/crack to be a problem in the HRM. Of these 42 respondents, 48% of them identified it to be a problem in the Dartmouth CHB while 14% of the 42 survey respondents identified cocaine/crack to be a problem in the Southeastern CHB. This is most likely attributable to the fact that a large number of survey respondents worked in the Dartmouth CHB area than did in the Southeastern CHB (see Table 2). Cannabis has been identified by 48%-52% of the 43 survey participants as a problem in all 6 CHBs.

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Table 5: Percentage of Respondents Identifying Problems in the Community Health Boards by Individual Drug Use

Drugs/Issues	Community Health Board					
(n = number of survey respondents identifying the drug as a problem in CHBs)	Dartmouth (%)	Halifax (%)	Chebucto West	Cobequid (%)	Eastern Shore (%)	Southeastern (%)
Cocaine/Crack cocaine (42)	48	49	28	16	14	14
Cannabis (43)	51	52	48	48	49	46
Prescription Opioids (38)	43	43	36	25	27	26
Prescription Depressants (30)	32	34	29	22	26	28
Non-potable substances (16)	8	19	6	3	5	3
Illicit Methadone (23)	26	30	17	8	8	8
Prescription Stimulants (15)	12	17	15	11	14	16
Illicit Amphetamines (15)	11	16	12	6	8	8
Hallucinogens (13)	14	14	15	14	17	12
Steroids (6)	6	6	9	6	6	6
Inhalants (6)	6	6	6	5	5	5
Heroin (6)	6	5	8	5	5	5

Some survey respondents recognized more than one CHB when identifying a given drug/issue.



Drug Purity and Pricing

Table 6 summarizes the responses to questions that asked respondents to describe changes in the purity and price of drugs in the HRM.

Table 6: Survey Respondents' Beliefs about Changes in the Purity and Price of Drugs in the HRM in the Past 12 Months

Drug	Increase	Decrease	Increase	Decrease	No	Don't
(n=number of	Purity	Purity	Price	Price	change	know
respondents)	(%)	(%)	(%)	(%)	(%)	(%)
Cannabis (n=54)	45	2	4	13	26	39
Prescription Opioids	18	7	15	2	18	51
(n=55)						
Prescription	18	2	16	8	20	49
Depressants (n=51)						
Cocaine/Crack	12	18	11	2	12	56
(n=57)						
Illicit Methadone	10	4	12	0	12	65
(n=48)						
Prescription	12	0	6	0	22	63
Stimulants (n=51)						
Illicit Amphetamines	5	0	8	2	20	62
(n=48)						
Hallucinogens	4	6	2	4	18	78
(n=50)						
Steroids (n=45)	4	2	0	4	11	82
Heroin (n=49)	0	4	4	6	18	65

Among respondents, Cannabis had the highest reported increase in purity (45%) and the greatest relative decrease in price (13%). From a supply and demand perspective, any time the purity of a psychoactive drug increases and its price decreases, a greater number of individuals may use the drug.

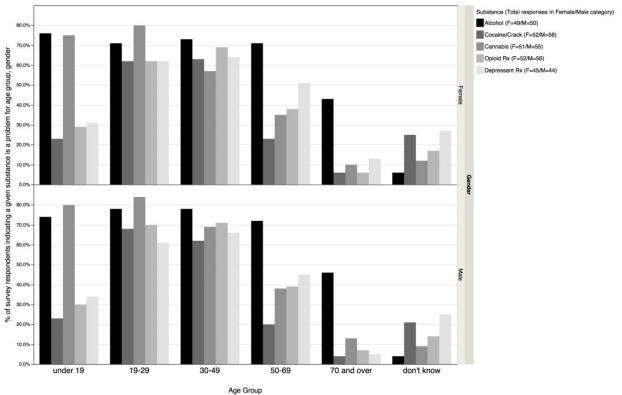
With regards to beliefs about changes in the purity and price of drugs in the HRM a large percentage of survey respondents selected the "Don't Know" option. The survey questionnaire did not provide respondents an opportunity to elaborate on why they may have chosen "Don't Know".



Age and Gender of Drug Users

Figure 2 summarizes the responses to questions that asked respondents to describe the typical users of drugs according to age categories and gender. Alcohol, Cocaine/Crack, Cannabis, Prescription Opioids and Prescription Depressants are represented in this Figure as they were most identified as serious problems (Described in Tables 3 and 4).

