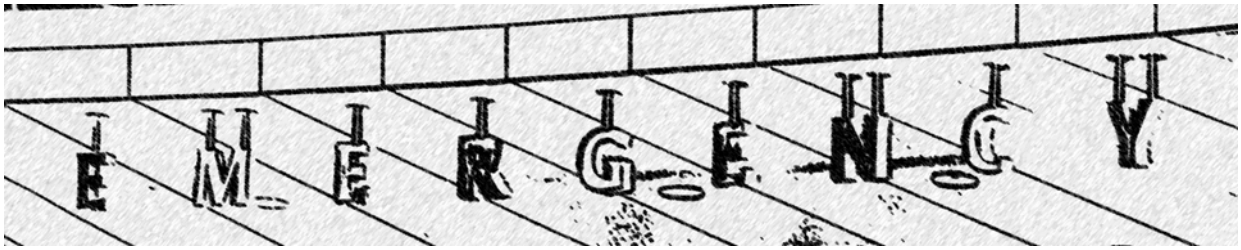

Saving Lives: Overdose Prevention & Intervention Projects in Select North American Cities

September 2008

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This report is available at: www.preventingcrime.net

Foreword

The acknowledgement of substance use and addiction as a critical risk factor for crime and victimization continues to be one of the issues being addressed by the Community Safety & Crime Prevention Council and its Substance Abuse Committee. The development of evidence-based policies and programs that can reduce drug-related crimes are critical to enhancing the well being of all citizens and service providers within the Waterloo Region community

In response to concerns about drug-related overdoses from the community and in an effort to inform the development of an Integrated Drugs Strategy, an ad hoc Overdose Prevention and Intervention Project (O.P.I.P.) was developed early in 2008. Comprised of two students from the School of Social Work at Wilfrid Laurier University- Jamie lee Bell and Julia Weisser- and CS&CPC staff, the project sought, in the absence of any local data, to:

a. understand the extent and typology of drug-related overdoses locally
b. scan other communities for programs and practices that addressed overdose issues

The first report, ***A First Portrait of Drug-Related Overdoses in Waterloo Region*** (Bell & Parkinson, 2008), provides the first glimpse at the type and extent of drug-related overdoses locally. Using secondary data from area hospitals, the Coroner's Office and Emergency Medical Services, the report provides some baseline data for people seen by the Coroner's Office and/or emergency medical services. It does not include people who did not seek medical assistance.

A First Portrait of Drug-Related Overdoses in Waterloo Region provides two recommendations. The first is for on-going data collection and monitoring of overdose incidents in Waterloo region. The second recommendation speaks to the development of an overdose prevention-intervention program. Both are potential elements of an Integrated Drugs Strategy.

This report, ***Saving Lives: Overdose Prevention and Intervention Projects in Select North American Cities***, in addition to responding to community concerns and informing the Integrated Drugs Strategy, enhances the knowledge base of recommendation number two in the first report by identifying key elements of programs that prevent and reduce drug-related overdose incidents.

The Overdose Prevention and Intervention Project is limited to the reports, training opportunities during the 2008 In The Mind's Eye program and consideration of overdose issues during the development of the Integrated Drugs Strategy.

Interest in the provision of overdose training locally appears to be strong. The development of an on-going overdose program is one that now rests with area service providers and citizens. We hope that this report assists in saving lives and reducing harm.

Saving Lives: Overdose Prevention and Intervention Projects in Select North American Cities

Julia Weisser and Michael Parkinson, September 2008

Introduction

Among people who use drugs, overdose is a common yet preventable cause of injury, including death (Pollini et al, 2006). In Canada, it is estimated that there have been between 500 and 1,000 overdose deaths per year since the mid-1990's (Fischer et al, 2004). Popova et al (2006) report 1,695 deaths due to illegal drug use in Canada in the year 2002.

In Waterloo Region, recent estimates place calls to Emergency Medical Services (E.M.S.) due to an overdose at 547 in 2006. There were approximately 28 deaths due to overdose in the same year. From 2004-2008, an average of 669 overdose incidents were reported by the three local hospitals (Bell & Parkinson, 2008). These figures are gleaned from coroners' reports, E.M.S. and hospital data. The actual incidents are almost certainly higher since many overdoses are not seen by medical authorities or, if seen at the hospital or by the coroner, are reported in such a manner that does not account for substance use as the instigating factor; a cocaine overdose that caused heart failure is one such example.

The intent of this report was to identify and describe programs whose aim is to a) prevent overdose for people using illicit drugs and/or b) provide intervention strategies when someone is overdosing. An environmental scan was conducted, including a literature review and key informant interviews with five service providers in four North American cities. To gauge interest amongst Waterloo Region service providers, a local key informant survey was undertaken.

Saving lives and preventing injury is the primary goal of the overdose prevention and intervention programs surveyed. It is a pragmatic approach informed by harm reduction theory and practice; it acknowledges the fact that people use drugs but also that they can learn how to use them as safely as possible. There are definite ways to reduce the risk of overdose, injury and death. The literature and the key informant interviews suggest overwhelmingly that overdose prevention and intervention strategies work. Additionally, both support the idea that people who use drugs are interested in and capable of reducing the risk, as well as coming to each other's aid in the event of an overdose.

Beyond reducing injury and saving someone's life, part of the rationale in other communities for developing overdose programs is the reluctance of people who use drugs to call for an ambulance. This is particularly pertinent in communities where such a call brings the risk- real or perceived- of being arrested. In Waterloo Region, a 911 call triggers all three first responders- ambulance, fire and police- and the priority is treating the victim.

About half of the people who use drugs who were interviewed for the *Baseline Study of Substance Use, Excluding Alcohol in Waterloo Region* indicated that they thought their social network would not seek medical assistance on their behalf. Of those who thought their social

network would seek medical assistance on their behalf, respondents indicated that only some of the time would they expect the caller to remain with the victim at the scene.

Programs and policies that prevent, reduce or eliminate the harms of problematic psychoactive substance use are important crime prevention tools. They combine the expertise and experience of health, social and community systems.

Overdoses: An Overview

What Happens in the Body

Physiologically, an overdose happens when the level of a drug or a combination of drugs is so high that it becomes toxic, at which point the body is overwhelmed (D.O.P.E. project, 2008). Depressants (such as opiates, benzodiazepines, and alcohol) slow down the central nervous system, which results in slow breathing, changes in blood pressure and heart rate. Therefore, a depressant overdose (for example, an opiate overdose) can slow breathing to the point of loss of consciousness, coma, or death (D.O.P.E. project, 2008). Stimulants (e.g. speed, cocaine, ecstasy) have the opposite effect, and thus can result in seizure, stroke, heart attack or death (D.O.P.E. project, 2008).

One of the reasons that overdose intervention strategies often focus on opiates is because there is more opportunity for intervention and reversal than there is for stimulants such as cocaine (Scott, 2008; Enteen, 2008). In the event of an opiate overdose, rescue breathing and/or naloxone administration can save a person's life; unfortunately, there is little that can be done in the event of a cocaine overdose. For this reason, it is important to concentrate on prevention when discussing stimulant overdose.

Risk Factors for Overdose

Studies suggest that in terms of heroin overdoses, those who are most likely to die are male, have been dependent on heroin long-term, are older (although younger people overdose more often, they less frequently die as a result), are not in treatment for substance use, and also use alcohol or benzodiazepines (D.O.P.E. project, 2008; Sporer & Kral, 2007). Other risk factors may include "an increased use of benzodiazepines or tricyclic antidepressants, and issues with social marginalization such as polysubstance abuse, incarceration, or homelessness" (Sporer & Kral, 2007).

Several risk factors exist for <u>all</u> drug overdoses. This knowledge should be an integral part of overdose prevention education. Risk factors include:

- Mixing drugs (licit and illicit),
- Using alone,
- Using in an unfamiliar environment,
- Using after a period of abstinence (including treatment programs and prison),
- Using from an unknown source or a new dealer, and
- Using without testing first.

The Relevance of Substance(s) Used

Although the extent of overdose incidents is difficult if not impossible to precisely ascertain, Pollini et al (2006) indicate that "drug overdose is a leading cause of death among illicit drug users" (p.261). Opiate overdose in particular has increased dramatically in the Western world in the past decade, including the United States, parts of Europe and Australasia (Maxwell et al, 2006). Several North American cities including Chicago, New York, San Francisco, Baltimore, Boston, Vancouver, Edmonton, and Toronto have identified overdose as a serious problem worthy of intervention. Interventions can take various forms depending upon the community context, the kind substances used, and the methods of administering substances, among other considerations.