Figure 2: Survey Respondents' Beliefs of the Problems with a Given Substance by Age Group and Gender



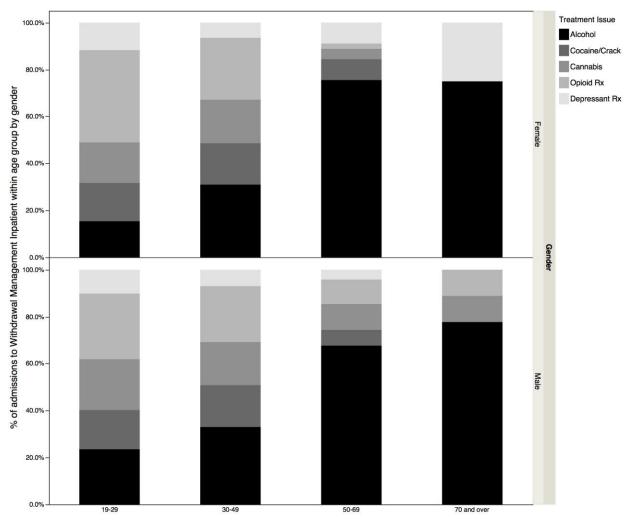
Given the small sample size, statistical comparison could not be made on this data. It would appear however that the profiles of problematic drug use vary according to age groups but not according to gender. For example in all individuals 19 years and under, alcohol and cannabis were perceived to be the most problematic while cocaine/crack, prescription opioids and depressants were less identified. This is in contrast to individuals 30-49 years of age where all 5 drugs were identified as being equally problematic.

Substance Use by Age and Gender in Clients Accessing Inpatient Withdrawal Management Services

Figure 3 displays the reported use of Alcohol, Cocaine/Crack, Cannabis, Prescription Opioids or and Prescription Depressants (same 5 drugs as shown in Figure 2) by age and gender for clients accessing Inpatient Withdrawal Management Services of Addiction Prevention and Treatment Services (APTS), Capital Health between April 1, 2011 and March 23, 2012. During this time period, there were individual clients admitted to the Inpatient Withdrawal Management Unit accounting for 823 admissions (i.e. some individuals were admitted more than one time during that time period).



Figure 3: Variation by Gender and Age Groups in Drugs Reported on Admission to Withdrawal Management Inpatient Services



Age Group

Clients who are less than 19 years of age are not admitted to the Withdrawal Management Unit of APTS and for that reason a less than 19 year age category is not depicted as shown in Figure 2. For the five drugs, the stacked bars in each of the age categories represent the drugs used alone or in combination with other drugs. There does not appear to be any difference between males and females in any of the four age categories in the use of the five drugs (alone or in combination). It does appear that for clients over 50 years of age admitted to the Inpatient Withdrawal Management Unit that alcohol is the most commonly used.



Pregnancy

Table 7 summarizes the responses to the question that asked survey respondents to describe increases in drug use by pregnant women in the HRM.

Table 7: Survey Respondents' Beliefs about Increases in Drug Use by Pregnant Women in the HRM in the Past 12 Months

Drug (42 survey respondents)	Percentage (%)
Don't know	69
Prescription Opioids	17
Alcohol	17
Cocaine/Crack	12
Prescription Depressants	12
Cannabis	11
Methadone	10
Hallucinogens	0
Heroin	0
Illicit Amphetamines	0
Inhalants	0
Non-potable	0
Prescription Stimulants	0
Steroids	0

Sixty-nine percent of respondents did not know if there had been an increase in drug use among pregnant women. None of the survey respondents believed there was an increase in use of Hallucinogens, Heroin, Illicit Amphetamines, Inhalants, Non-potables, Prescription Stimulants, or Steroids by pregnant women. Survey respondents believed that Prescription Opioids were the most common drug used amongst pregnant women at 17%.

Survey participants were asked to identify any increases in issues related to drug use among pregnant women, over the past 12 months. Of 15 respondents to this question, 60% indentified there had been increased need for medical care and access to treatment among pregnant drug using women, 53% reported increased involvement with the law and 40% reported an increase in the rates of Hepatitis C Virus infection.



Morbidity

Table 8 summarizes the responses to questions that asked survey respondents to describe increases in individuals accessing alcohol and drug treatment services and to medical services in the HRM.

Table 8: Survey Respondents' Beliefs about Increases in Individuals Accessing Alcohol and Drug Treatment Services and to Medical services in the HRM in the Past 12 Months

Drug	Increase in Individuals	Increase in Individuals
	Accessing Alcohol and Drug	Accessing Medical
	Treatment Services	Services in HRM
	(n=48 survey respondents)	(n=47 survey respondents)
Alcohol	44%	43%
Prescriptions Opioids	38%	28%
Don't know	38%	38%
Cocaine/Crack	31%	28%
Prescription Depressants	29%	23%
Cannabis	23%	11%
Prescription Stimulants	15%	11%
Illicit methadone	13%	10%
Illicit Amphetamines	12%	13%
Methadone	12%	13%
None of the Above	8%	4%
Non potable	6%	4%
Heroin	6%	2%
Hallucinogens	4%	2%
Steroids	4%	2%
Solvents	4%	2%

Alcohol (44%) was identified as the most common drug responsible for individuals accessing alcohol and drug treatment services while solvents (4%) was the least reported. Survey participants were asked to identify factors they believed may have accounted for increases in individuals accessing alcohol and drug treatment services. Included amongst the responses of 42 respondents were; decreases in the health and wellness of individuals (29%), poor public health policies (24%) and poverty (24%).

Alcohol (43%) was identified as the most common drug responsible for individuals accessing medical services while hallucinogens, solvents and steroids were the least reported (2%). Survey participants were asked to identify factors they believed may have accounted for increases in individuals accessing medical services. Included amongst the responses of 47 respondents were; decreases in the health and wellness of individuals (42%), poor public health policies (35%) and poverty (35%).



Mortality

Table 9 summarizes the responses to questions that asked survey respondents whether there had been any increases in drug-related deaths over the past 12 months.

Table 9: Survey Respondents' Beliefs about Increases in Alcohol and Drug-Related Deaths in the HRM in the Past 12 Months

Drug	Increase in Drug Related Deaths
	(n=46 survey respondents)
Don't know	50%
Prescriptions Opioid	39%
Alcohol	37%
Cocaine/Crack	22%
Prescription Depressants	22%
Illicit methadone	17%
Prescription Stimulants	9%
Illicit Amphetamines	7%
Cannabis	4%
Heroin	4%
Hallucinogens	0%
Non potable	0%
None of the Above	0%
Solvents	0%
Steroids	0%

Thirty-nine percent of survey respondents identified Prescription Opioids as being responsible for an increase in deaths in the HRM. Fifty percent of respondents indicated that they did not know whether there had been any increases. Survey participants were asked to identify factors they believed may have accounted for increases in mortality. Included amongst the responses of 39 survey respondents were; difficulty in accessing treatment (41%), decreasing health and wellness of individuals (36%) and poor public health policies (33%).

HIV and the Hepatitis C Virus Infections

Table 10 summarizes the responses to questions that asked survey respondents to describe whether increases in HIV and the Hepatitis C Virus cases in the HRM were attributable to alcohol and/or drug use.

Table 10: Survey Respondents' Beliefs about Increases in HIV and the Hepatitis C Virus Infections in the HRM in the Past 12 Months

Survey Questions	HIV	Hepatitis C Virus (n=44
	(n=45 respondents)	respondents)
Yes, alcohol related	0%	0%
Yes, drug related	7%	14%
Yes, drug and alcohol related	13%	11%
No, neither alcohol or drug related	4%	3%
Don't know	76%	70%



Drugs and alcohol use (7%-14%) were the most commonly reported factor associated with increase in HIV and the Hepatitis C Virus cases. None of the survey respondents believed that alcohol alone was attributable to their belief of an increase in HIV or Hepatitis C Virus infections in the HRM. However, some respondents believed that alcohol and drugs were contributing to an increase in these diseases which may reflect a perception that poly drug abuse, rather than single drug or alcohol use alone, was a casual. Further research is required to test this potential hypothesis.

Intravenous Drug Use

Table 11 summarizes the responses to survey questions that asked survey respondents to describe intravenous drug use in the HRM.