Overdose prevention and intervention can focus on any number of drugs, including stimulants and depressants. Drug overdoses are often the result of mixing drugs, and so any comprehensive overdose prevention strategy should educate people who use drugs about the effects of mixing certain drugs together, both licit and illicit. The majority of the literature concentrates on opiates, particularly on the effects of naloxone on the body during an overdose (see "naloxone" in the next section).

Overdose prevention and intervention programs can be tailored to individual communities by focusing efforts on the most commonly used substances. The recent *Baseline Study of Substance Use, Excluding Alcohol in Waterloo Region* suggests that "crack, cannabis, and prescription opioids are the most prevalent drugs in Waterloo Region, with indications that the use of crystal methamphetamine is increasing and use of heroin may be decreasing" (Region of Waterloo Public Health, 2008, p. 11). Data also suggests that Ontario secondary school students "were more likely to have tried opiates for non-medical purposes than they were to have smoked cigarettes" (Region of Waterloo Public Health, 2008, p.17). Researchers with Rockefeller University confirmed this week in *Neuropsychopharmacology* that the use of painkillers during childhood (e.g. Oxycodone) increases the predisposition of a person to opiate dependency in later life.

Although there is evidence to suggest that heroin use may be decreasing in Waterloo Region, misuse of prescription opioids continues to be a cause for concern (Region of Waterloo Public Health, 2008). Additionally, according to the local Ontario Addictions Treatment Centre, methadone treatment for prescription opioid use vastly exceeds treatment for heroin use (methadone is a synthetic substitution opioid used to stabilize people dependent on opioids).

Any comprehensive overdose program should address overdose issues for several drugs, and the mixing thereof. While there have been no reported overdoses from cannabis itself, when it is combined with other drugs it can be a contributing factor. Crack, cocaine and other stimulant overdoses leave little room for overdose recovery. Thus, this is a key area for prevention training, and should include the importance of calling 911.

Finally, since psychotropic drugs are ranked high in overdose incidents at local hospitals, further consideration about how to prevent and reduce these overdoses is needed. Such consideration was beyond the scope of this report and psychotropic drugs did not appear overtly in the overdose programs surveyed.

Opiate overdoses offer both prevention and intervention opportunities. The (recreational) use of opiates locally appears to be significant, and as noted earlier, much of the literature focuses on opiates and the use of naloxone. Indeed, three of the four overdose programs we surveyed include it as part of their training. For these reasons, and because the use of naloxone shows promise elsewhere but has received little attention in Canada, it is discussed in greater length below.

Literature Review: Naloxone

Naloxone, commonly called "Narcan", is an opiate antagonist that is routinely administered by paramedics in the event of an opiate overdose (see appendix for fact sheet). Naloxone works by binding to the opioid receptors in the brain, tricking the brain into thinking that there are no opiates in the body (D.O.P.E. project, 2008). Naloxone causes withdrawal symptoms in a person with an opiate dependency, but has no other effect in and of itself (Bigg, 1999). It can "reverse" an overdose by speeding up a person's breathing and this effect lasts for up to one hour (Bigg, 1999).

The idea behind prescribing and distributing naloxone to people who use drugs is to keep it on hand, not unlike an epi-pen used for allergies, in the event of an overdose (Piper et al, 2007). The legal issues surrounding "take-home" naloxone are complicated at best, due in part to the fact that it is likely to be administered by a third party (i.e. someone in attendance at an overdose) rather than by the person for whom it was prescribed. This has implications for physicians' malpractice insurance, among other potential risks (Carey, 2008). Prescription naloxone programs began in Europe before being made available in Australia and the United States; it is available over the counter in Turin, Italy (Sporer & Kral, 2007).

In the United States, the Food and Drug Administration has approved naloxone as a prescription drug. It is not a controlled substance but over-the-counter distribution is prohibited (Carey, 2008). Barriers to reclassifying it for over-the-counter distribution include a long application process, a lack of financial incentive for pharmaceutical companies, and political and public reaction (Carey, 2008). Certain cities and/or states in the U.S., for example San Francisco, New York, Chicago, Baltimore, and New Mexico, have made use of vague state laws to allow prescribing by physicians done "in good faith" (Carey, 2008). Some states also have laws that provide immunity from civil liability to non-health professionals by defining the use of naloxone as a first aid or emergency treatment (Sporer & Kral, 2007).

Recently, the United States Conference of Mayors unanimously agreed on a need for overdose prevention programs including support for naloxone distribution (Providence Daily Dose, 2008). Dramatic increases in U.S. overdose deaths attributable to non-pharmaceutical Fentanyl, a synthetic opioid, have also led to calls for overdose prevention programs (Centre for Disease Control, 2008). The above-mentioned cities currently have naloxone distribution programs for people who use drugs (Sporer & Kral, 2007).

In Canada, there are no clear-cut legal precedents to draw on that can assist with a dialogue about naloxone distribution programs. Streetworks in Edmonton recently became the first program in

Canada to prescribe naloxone to people who use drugs by involving a physician and a co-signing registered nurse (Griffiths & Taylor, 2008).

Naloxone Research Findings
A large number of studies have been conducted to evaluate:

- The effectiveness of naloxone distribution programs (Piper et al, 2007; Lenton & Hargreaves, 2000; Maxwell et al, 2006; Green et al, 2008; Seal et al, 2005; Galea et al, 2006),
- The risks versus the benefits of naloxone distribution (Bigg, 1999; Sporer & Kral, 2007);
- The knowledge, ability and willingness of people who use drugs to administer naloxone to their peers (Worthington et al, 2006; Wright et al, 2006; Sherman et al, 2008; Baca & Grant, 2007; Lagu et al, 2006),
- Physicians' knowledge of naloxone and their willingness to prescribe it to people who use drugs (Beletsky et al, 2006), and
- The potential for naloxone distribution to caregivers (e.g. family members) of people who use drugs (Strang et al, 2008).

Naloxone distribution programs are sometimes controversial. Several arguments against the programmes can be found in the literature, not the least of which is that naxolone is seen as "condoning" drug use. It has been suggested that if people who use heroin know that they have naloxone on hand, they will use drugs in a more cavalier fashion. However, there is little evidence to support this claim, and the unpleasantness of the withdrawal effects from naloxone alone is likely enough to preclude this from happening (Bigg, 1999).

Another common argument is that people who use drugs will not be able to intervene effectively in an overdose incident or would not be interested in doing so, particularly if they are "high" at the time (Lenton & Hargreave, 2000). Again, evidence does not support this claim; naloxone is a muscular injection and is not any more complicated to inject than heroin (Lenton & Hargreave, 2000). In fact, studies suggest that people who use drugs are interested in and capable of using naloxone effectively in order to save the lives of their peers (Lagu et al, 2006; Green et al, 2008). When properly trained, people who use drugs have been shown to have significant expertise in recognizing an overdose and intervening, including naloxone administration (Green et al, 2008).

It has been suggested that the improper use of naloxone could result in damage being done to the person, or that naloxone administration might preclude a call to emergency services (Bigg, 1999). However, Sporer & Kral (2007) report that emergency medical services are only called half of the time in the event of overdose. People who use drugs have many reasons for not calling emergency services, including fear of arrest and the mistaken belief that the person could be revived (Pollini et al, 2006). Other arguments against naloxone distribution programs include the small yet possible risk of complications and the potential for spread of disease due to unclean needle use (Sporer & Kral, 2007). Training programs that include proper naloxone administration have a high rate of success in preventing this risk.

Overwhelmingly, evidence points to the effectiveness and relative safety of naloxone distribution programs. Support for the effectiveness of the programs, aside from those points already mentioned, include: the need for new and innovative approaches, the fact that abstinence-based

approaches are likely to fail for some people who use drugs, the demonstrated success rates of existing naloxone programs, the potential for encouraging positive change in people's lives, and the fact that emergency services may arrive to late for a successful intervention if they are contacted at all (Sporer & Kral, 2007; Bigg, 1999). Additionally, naloxone programs build bridges to other health and social services traditionally not available to this population, a key crime prevention benefit. **Ultimately, the risks of naloxone distribution are small compared to the real potential for saving lives**.