Table 11: Survey Respondents' Beliefs about Intravenous Drug Use in the HRM in the Past 12 Months

Question: Has there been an increase or decrease in intravenous drug use (IDU) in HRM					
over the past 12 months? (n=45 survey respondents)					
Response	(%)				
Don't know	56				
Increase	31				
No change	11				
Decrease	3				
Question: What drugs have been injected in HRM over that past 12 months? (n=46 survey					
respondents)					
Drug	(%)				
Prescription Opioids	67				
Cocaine/Crack	63				
Don't know	32				
Heroin	17				
Illicit methadone	15				
Question: Has there been an increase in risk	y behaviours (e.g., reusing dirty needles,				
having unprotected sex) by individuals injecting drugs in HRM over the past 12 months?					
(n=46 survey respondents)					
Response	(%)				
Don't know	67				
Yes	22				
No	11				

Thirty-one percent of respondents reported an increase in intravenous drug use, 3% reported a decrease, 11% reported no change and 57% reported they did not know. Prescription Opioids (67%) and Cocaine/Crack (63%) were the most commonly reported drugs being injected in the HRM.



Enforcement

Trafficking

Table 12 summarizes the responses to survey questions that asked survey respondents to describe changes in the trafficking of drugs in the HRM.

Table 12: Survey Respondents' Beliefs about Changes in Trafficking of Drugs in the HRM in the Past 12 Months

Drug	Respondents Reporting an	Respondents Reporting a		
	Increase in Trafficking	Decrease in Trafficking		
	(n=48 respondents)	(n=42 respondents)		
Prescription Opioids	48%	2%		
Cocaine/Crack	42%	2%		
Prescription Depressants	33%	0%		
Illicit Methadone	31%	0%		
Don't know	31%	67%		
Cannabis	29%	0%		
Illicit Amphetamines	29%	2%		
Prescription Stimulants	25%	2%		
Steroids	8%	5%		
Hallucinogens	6%	10%		
Heroin	4%	12%		
None of the above	0%	10%		

Prescription Opioids (48%) and cocaine/crack (42%) were the most commonly identified drugs associated with an increase in trafficking. Trafficking in Heroin (4%) as the least reported. Survey participants were asked to identify factors they believed may have accounted for increases in the trafficking. Included amongst the responses from 45 respondents were poverty (56%), lack/difficulty in accessing treatment services (53%), demand from consumers (47%), ineffective health policies (40%), and availability from suppliers (38%), unemployment (47%), and lack of affordable housing (33%).

Alcohol-Related Crime

Table 13 summarizes the responses to survey questions that asked respondents to describe issues associate with alcohol-related crime and its causes in the HRM.



Table 13: Survey Respondents' Beliefs about Issues Associate with Alcohol-Related Crime in the HRM in the Past 12 Months

Question: Has there been an increase in any of the following alcohol-related crimes in HRM over the past 12 months? (47 survey respondents)				
Response	(%)			
Don't know	45			
Traffic crimes	40			
Violent crimes	38			
Property crimes	36			
None of the above	0			
Question: What factors do you think are driving this increase? (45 survey respondents)				
Response	(%)			
Rates of alcohol use	51			
Lack/difficulty in accessing treatment	33			
programs				
Poverty	36			
Don't know	36			
Ineffective health policies	29			
Unemployment rates	27			
Lack of affordable housing	20			

According to survey respondents, traffic crimes (40%) were the most reported crime associated with alcohol use. The rate of alcohol use was the most commonly reported factor believed to attribute to increases in crime.

Nova Scotia Student Drug Use Survey 2007

The last Nova Scotia Student Drug Use Survey of grades 7, 9, 10 and 12 students was performed run 2007. Currently, Nova Scotia does not have a routine plan for the collection of student drug use data. Approximately 49.5% of students in the Capital District Health Authority (CDHA) reported consuming alcohol while approximately 31% of students reported using cannabis. Appendix D provides additional details on the past years use of other drugs by students living within the CDHA area.



Discussion

The Halifax Regional Municipality Drug Use Report 2012 is the first Report produced by the HRM Canadian Community Epidemiology Network on Drug Use site since 1997. Despite methodological limitations inherent in a survey questionnaire, the employment of a convenience sample and a short time frame to collect, synthesize and appraise the information, the Report is an important source of information in taking the first steps towards developing a better understanding of the current state of drug use in the HRM. Additionally, this Report will help in the identification of a network of individuals and organizations to re-invigorate site partners capable of contributing to and using information/data gathered by HRM CCENDU.