There is overall agreement in the literature that any naloxone distribution program must include the following components:

- Education about the drug, and proper ways to administer and store it,
- A prescription provided by a licensed health care provider,
- Medical records of the prescription,
- Proper labelling and instructions provided with the drug, and
- A system for medication refills (Sporer & Kral, 2007).

Naloxone distribution is not a panacea but rather is most successful as part of an overall overdose prevention and intervention program. Such a program should include instruction in rescue breathing, education about risk factors (such as the ones mentioned on p.3), and information about what to do and what not to do in the event of an overdose.

Evaluation studies of naloxone distribution programs in the United States report positive outcomes with lives saved due to overdose reversals (Piper et al, 2007; Lenton & Hargreaves, 2000; Maxwell et al, 2006; Green et al, 2008; Seal et al, 2005; Galea et al, 2006). Key informant interview data from the study, presented below, further illustrate these successes. Any organization wishing to include a naxolone distribution program must consider potential liability issues. These can be made less threatening through effective community partnership and good communication, with a focus on evidence based approaches.

Key Informants Methodology

Sampling Strategy

Two sets of key informants were approached. The first included those external key informants involved with overdose programs outside of Waterloo Region. The second set of key informants consisted of local service providers.

We constructed the external key informant interviews with people or organizations known to have an overdose prevention and intervention program in North America. Key informants were contacted between May and July 2008. Throughout the process, key informants suggested other potential interviewees. The sampling strategy is best characterized as a combination of "purposive" and "snowball" sampling. In the time frame available, we conducted four interviews, three by phone and one by email, with service providers in Chicago, Illinois; Toronto, Ontario; San Francisco, California; and Edmonton, Alberta.

The local key informant survey was sent to service providers in the Waterloo Region in July. Forty-two people responded in the time provided (approximately two weeks).

Data Collection
The key informant interviews were designed to elicit relevant information in the areas of: programs offered (both prevention and intervention); use of Narcan/naloxone; administration; and reflection (see appendix C for interview results by section). The interviewees also had room to offer unsolicited comments, questions, and requests of the interviewers.

The local key informant survey was conducted online using the "Survey Monkey" tool, which allows the user to create, collect, store, and analyze survey results (www.surveymonkey.com).

Data Analysis
The results were reviewed for each question. Additionally, key themes from the key informant interviews were identified. These are presented below. The local key informant survey data analysis used descriptive statistics to review respondents' interest levels and willingness to take on an overdose prevention and intervention project.

Limitations

The small number of external key informants and the short time frame in which the research, while extremely informative, was conducted limits the results of the study. The findings should thus be seen as a first step in considering an overdose prevention and intervention project for Waterloo region.

Results

External Key Informants
Overall, the key informants from across North America overwhelmingly provided a picture of success. Challenges and recommendations were also identified and are included here. Key themes from the interviews include the importance of:

- Training both service providers and people who use drugs (using different curricula),
- Flexibility and brevity in program delivery,
- Allowing people who use drugs to voice their experiences when conducting lengthy trainings,
- Using peer trainers (people who use or have used drugs),
- Tailoring the program to fit the audience,
- Procuring core funding where possible,
- Collecting data, generating statistics, and evaluating the program in terms of number of lives saved, and
- Collaborating with the community including health care providers, police, service providers, the media, hospitals, emergency services, people who use drugs, and the community at large.

All four of the programs that were reviewed as part of this study combine overdose prevention and intervention into one training session. Two out of four trained both people who use drugs and service providers using different training programs; the other two focused only on people who use drugs. Three out of four programs offered brief (ranging from five to thirty minutes) training to people who use drugs. The other program, which lasted nine months and was conducted a total of ten times, offered comprehensive five-hour trainings. Three out of four programs prescribed naloxone to drug users, and all of these provided training on how to administer it properly.

Aspects of the various prevention and intervention trainings include:

- Basic CPR and rescue breathing,
- The physiology of overdose,
- Recognizing an overdose for various drugs,
- Myth-busting (including what not to do in the event of an overdose),
- Dispelling stereotypes about drug use,
- Introduction to naloxone; how to administer naloxone (including how much to give and how to monitor the person after injection),
- Results of mixing drugs (including pharmaceuticals),
- Risk factors for overdosing, and
- When and how to call emergency services, including barriers to calling.

Additionally, people who use drugs and are prescribed naloxone complete medical history forms, are given written resources to take with them including their prescription, and in Chicago they also watch a video (available at: http://www.anypositivechange.org/NALOXONE/) about administering naloxone.

All three of the programs that administer naloxone recommended it, citing it as "very beneficial to the community it directly and indirectly affects" (Griffiths and Taylor, 2008). This finding was in keeping with the literature review. Interviewees identified the need for a medical director/physician willing to prescribe naloxone, as well as the need for private funding if local government does not provide funding (for example, the Chicago Recovery Alliance relies on private donations for naloxone). Three out of four programs were funded primarily by local government, the fourth by the local health authority. Three out of four programs were able to secure core funding, while the fourth was funded by a grant and ceased after nine months' time (Toronto). All four programs had at least one full-time paid staff member, and the programs varied greatly in their use of volunteers, part-time workers, and peer trainers.

Interviewees were asked about the reaction to their program from local police, primary health care providers, service providers, local media, and the community at large. Overall, positive yet reserved reactions were the norm, although the amount of publicity and awareness that the programs received varied greatly. In Chicago, efforts were made to educate the police about naloxone. Primary health providers, service providers, and the community at large seemed divided in terms of support, largely dependent upon their philosophy towards drug use and addiction.

In terms of success, interviewees offered numbers of reported lives saved (315 in San Francisco since 2003; 820 in Chicago since 2003), successful collaborations with needle exchanges and other community services, and interest from other services and community partners. Challenges included securing funding, raising awareness about intervening in overdose incidents, engaging with the police and the medical community, legal restrictions on naloxone, lack of support for harm reduction services, cultural sensitivity and appropriateness, respectful and successful collaboration amongst community partners, allotting staff time to the program and, finally, program evaluation.

Finally, interviewees shared their tips for the creation of a successful program, including:

- Collaborate as early as possible,
- Gather as much data on reversals (lives saved) as possible from the clients and support the claim that you are saving lives,
- Expect delays from government and/or service agencies,
- Don't let support workers sit in on the training, because it may make people who use drugs uncomfortable,
- If you give out an honorarium, be clear about when you will give it out,
- Allow ample time for people to talk about their experiences with overdose,
- Be flexible and keep things as simple as possible,
- Provide accurate information,
- Tailor your trainings to the group,
- Educate about naloxone and why it is important, and
- Don't over-promise and under-deliver.

Local Key Informants

The local key informant survey suggests strong interest in overdose prevention and intervention from Waterloo region service providers. Of forty-two respondents to the Local Key Informant survey:

- Thirty-seven of forty-two participants (90.2%) indicated an interest in an overdose prevention-intervention program,
- 69% indicated this kind of program would be useful for their clientele,
- 88.1% indicated this kind of program would be useful for staff at their organization,
- 16.7% would provide resources to support an overdose program and 61.9% would consider doing so,
- 56.1% would host a training session.

Possibilities for Waterloo Region

As evidenced by the above interviews, overdose prevention and intervention programs can take many forms. The importance of using peer trainers was a recurring theme. The following is a summary of a "*Peer-Based Cascade Training Model*" (see appendix D for full description), informed by the work of Grant McNally (2005). It is a practical, feasible, cost-effective model that benefits both service providers and people who use drugs. It works under several assumptions: (1) that service providers and people who use drugs can work together to combine skills and experience; (2) that people will be willing to train their peers; (3) that people who use drugs will be more receptive to information that is provided on a peer-to-peer level; and (4) that the service providers and people who use drugs who go through the training will pass along the information to people around them. Each of these assumptions is supported by the literature as well as by the key informant interviews.

The Peer-Based Cascade Training Model

This training can dispel some of the inaccuracies, myths and assumptions that currently exist around what to do in the event of an overdose. The curricula would include the educational aspects identified in this study that are considered crucial and effective. First, interested service providers and interested people who use drugs collaborate to form two overdose prevention and intervention curricula (one for service providers and one for people who use drugs, although there will be similarities between the two). Second, the service provider and the drug user jointly provide training sessions with their peers, at which point other potential trainers will be identified to do the same at subsequent sessions. Additionally, the information will be shared informally with friends, family, and colleagues. Finally, it is anticipated that the information will be passed along in the community and may one day dispel myths and improve information and practices to prevent overdose incidents.

Next Steps

This report indicates that programs to prevent and reduce drug-related overdoses in other cities in North America are successful. The local key informant survey suggests strong interest from Waterloo region service providers in overdose prevention and intervention.

Interest from local service providers in overdose prevention-intervention training was affirmed in June as part of a survey to determine programming content for the Community Safety & Crime Prevention Council's *In The Mind's Eye 2008: Issues of Substance Use in Film + Forum* series. As a result, "Overdose Prevention and Recovery" training sessions will be held November 3 and 4 with Dr. Greg Scott from Chicago. This will provide an opportunity for service providers and others to take part in pragmatic training and learn more about operating an overdose prevention-intervention program.

Upon review of the report(s), key questions for local service providers and citizens to consider could include:

- Is there an opportunity to prevent overdoses in Waterloo Region?
- If so, where are the opportunities for collaboration, including resources?

- What might the model for service delivery look like?
- What might an overdose program and its implementation look like?
- What methods might be employed to evaluate effectiveness?

While the Waterloo Region Community Safety & Crime Prevention Council has a mandate to prevent crime by addressing risk factors for crime, and this most certainly includes drug-related crimes, our involvement with the Overdose Prevention and Intervention Project is limited to the two reports, training in the fall, and ad hoc consultation into the future.

The potential for preventing death and injury via drug-related overdoses now rests with citizens and service providers in Waterloo region.

As more than one key informant suggested to us, there is no need to wait to prevent the next overdose, the next death.

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Web Resources

Harm Reduction Coalition (D.O.P.E. & S.K.O.O.P. projects):
http://www.harmreduction.org/article.php?list=type&type=51

Canadian Harm Reduction Network:
http://www.canadianharmreduction.com/

Chicago Recovery Alliance:
http://www.anypositivechange.org

Streetworks in Edmonton:
http://www.streetworks.ca

In the Mind's Eye (Waterloo Region):
http://www.inthemindseye.ca/resources/resources.htm

Centre for Disease Control podcast:
http://www2a.cdc.gov/podcasts/player.asp?f=4913

National Public Radio : http://www.chicagopublicradio.org/Search.aspx?q=greg%20scott

Health Canada – Reducing the Harm Associated with Injection Drug Use in Canada:
http://www.hc-sc.gc.ca/hl-vs/pubs/adp-apd/injection/index_e.html

Breathe (the overdose game):
http://obeymiffy.com/breathe/

Harm Reduction Project, Salt Lake City, UT:
http://www.harmredux.org/overdose.html

New Mexico Department of Health Harm Reduction Program, Naloxone Distribution:
http://www.health.state.nm.us/hiv/Harm%20Reduction%20Program.htm

N.O.M.A.D. Not One More Anonymous Death/Overdose Prevention Project:
http://nomadoverdoseproject.googlepages.com/nomadhomepage

Appendices

A: Program literature

D.O.P.E. Project (San Fransisco):

OVERDOSE IS MOST COMMON WHEN:

- Your tolerance is down due to not using heroin or methadone – after incarceration, detox, or drug-free drug treatment.
- When drugs are mixed, especially heroin with other downers, like alcohol or benzos.
- When using alone – nobody is around to respond if you get into trouble.

WARNING SIGNS OF A HEROIN OVERDOSE:

- Can't be woken up by noise or pain (try yelling their name or "Narcan!" and rubbing your knuckles on their breastbone)
- Blue or ashy lips and fingernails
- Slow (less than 1 breath every 5 seconds) or shallow breathing
- Gasping, gurgling, or snoring
- Vomiting

If the person is conscious, but can't talk, try to keep them awake and watch their breathing.

MORE INFORMATION

Overdose Prevention
call toll-free:
1-866-STOP-ODS

Drug Treatment in California
call toll-free:
1-800-879-2772 or
1-800-662-4357

HIV Testing or Treatment in California
call toll-free:
1-800-367-AIDS (English/Spanish)
TDD 1-888-225-AIDS

D.O.P.E. PROJECT

Drug **O**verdose **P**revention & **E**ducation
is a program of the
Harm Reduction Coalition
1440 Broadway, Suite 510
Oakland, CA 94612
510.444.6969 x 16
dope@harmreduction.org

www.harmreduction.org

A medical professional prescribed this naloxone to the carrier. If you have questions, please contact:

OPIATE OVERDOSE PREVENTION AND SURVIVAL

When someone is overdosing...

remember to S.C.A.R.E. M.E.

Stimulation

- Try to wake them up by calling their name, shouting "Narcan!", shaking them, pinching their fingernails, or raking their breastbone with your knuckles.

Call 911

- If they don't respond to noise or pain, call 911. If you must leave the person alone to make the call, put them in the recovery position.*
- Give address/location
- Say, "The person is unconscious and not breathing."
- ***You don't have to say that any drugs are involved until the ambulance arrives.***

Airway

- Make sure nothing is blocking their airway, then watch their chest and put your cheek over their nose and mouth to feel for breathing.

Rescue breathing

- If they aren't breathing at least 1 breath every 5 seconds, tilt their head back, pinch their nose closed, and give one slow breath every 5 seconds until the paramedics arrive. Watch to see that their chest rises and falls with each breath.

Evaluate

- Are they any better?
- Can you get to naloxone (Narcan) and prepare it quickly enough that they won't go too long without your help breathing?

Muscular injection

- Prepare the naloxone and inject it straight into a muscle (upper arm, butt, or thigh)
- Keep breathing for them until the naloxone kicks in or the paramedics arrive

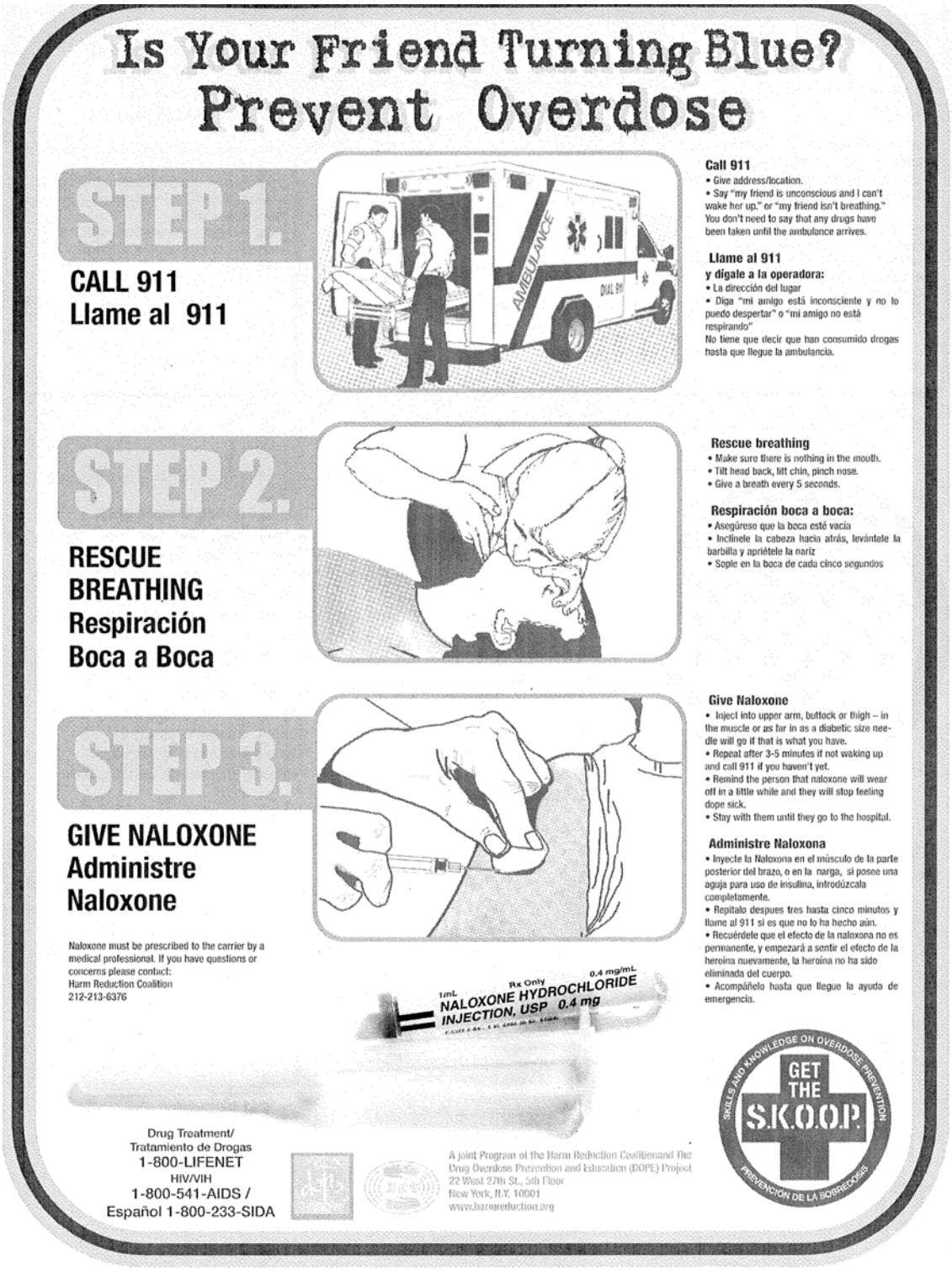
Evaluate & support

- Are they breathing on their own?
- If the first shot doesn't kick in after 4 minutes, give them a second dose of naloxone.
- Naloxone wears off in 30-90 minutes.
- Comfort the person – he/she will be dope sick from the naloxone. Try not to let him/her use more drugs until the naloxone wears off.