Information on the prevalence, trends and patterns of use among Canada's drug using populations is currently considered deficient. This may reflect, in part, the fact that the design of many national and provincial/territorial surveys (telephone based surveys) is exclusionary of the drug-using populations (e.g. persons in prisons, the homeless, persons using illicit drugs and who may be unwilling to divulge such information). An additional problem is that only a small number of people admit using illicit drugs, and this increases the possibility of sampling error. Other problems common to the interview process include selective responses and memory gaps. Given these limitations with national surveys in Canada, the HRM Drug Use Report 2012 provides valuable information on the context of drug use in the HRM.

The purpose of the Report is to collect and exchange current information on the drug using population in the HRM. This Report is not intended to provide comprehensive statistical information but rather to provide current perspectives on drug use patterns and trends in the HRM based on the knowledge and experience of front line workers, agencies and organizations. Although no statistical analysis could be performed on the data, it would appear that the responses from survey participants indicate their belief that alcohol, cocaine/crack, cannabis, prescription opioids and prescription depressants are the most problematic of the drugs surveyed and have the greatest affect on the neighbourhoods in the Community Health Boards of HRM. Many of the survey respondents commented on how interesting they found the survey and that it caused many to ponder about drug use trends in the HRM. This feedback from survey respondents provides an exciting opportunity not only to re-invigorate the HRM CCENDU site, but also for the uptake and participation in future HRM CCENDU survey questionnaires.

Drugs and alcohol use were the most commonly reported factor associated with respondent's beliefs about an increase in HIV and the Hepatitis C Virus cases in the HRM. The 2010 Surveillance Report of Notifiable Diseases in Nova Scotia reported 15 newly diagnosed cases of HIV in 2010 (rate of 1.6/100,000 population) bringing the cumulative number of new diagnoses since 1983 (when the first case was reported) to 753 (Nova Scotia Department of Health and Wellness, 2010). Five new cases of AIDS were reported in 2010, bringing the cumulative reports of AIDS in Nova Scotia to 344.

Survey respondents believed that Prescription Opioids and Cocaine/Crack were the most commonly reported drugs being injected in the HRM. In Canada, recreational injection drug use continues to be the predominant risk factor for the Hepatitis C Virus acquisition (due to sharing of needles, syringes, and other injection equipment), and is associated with 70-80% of newly acquired Hepatitis C Virus cases in Canada. In larger Canadian cities, the second largest risk factor is travel or residence to a Hepatitis C Virus-endemic region because of the higher rate of health care-acquired Hepatitis C Virus infections in these regions (Public Health Agency of Canada, 2009).



The Hepatitis C Virus was the third most frequently reported (298 cases; rate of 32/100,000 population) next to Chlamydia at 240 / 100,000 and Methicillin Resistant Staphylococcus Aureus infections at 96.3/100,000 (Nova Scotia Department of Health and Wellness, 2010). This is comparable to the 2009 Canadian rate of 33.7/100,000 population. The highest rate of the hepatitis C virus among the Shared Service Areas (SSAs) in Nova Scotia was in the Eastern SSA (Provincial Health Authorities) with a rate of 59.6/100,000 population, almost double the rate of the province overall. The rate of infection in the province was higher among males than females (45.1/100,000 population vs. 19.3/100,000 population, respectively. The 25-39 year age group had the highest rates of Hepatitis C Virus (70.9/100,000 population) when age group broke out rates.

For cases of Hepatitis C Virus reported in 2010 in Nova Scotia, 43.5% had a known risk factor for infection. Injection drug use (IDU) was reported as a risk factor for 77.3% of these cases. In Canadian cities participating in the Enhanced Hepatitis Strain Surveillance System (EHSSS), IDU was associated with 63% of all cases with known risk factor information between 2004 and 2008. Risk factor information is available for 45% of the 921 cases of acute infection reported to EHSSS between January 1, 2004 and September 30, 2008. Of the acute Hepatitis C Virus cases with known risk factor information, injection drug use (IDU) is associated with 63% of infections, 9% drug snorting, 14% sexual contact, 2% health care acquired (including blood transfusion, receipt of blood product, hemodialysis, surgery, and dental surgery), and 8% other (including occupational exposure to blood, household contact with Hepatitis C Virus carriers, incarceration without other risk factors) (Public Health Agency of Canada, 2009).