***RECOVERY POSITION**

If you must leave, give the person rescue breathing until you hear the ambulance sirens. Then, put the person on their side with their hands under their head. This way, if they vomit, they won't choke on it.

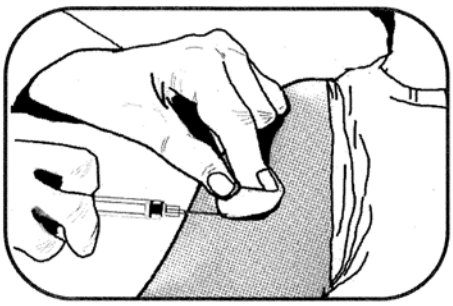
S.K.O.O.P (New York City).:




THE FACTS
Heroin and other Opioids
Heroin and other opioids are either derived from the poppy or made in a lab to have the same effects: euphoria and pain relief. If you take too much then you stop breathing and die.
Examples:
Heroin, codeine, morphine, methadone, oxycodone (Oxycontin, Percocet),hydrocodone (Vicodin), hydromorphone (Dilaudid) fentanyl (Duragesic).
What is naloxone?
Naloxone (Narcan) reverses heroin overdoses by blocking heroin (or other opioids) in the brain for 30-90 minutes. During that time enough heroin usually wears off so that the overdose is prevented.
Naloxone in Action
It wakes you up and makes you breath.
It doesn't get you high.
It does nothing to someone who isn't using opioids.
Routinely used by Emergency Medical Services.
It is over the counter in Italy.
Drug treatment and heroin overdose prevention: opioid maintenance
Methadone maintenance can decrease the risk of overdose by up to 75%.
Since the start of buprenorphine and methadone maintenance in France heroin overdose deaths have dropped by 79%.
If you are using heroin you might want to start methadone or buprenorphine maintenance treatment.
Reconociendo los síntomas y riesgos de la sobredósis
SKILLS AND KNOWLEDGE ON OVERDOSE PREVENTION
GET THE S.K.O.O.P.
PREVENCION DE LA SOBREDOSIS
La sobredósis es común cuando:
La tolerancia disminuye al no usar la heroína o metadona después de haber estado encarcelado o en un programa de rehabilitación de drogas
Se mezclan las drogas especialmente con alcohol o tranquilizantes
Se usa a solas o sin compañía
Reconociendo la sobredósis:
La persona está inconsciente, respira lentamente y no responde a:
Que le griten su nombre o la palabra "Narcan"
Que le froten los nudillos sobre el pecho.
Overdose is most common when:
Your tolerance is down due to not using heroin or methadone- after incarceration, detox or
drug-free drug treatment.
When drugs are mixed especially alcohol or benzos.
When you use alone.
Recognizing overdose:
Person is unconscious, breathing very slowly and doesn't respond to:
• Yelling their name or "Narcan!"
• Rubbing knuckles on the breastbone.
S.K.O.O.P.
Skills and Knowledge On Overdose Prevention is a program of the Harm Reduction Coalition 22 West 27th St. 5th Fl. New York, NY 10001 www.harmreduction.org
Drug Treatment/
Tratamiento de Drogas
1-800-LIFENET
HIV/VIH
1-800-541-AIDS /
Español 1-800-233-SIDA
S.K.O.O.P.
Skills and Knowledge On Overdose Prevention
is a joint program of the
Harm Reduction Coalition
22 West 27th St. 5th Fl.
New York, NY 10001
The D.O.P.E. Project
447 Turk Street
San Francisco, CA 94102
Ph: 415.775.7163 Fax: 415.775.7170
www.harmreduction.org

1. CALL 911
Llame al 911

2. RESCUE BREATHING
Respiracion de Boca a Boca



3. GIVE NALOXONE
Administra Naloxone

Is Your Friend Turning Blue?

SKILLS AND KNOWLEDGE ON OVERDOSE PREVENTION

GET THE S.K.O.O.P.

PREVENCIÓN DE LA SOBREDOSIS

A Program of the
Harm Reduction Coalition
22 west 27th St., 5th Floor
New York, N.Y. 10001
www.harmreduction.org

Drug Treatment/
Tratamiento de Drogas
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HIV/VIH
1-800-541-AIDS /
Español 1-800-233-SIDA

S.K.O.O.P.

Skills and Knowledge On Overdose Prevention
is a program of the
Harm Reduction Coalition
22 West 27th St. 5th Fl.
New York, NY 10001
www.harmreduction.org

This naloxone was prescribed to the carrier by a medical professional. If you have questions or concerns please contact:
Harm Reduction Coalition
212-213-6376

Riesgos y Reconociendo la Sobresosis

La sobredosis es común cuando:

La tolerancia baja al no usar heroína o metadona despues de estar encarcelado o en un programa de tratamiento de drogas.
Cuando se mezclan las drogas especialmente con alcohol y benzos.
Cuando se usa solo/a.

Reconociendo una sobredosis:

La persona esta inconsciente, respira despacio y no responde a:
· Que le griten el nombre ni "Narcan"
· Que le froten el nudillo contra el centro del pecho.

Risks & Recognition of Overdose

Overdose is most common when:

Your tolerance is down due to not using heroin or methadone- after incarceration, detox or drug-free drug treament.
When drugs are mixed especially alcohol or benzos.
When you use alone.

Recognizing overdose:

Person is unconscious, breathing very slowly and doesn't respond to:
· Yelling their name or "Narcan!"
· Rubbing knuckles on the breastbone.

Acción a tomar:

+ Evalua la respiración:

Mira, oye y toca, si no esta respirando llama al 911. Empieza la respiración de boca a boca o administrarle Naloxone.

+ Llama al 911 y dile a la operadora

· la dirección o lugar.
· "mi amigo esta inconsciente y no lo puedo despertar.",
o "mi amigo no esta respirando."
No tienes que decir que se han consumido drogas hasta que la ambulancia llegue.

+ Respiración de boca a boca

· Asegurate no hay nada en la boca.
· Inclina la cabeza hacia atrás, levanta la barbilla, aprieta la nariz.
· Sopla en los pulmones de cada cinco segundos.

+ Administra Naloxone

· Inyecta a la persona en el músculo de la parte posterior del brazo, las nalgas, o muslos o hasta lo mas profundo que llegue la aguja de insulina si es la única que tienes.
· Repítelo de cada 2-5 minutos si no despierta llama al 911 si es que no lo has hecho.

+ Después del Naloxone

· Recuerda que el Naloxone se desgasta. Acompáñalo hasta que vaya al hospital.

Actions:

+ Check breathing:

Look, listen and feel. If not breathing call 911 and start rescue breathing and/or give Naloxone.

+ Call 911

· Give address/location.
· Say "my friend is unconscious and I can't wake her up." or "my friend isn't breathing."
You don't need to say that any drugs have been taken until the ambulance arrives.

+ Rescue breathing

· Make sure there is nothing in the mouth.
· Tilt head back, lift chin, pinch nose.
· Give a breath every 5 seconds.

+ Give Naloxone

· Inject into upper arm, buttock or thigh – in the muscle or as far in as a diabetic size needle will go if that is what you have.
· Repeat after 2 minutes if not waking up and call 911 if you haven't yet.
* Remind the person that naloxone will wear off in a little while and they will stop feeling dope sick.
· Stay with them until they go to the hospital.