Survey respondents identified Prescription Opioids and cocaine/crack as the most commonly identified drugs associated with an increase in trafficking in the HRM. The 2007 Uniformed Crime Reporting Survey (Dauvergne, 2009) offers insights into the trends in police reported drug offences by type of drug, for the provinces and territories. In that year, British Columbia had the highest rate at 653.7 drug related offenses / 100,000; Prince Edward Island had the lowest rate at 142.1 / 100000 population. The Nova Scotia rate was 268.3 with the national average at 305.3. Drug offence rates in Yukon, Nunavut, and particularly the Northwest Territories; also tend to be considerably higher than the national average.

With respect to Police-reported drug offences by type of drug, the national rate for cannabis is 189.6 / 100000; cocaine is 69.2 / 100,000; heroin is 2.4 / 100000 and other drugs are 44.1 / 100000 (Dauvergne, 2009). These rates in Nova Scotia per 100,000 for cannabis, cocaine, heroin and other drugs are 193.0, 37.7, 0.0 and 37.6 respectively. In accordance with the province as a whole, relatively high rates of drug offences are found in the census metropolitan areas (CMA) of Vancouver, Victoria and Abbotsford Along with Trois-Rivières and Gatineau, these cities have reported the highest rates in Canada for the past five years (Dauvergne, 2009). The rates in Vancouver and Victoria have been among the highest in the country since 1991, when CMA statistics first became available.

Future versions of the survey could be designed to afford participants more opportunity to provide context to the response "Don't Know" to some of the questions. For example, for questions regarding drug purity and pricing, between 39% of respondents for cannabis to 82% of respondents for Steroids answered "Don't Know". It might be worthwhile to explore the feasibility of having some survey questions only answered by certain respondents. Law enforcement personnel and drug users may be better able to comment on purity than say for example, treatment providers.



Of note is the fact that some participants were responding to increases/decreases in purity of the Prescription Opioids, Depressants and Stimulants. The Prescription Opioid hydromorphone (Dilaudid) is available in a variety of strengths. If there was an increase in the 4mg Dilaudid tablets on the street when the 2mg Dilaudid tablets where the most prevalent previously, respondents may indicate an increase in purity. However, this is an increase in strength of hydromorphone on the street, not purity. Another issue with the questionnaire was related to seriousness of the drug problem. It may be feasible that participants may not be aware of the signs and symptoms of problematic substance use for particular drugs. This may account for the relative low response rates for the seriousness of Steroids, Inhalants, and Hallucinogens. This affords a great opportunity for the synthesis and exchange of drug information amoungst the partner organizations in the HRM CCENDU network.

While several sources of data regarding alcohol, drug and other substance use (and consequences) exist, there is clearly a need for better collection and consolidation of information that the CCENDU network may be able to contribute to. Future HRM CCENDU Report should consider drawing upon information from CIHI and Vital Statistics to combine with the survey responses to improve the mortality and morbidity. However, these data sources are not without their limitations as the accuracy, specificit5y and completeness of the information needs to be improved upon.

Limitations

It is important to point out that the recruitment of a convenience sample, rather than a stratified sampling procedure with the HRM resident population, has both strengths and limitations. The obvious limitation is that the current sample (65 survey respondents) is not generalizeable to or representative of the general population of the HRM. However, given that the aim of this report is to identify in an efficient manner what has been experienced "on the streets of the HRM" over the past year, the respondents were selected for their expertise. It follows that the data represent their individual (and their colleagues' and clients') collective experience.

One population that may have been underrepresented in this sample are individuals attending post secondary educational institutes within the HRM. The HRM is home to 5 Universities and a provincially run family of Community Colleges. Collectively individuals attending these institutions number approximately 40,000 or 10% of the HRM population. Given that the rate of drug and alcohol use is known to be high in this population future administrators of this survey should strive to ensure representation in their participant sample.