Chicago Recovery Alliance:

things to do in **recognizing** and **responding** to an **opiate/heroin overdose** using **naloxone**

fold

naloxone:

- is **not** a *Scheduled Drug* – it has no potential for abuse
- is also called Narcan®
- is a pure antidote to opiates including heroin – it reverses the effects of heroin for about an hour
- can cause withdrawal in a person with a habit
- withdrawal can harm someone
- does not eliminate heroin
- more than one shot may be needed to stop overdose
- has no effects of its own. using it without having opiates in you is like injecting water.
- overdose may return when naloxone wears off (about one hour)

fold

about

Naloxone is a medication prescribed for the reversal of opiate intoxication. The person possessing naloxone has been trained in its safe usage and has demonstrated competency in managing opiate/heroin overdose situations.

This program is designed to reduce the nearly 500 opiate-related overdose deaths in Chicagoland each year. Your cooperation is appreciated.

For more information, please contact:

Shawn DeLaney, M.D., F.A.C.E.P.
Project Medical Director
Chicago Recovery Alliance
3700 North Lakeshore Drive, Suite707
Chicago, Illinois 60613
312.953.1602

Saz Maxwell, MD
Physician Consultant
609 North Wells
Chicago, Illinois 60610
773.569.8997

things to do with an **opiate/heroin overdose**

Stimulation
can they be awakened?

Call for help
if the person is not responsive

Airway
make sure nothing is inside the person's mouth stopping the breathing.

Rescue breathing
breathe for them – two quick breaths every five seconds

Evaluate
are they any better? can you get **naloxone** and prepare it quick enough that they won't go for too long without your breathing assistance?

Muscular injection
inject 1cc of naloxone into a muscle

Evaluate+support
Is the person breathing on their own?
Is another dose of naloxone needed?
Naloxone wears off in 30-90 minutes.
Seek help and comfort him/her so he/she will not use any more drug until the naloxone wears off.

fold

wandereye communications | http://www.wandereye.com | wandereye@wandereye.com | design, photography, media

Things to do with an **opiate/heroin overdose** using **Naloxone**

Naloxone is a medication prescribed for the reversal of opiate intoxication. The person possessing naloxone has been trained in its safe usage and has demonstrated competency in managing opiate/heroin overdose situations.

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overdose may return when naloxone wears off (about one hour)

can cause withdrawal in a person with a habit

withdrawal can harm someone

for more information, please visit
www.anypositivechange.org
or call (773) 471–0999

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B: Program Administration
Streetworks (Edmonton):

Job Description (Draft)

Nurse Facilitator

Drug Strategy and Overdose Prevention Project

Drug Education Booklet

1. Engage a broad range of service users in conversations which explore their drug information needs.
2. Create a group of Natural Helpers consisting of 10 current and past drug users.
3. Hold 1-2 meetings per month to create drug information booklet, utilizing the expertise of the community members. Access refreshments, distribute honouraria and keep minutes.
4. Research drug information as needed.
5. Create booklet on computer using publishing program, including text and artwork.
6. Contact reviewers to vet the information for accuracy.
7. Contact potential printers for quotes and assess quality of work.
8. Acquire ISBN number.
9. Oversee printing process with chosen printing agency.
10. Plan distribution plan for booklets.
11. Evaluate process with Natural Helpers.
12. Evaluate booklet with service users and provincial programs.

Speaker's Bureau

13. Engage a broad range of service users in conversations which explore their needs in public speaking.
14. Create a group of Natural Helpers consisting of 8 current and past drug users who have a particular interest in teaching youth.
15. Canvass group to decide what areas they want more information about.
16. Create a curriculum.
17. Hold 4 hours of sessions to facilitate group learning and comfort. Distribute honouraria.
18. Seek 10-20 opportunities to speak to youth groups.
19. Arrange speaking engagements with Streetworks staff.
20. Evaluate process with speakers and youth groups. Document.

OD Prevention Program

21. Engage a broad range of service users in conversations which explore what drug information they to prevent overdoses.
22. Create a group of Natural Helpers consisting of 10 current and past drug users.
23. Hold 1-2 meetings per month to create overdose prevention awareness campaign, utilizing the expertise of the community members. Access refreshments, distribute honouraria and keep minutes.
24. Create culturally relevant resources.
25. Contact potential printers for quotes and assess quality of work.
26. Oversee printing process with chosen printing agency.

27. Plan distribution plan for resources.
28. Evaluate process with Natural Helpers.
29. Evaluate resources with service users and other provincial programs.
30. Liase with stakeholders as to the information needed for naloxone training.
31. Create curriculum, written information and cards.
32. Access naloxone from least expensive supplier.
33. Work with researchers in planning and carrying out research.
34. Train 50 service users in naloxone administration, using a variety of settings and styles.
35. Maintain monthly meeting of Natural Helpers to monitor progress of project on the street.
36. Consult with Royal Alexandra Emergency, Emergency Response Department and Edmonton Police Service managers to decide on best method of informing their department's personnel of this project and facilitating the role they want to play.
37. Provide inservices to the above departments as needed.
38. Monitor results and document experiences.

General

39. Work closely with Streetworks staff and maintain close communication with team.
40. Carry out evaluation process and provide required reporting documentation.
41. Access service users in a wide variety of settings and utilizing a variety of strategies.
42. Act as a resource to Natural helpers as needed.
43. Provide manager with monthly reports, hours, expense claims etc.
44. Participate in relevant committees.
45. Do presentations to stakeholders as needed.
46. Work closely with researchers to facilitate data collection.

Qualifications

1. Experience working with people and communities who have experienced poverty and addictions. Knowledge of injection drug use, and sex trade work. Knowledge of harm reduction, health promotion, primary health care and community development. Knowledge of community resources used by target population.
2. Current registration with the AARN.
3. Documented proof of a satisfactory Criminal Record Check, Child Welfare Information System check.
4. Valid standard First Aid Certificate and CPR.
5. Training in suicide prevention and non-violent crisis intervention.
6. Valid driver's license, driver's abstract and proof of 6A insurance.
7. If personal history includes addictions, must have been clean and sober for 2 years.

Reports to: Program Manager
Hours of Work: 37.5 hours per week

Drug Education and Overdose Prevention Project
August 2004
Streetworks - Edmonton

Introduction

.

Streetworks is currently a comprehensive and integrated HIV/AIDS/Hepatitis C prevention program, which utilizes harm reduction, health promotion and primary health care strategies. The mission of the program is "People who use injection drugs and/or work in the sex trade will have the harm reduction resources they need to be safe and healthy." The goal of the program, at the front-line level, is to provide or enhance the skills, knowledge, resources and support people need to lead safer and healthier lives. The program has a Council of high-level representation from 9 agencies, with the Executive Director of HIV Edmonton currently as Chair. Other Council members include the Boyle Street Co-op, the Boyle McCauley Health Centre, Catholic Social Services, Edmonton Police Service, the Northern HIV Clinic, AADAC, CHA (both Primary Care Services and Regional Public Health). The Council is responsible for policy-making, lobbying, consultation, and program direction. The program manager is responsible to the Council, and works most directly with the Chair. The program staff and the program manager operate as a team. Streetworks is not an incorporated agency.

Streetworks' current programs include the following:

-needle exchange & tool provision
-nursing services
-natural helpers
-advocacy
-health education
-referrals
-pharmacy & business program
-support for persons living with HIV
-ride-along program
-research and evaluation

Streetworks' geographical boundary is Edmonton; although there are high activity areas throughout the city, services are concentrated in the urban core due to high need and limited resources.

Streetworks serves street involved individuals who are injection drug users (IDUs) along with sexual partners and social networks, as well as individuals involved in the sex trade. In 2003, there were 22,269 visits and 834,354 needles exchanged. Characteristics of the population include: high level of alienation from mainstream resources, high unemployment, homelessness, involvement in illegal activities, involvement with the criminal justice system, strong attachment to non-traditional social networks, and generally less than optimal health. The following table identifies gender, age and race percentages for the time period of January to December 2003:

Gender		Age		Race	
Male	61.1%	Teens	4.5%		
Female	37.7%	Twenties	21.9%	Native	55.1%
Transgender	1.2%	Thirties	39.8%	Caucasian	41.9%
		Fifties+	9.4%		

For the past 14 years, Streetworks has been the only needle exchange program available to the residents of Edmonton. It runs out of 6 locations and operates a van for evening outreach work. There are 4 staff (2 nurses, & 2 outreach workers) in the core program, which is funded through the Alberta Community HIV Fund (ACHF) with a contribution for supplies by Capital Health Authority.