An additional limitation is that the majority of data presented relies only the knowledge of the survey respondents to specific questions which may be comprised of their opinions, beliefs, and perceptions which are all subjective. An example of this limitation is presented by the use of the term "problem" in the questionnaire. Individuals were asked how serious a problem various substances were based on the use of the term "problematic substance use," which is generally understood to mean dependent or recreational use that can lead to or causes social, psychological, financial, health and/or legal problems for individuals and communities. Because this term is subjective (i.e., problematic because use is widespread versus because of consequences to users), interpretation may not be straightforward. Future versions of the questionnaire will address this by providing the general definition.



Conclusion

The responses to the HRM CCENDU site questionnaire indicate that alcohol, drug, and other substance use are problematic. Alcohol, cocaine/crack, cannabis, prescription opioids, and prescription depressants are primary substances of concern. The results indicate that all ages and gender are affected by drug and alcohol related harms. The HRM is comprised of 6 Community Health Boards. While certain drug related issues are common to all Health Boards, the Halifax and Dartmouth CHBs were identified by survey respondents as being most affected by drug use. This Report will serve as an important resource in taking the first steps towards developing an understanding of the current state of drug use in the HRM and identifying a network of individuals and organizations to reinvigorate the HRM CCENDU site.

Recommendations

Despite methodological limitations inherent in a survey questionnaire of this type, this Report was successful in taking the first steps towards developing a better understanding of the current state of drug use in the HRM and identifying a network of individuals and organizations to establish a future HRM CCENDU. The recommended next steps include:

- 1. The Manager, Pharmacology, Research and Quality Services, Addiction Prevention and Treatment Services, Capital Health to become the Coordinator for the Halifax Regional Municipal CCENDU site.
- 2. The Site Coordinator to distribute the 2012 Halifax Regional Municipality Drug Use Report 2012 to the organizations that participated in the survey questionnaire.
- 3. The Site Coordinator to identify a list of organizations and individuals to distribute the Report to who may benefit from the information of the Report.
- 4. The Site Coordinator to schedule a meeting(s) to present the finding from the Report to organizations who participated in the survey questionnaire and to discuss mechanisms to re-invigorate and stimulate the HRM CCENDU site.



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Appendix A: Survey Questionnaire

For a copy of the survey questionnaire, please contact

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Appendix B: Drug use in the Past 12 months in Students in Grades 7, 9, 10 & 12 in Nova Scotia and in the Capital District Health Authority (CDHA)

	Nova Scotia				
Drug	Grade 7	Grade 9	Grade 10	Grade 12	CDHA
Alcohol	12.3 ± 3.6 *	49.3 ± 4.7	63.4 ± 4.7	80.5 ± 3.8	49.5 ± 3.5
Cannabis	5.6 ± 2.6	31.4 ± 4.8	38.9 ± 6.0	53.1 ± 5.5	30.6 ± 3.8
LSD	1.4 ± 0.9	3.9 ± 1.7	3.8 ± 1.7	5.5 ± 2.4	2.8 ± 1.2
Methamphetamine	1.1 ± 1.0	2.4 ± 1.4	2.2 ± 1.6	0.8 ± 0.9	2.0 ± 1.3
MDMA (Ecstasy)	0.8 ± 0.7	6.7 ± 2.0	8.6 ± 3.1	11.3 ± 4.2	5.3 ± 2.0
Cocaine or crack	1.5 ± 1.0	4.1 ± 1.6	3.9 ± 1.6	7.9 ± 3.6	4.1 ± 1.6
cocaine					
Inhalant	6.5 ± 2.6	7.2 ± 2.7	2.7 ± 1.4	1.2 ± 1.1	5.0 ± 1.8
Non-medical use	1.1 ± 1.0	1.6 ± 0.9	2.4 ± 1.4	1.5 ± 1.2	1.6 ± 0.9
of steroids					
Non-medical use	2.5 ± 1.7	7.9 ± 3.3	7.4 ± 2.1	8.2 ± 3.4	6.9 ± 2.3
of amphetamine					
or					
methylphenidate					
Non-medical use	1.2 ± 1.1	3.5 ± 1.8	4.7 ± 1.6	2.5 ± 1.5	3.8 ± 1.5
of tranquillizers					

^{*:} % ± 99% CI

Adapted from:

Poulin, C., & Elliott, D. (2007). Student Drug Use Survey in the Alantic Provinces: Atlantic Technical Report. Retrieved on March 23, 2012 from http://www.health.gov.nl.ca/health/publications/atl_tech_report_2007_web_cover.pdf.