The work of Streetworks is guided by the following determinants of health:

Income and Social Status – Through "Natural Helpers", people gain new skills, respect, and increased self-esteem, as well as a small amount of money. Through working with mainstream service providers and doing presentations to professionals and students, there is a positive impact upon the image of IDUs and sex trade workers and decrease in stigmatization. Natural Helpers learn marketable skills, or learn things which spark a curiosity for learning more.

Personal Health Practices and Coping Skills – Streetworks strives to assist an individual attain their optimal level of health. Through harm reduction and primary health care strategies, people care more about themselves, are less chaotic, and are able to enhance their own good health practices.

Health Services – The successful delivery of nursing and allied health services, demonstrates the effectiveness of flexible, outreach-based services of the Streetworks program.

Culture – The program strives to remain appropriate while working within both the Aboriginal community and the street-involved culture.

Streetworks has also played a major role in educating professionals and the general public through presentations, conferences and media opportunities. Streetworks is an active member of the Alberta Community Coucil on HIV (ACCH) and the provincial Non-Prescription Needle Use (NPNU) Project. In deliberation with consultants in 1996-1997, Streetworks identified seven major outcome areas it expects to attain. At present, these outcomes include:

-Target population reached
-Target population cares about own health
-Target population cares about safety
-Target population gets involved in program goals
-Increased number of community agencies accept collateral responsibility for program
-Community agency responsiveness
-Community adopts safer practices

Need/Gap/Rationale Streetworks is Edmonton's Harm Reduction/needle exchange program and has been in existence since 1990, operating in Edmonton's downtown core. Streetworks has played a major role in the research conducted on IDUs through the Centre for Health Promotion Studies, headed by Dr. Cameron Wild. In the study entitled "Injection Drug Use in Edmonton's Inner City: A Multimethod Study", significant findings included the complexity of health issues, the role of polydrug use, the cultural nuances for this target population and the role of the Streetworks program in people's ability to prevent blood borne pathogens. The data at the CHPS site includes quotations about overdose experiences which will inform pieces of this project. The full report is available online at www.chps.ualberta.ca/publications/reports/reports.htm. Streetworks is also involved in the national OPICAN : Multi-site cohort Study of Untreated Illicit Opiate Users in Canada (Benedikt Fischer, PhD), which includes OD information. It demonstrates that the range for overdoses over the 6 months prior to interview to be between 12.8-20.6% nationally (appendix C). Another study Streetworks was involved in through Capital Health HIF evaluation demonstrated that connection with the Streetworks program decreased the number of ambulance calls, decreased the number of days spent in acute care beds and increased the number of visits to hospital emergency rooms (more appropriate use) over a five year period, highlighting Streetworks' effectiveness and connection to the target population. This report from Bob McKim is included (appendix D) entitled Streetworks Briefing Paper, Initial Internal Evaluation Results, January 2003.

Natural Helpers are individuals in a community who are naturally inclined to take care of the people around them. It is a concept we have used many times to develop all of our resources. Information on

Natural Helpers and some of the resources they have developed can be seen at www.streetworks.ca. The resources include posters, pamphlets, booklets (Vein Care, Street First Aid, Germs, and STD) and a video (Clean Points: Tips on Hepatitis C). Many of these resources have been utilized worldwide. We have always found that when we work with a community member group, the health of the group is greatly enhanced. Many people come to understand that they are valuable and intelligent, and often, this leads to people stabilizing their lives, becoming more moderate in their drug use, or quitting their drugs. Also highlighted is the thirst for knowledge demonstrated by community members. Over and over, this vulnerable population helps each other out, as they feel unable, unworthy or untrusting of the present systems. Enhancing their ability to care for themselves and each other underlines the principles of Population Health, Health Promotion and Primary Health Care.

Drug Information booklet. Harm Reduction based drug information is not easy to access. Some information is available on the Internet, but many of our street-involved community members do not have access to a computer or are not confident in their reading skills. Street knowledge can be helpful, but at times it has a number of misconceptions. Other sources of information often utilize a "scare-tactics" approach. Harm Reduction based information accepts that some drug use is a reality and that greater knowledge leads to safer, healthier and more responsible drug use. The combination of street expertise and nursing expertise creates a resource which is factual, culturally appropriate, current, and sometimes humorous. We would also address safer drug use during pregnancy, which is complimentary to the Alberta Health Sustainability program, which aims to decrease the negative effects of drugs on pregnancy. The booklet may also inform people about common mental illnesses, which have an impact upon their drug use.

Speaker's Bureau A group of the Natural Helpers has been eager to share their experiences with youth, hoping to dissuade drug use or create more knowledgeable drug users. Many youth are experimenting with drugs, and first hand knowledge on effects and pitfalls is an important piece in maintaining health. Often, they are taught how to do drugs by others. As well, the normal developmental stage in growth and development gives young people a sense of invincibility, and a need to test limits. The following 2 comments are from teens that spoke to the research assistant during the CHPS study:

Quotes:
Noah 16 years:
RA: "Have you ever ended up in the hospital from using?
Noah: " Yes."
RA: "What happened?"
Noah: Okay. There's three guys and then there's me, and I said, "I betcha I can smoke the same amount of crystal in a night as all three of you together." They smoked an ounce together in a night; I smoked an ounce to myself in a night. Four days later I'm in the hospital.
RA: So how'd you end up there? Someone called for you or?
Noah: No, I stopped breathing, and my heart stopped beating. My heart was sort of going I just kind of just stopped. And they seen me. I was just going like this, and then I just fell over, and I stopped breathing, and they're just like…
RA: SO when you came back, what'd they say?
Noah: They were like, "Holy fuck man. You could have done more." [laughs] My friends look at it like that. I'm just like, "No, man. I think I did just the right amount."

Noah:"No, my friends are like, "Do drugs 'till you die. You keep doing it, and if you die, you've obviously done too much. But if you come back from the dead, you could have done a little bit more." [laughs] My buddy did enough GHB for six thousand people."

Destiny, 16
Destiny: "Oh, yes. They're like, "Isn't this much better?" I'm like, "Yes, but don't push it." (LAUGHS) They're like little children with attitudes. It's like, "I'm not a child; I'm an adult."

RA: How old were you at the time?
Destiny: Twelve. I was an adult.

The community members who express a desire to speak with young people do not often have the experience of public speaking and worry about what they "should" say. A program that gave the "Speakers" a more structured way to make presentations, and additional knowledge about HIV, Hep C, OD, and safer drug use would be necessary. This group would then work with Streetworks staff to access youth, and help to inform their decision-making.

Overdose prevention and prevention of death by overdose There have been no specific Harm Reduction programs that relate to decreasing overdoses, or death by overdoses in the province to this date. In 2003, in Alberta, the Provincial Medical Examiner's office reports the following instances where a drug was significant enough to be measured on autopsy and considered the cause of death.

Drug	**# of deaths**
Methadone	39 (increasing over the past couple of years)
Oxycodone	49 (increasing over the past couple of years)
Morphine/Heroin	90
Codeine	75
Cocaine	100
Methamphetamine	12 (2 deaths so far to June, 2004)

Not all suspected overdose deaths have a toxicology screen – much depends on other circumstances, such as age of the individual at time of death. The numbers above are the documented minimum. The ME's office does not distinguish multi-drug use within these numbers. However, if you were to assume that each stat was an individual, we could say that Alberta loses 1 person per day to drug overdose.
The Royal Alexandra Hospital Emergency Department reports the following statistics for 2003:

Overdose Intent	**Total Patients**
Accidental Overdose	142
Intentional Self-Harm Overdose	81
Undetermined Intent Overdose	20

These numbers include opiates/narcotics, cocaine, cannabis, LSD and other hallucinogens.

When broken down to cocaine and opiates, the data shows the following:

OD Intent	**Cocaine**	**Opiate/Narcotic**	**Cocaine & opiate/narcotic**	**Total**
Accidental OD	37	95	6	**138**
Intentional Self-Harm OD	10	69	2	**81**
Undetermined Intent OD	6	12	2	**20**
Total	**53**	**176**	**10**	**239**

Other pieces of information to support this work being done, and being conducted by Streetworks includes:
– 54% of Streetworks clients are of Aboriginal descent (2003). This group is overrepresented in many areas in the province, including incarceration and HIV seroprevalence.
– 4.5% of Streetworks clients are 19 and under (2003). The study entitled "Cost Effectiveness of Streetworks' Needle Exchange Program of Edmonton", by Dr. Philip Jacobs et al, 1998, shows that 50% of IDUs started *injecting* drugs between the ages of 9 to 19 (the most common ages being 12 and 15). We are aware that the Streetworks program needs to access youth more fully, but it is difficult within the current legal climate and drug trends.
– 38.6% of Streetworks clients (2003) are street-involved women
- The Alberta Non Prescription Needle Use project, which includes a consortium of 39 agencies including federal and provincial representatives, has identified Harm Reduction programming as critical to reaching youth, persons of Aboriginal descent, and those with mental health issues. Overdose deaths have been identified as an emerging issue within the province.

Drug Education and Overdose Prevention Project - Streetworks

Project Summary

This project would include 3 parts, which are closely related and intersect on many levels.

The *development of a drug handbook* that explains drugs from a Harm Reduction perspective. There are specific aspects of drugs which users do not typically know and which could lead to safer drug use. Streetworks staff, a community pharmacist, and a group of current and past users, who are Natural Helpers, will create the booklet during a series of meetings over 6 months. It may also include topics we have not included in other resources, such as being pregnant and street involved, or having mental health issues. The handbook will be 35 – 50 pages in length. The program would need to print approximately 5,000 copies, as we would share this resource with the other Harm Reduction programs in the province.
The *development of a "Speaker's Bureau"* where present and past drug users take a course (4 x 1hour sessions) in doing presentations, and then reach out to youth in an effort to enhance knowledge about drugs, their effects and the importance of being safe and healthy. We will train 8 speakers and they will give presentations to 10-20 youth groups.

An *overdose prevention program* that addresses the epidemic of overdoses in general, as well as the high number of deaths from overdose. This would entail knowledge development and dissemination as an overdose awareness campaign, working with a group of Natural Helpers to create items such as pamphlets or posters. It would also include the development of a naloxone program for users to stop the effects of opiate overdose for themselves and others, modeled on the work of the Chicago Recovery Alliance. This portion of the activities would be a demonstration project. This groundbreaking work in Illinois can be accessed through www.anypositivechange.com. This type of program involves accessing naloxone, community education, training of community members, and an awareness program for Emergency workers such as ER personnel, EMS and EPS.
The evaluation will be formative and summative and will include input from the Streetworks team, service users, partners and the facilitator. There is presently an Emergency Medicine Specialist who will be doing research on the project to determine outcomes of the overdose prevention program. As well, the Centre for Health Promotion Studies will be asking relevant questions through their latest research endeavour.

Information will be shared through the provincial NPNU and ACCH partners, as well as through media, presentations and conferences. Upcoming conferences of note are the International Harm Reduction

conference in Vancouver (2006) and the American Harm Reduction Conference in 2007 and it is our hope to share our results through these events.
Streetworks will submit all reports as required by Health Canada, but outcomes will also be monitored through the other researchers involved in the project.

The handbook, Speaker's Bureau, and overdose prevention materials will be ongoing pieces of the Streetworks program. Funding for printing will be sought as needed. The naloxone piece of this proposal is on a demonstration basis. It is our hope that this project will prove its human and fiscal worth, and be continued through another means.

Drug Education and Overdose Prevention Project - Streetworks

Detailed Project Description

Nature/extent/ how project will meet needs – All three components have been discussed in the need/gap/rationale section above. Creation of a drug booklet, development of a Speaker's Bureau, and an overdose prevention program will recognize expertise, enhance understanding, develop personal skills for the community members involved and increase knowledge amongst the broader street-involved population. This will occur because present and past injection drug users will be deeply involved in all aspects of the project. Peer naloxone administration will help people survive a critical overdose incident (death, anoxic brain injury). It will also help foster a milieu of community caring and concern, and decrease the feelings of being hopeless and helpless.

Target Groups/Scope – The target groups for this project will be past and present street-involved injection drug users and their social networks, concentrated mainly in the downtown core of Edmonton. Other benefits of the naloxone program will be decreased use of the Emergency Response System, Edmonton Police Service, Emergency Departments, and the Medical Examiners Office. As well, the Speaker's Bureau hopes to reach many young people in a wide variety of locations around the city of Edmonton. The results of this project may be utilized nationally to create similar projects and research.

Description – The overall goal of this project is to increase drug awareness and to decrease the number of overdoses and overdose deaths within the city of Edmonton. One full time temporary Registered Nurse will be hired to carry out all aspects of this project. The draft job description is attached as appendix E.

Development of a handbook will explain drugs from a Harm Reduction perspective. There are specific aspects of drugs which users do not typically know, e.g. that when one injects pills without filtering, there is a 40% chance of retinopathy, that morphine use has cardiac indications, or that sharing a straw for cocaine can be a route of transmission for Hep C. Streetworks staff, a community pharmacist, and a group of current and past users, who are Natural Helpers, will create the booklet. A group will meet 1-2 times per month at the Boyle Street Co-op, facilitated by a nurse hired by Streetworks for this project. The group members would be paid a honourarium of $10.00 per hour and will sign receipt slips at the end of each meeting. Food and refreshments will also be provided for the meeting. If the group needs to go to a particular location (e.g. a library, university) to research information, their travel will be paid/provided. This group will decide the format, pool information, research particular drugs, share stories, and choose artwork. The layout, artwork, and narrative will be inputted by the project staff person, on the Boyle Street Co-op's publishing program and computer system. Specific drugs will be chosen and may include peelers, Ts & Rs, coke, crack, dillies, crystal meth, methadone, 3s and 4s, benzos, pot and alcohol. It may include interesting facts, history, specific use issues, side effects, overdose prevention, withdrawl symptoms and relief methods, best strategies for quitting, etc. The handbook will be 35 – 50 pages in length. The information will be filtered through a community pharmacist at Myro's Pharmacy, an AADAC worker and 2 physicians for accuracy. Three quotes from potential printers will be sought and the most appropriate chosen. The program would need to print approximately 5,000 copies, as we would share this resource with the other Harm Reduction programs in the province (Calgary Safeworks, Red Deer, Medicine Hat, Lethbridge, and Grande Prairie). In the past, other Natural Helper group members have become quite close and feel loss at the end of the project; therefore a closure event is critical. At the end of this portion of this project, the group will have a small book launch and final meeting.

The booklet may also include topics we have not included in other resources, such as being pregnant and street involved, or having mental health issues. There are specific pieces of information pregnant women may wish to know about effects on their babies and how to minimize those affects, which drugs are more harmful than others, as well as basic health needs. Edmonton has an excellent Health For Two program, which explains normal pregnancy and supports women during this time, therefore there is no need to elaborate upon the usual pregnancy concerns and questions. The information in the booklet would be very targeted to pregnant women who are using drugs. This information may be incorporated into the main text of the document, depending on what the Natural Helpers group decides. Mental Health issues are very prevalent amongst the needle using population, yet very little is known on the street about depression, schizophrenia, bipolar, antisocial personality disorder, dementia, paranoid personality disorder, obsessive-compulsive disorder etc. Many people self-medicate with illicit drugs for their underlying mental health disorders. Perhaps greater understanding of mental illness will help individuals seek appropriate assessment and assistance. Including this section will depend upon the length of the main body of the booklet and what is a "good fit".

Development of a "Speaker's Bureau" where present and past drug users take a course (4 x 1hour sessions) in doing presentations, and then reach out to youth in an effort to enhance knowledge about drugs, their effects and the importance of being safe and healthy. Often, Streetworks' service users offer to do talks and meet with groups, but feel intimidated by their lack of experience, knowledge and comfort. We will train 8 speakers who are particularly oriented to speaking to youth groups. A small course in public speaking, HIV, Hepatitis C, safer drug use, overdose prevention, etc. will be developed. There will be 4 hours for the group to learn the information and work on public speaking skills. Each member will be paid $10.00 per hour honourarium for the course. Speaking to the youth groups will not be paid, unless the requesting agency provides dollars or other perks. Streetworks will seek opportunities for the Speakers to give presentations to 10-20 youth groups. A Streetworks staff person and a member of the Speaker's Bureau will work together and make presentations jointly. Speaking opportunities at alternative schools, Inner City Youth Housing project, Catholic Social services, Transitions House, and others will be sought.

An overdose prevention program that addresses the epidemic of overdoses in general, and the high number of deaths from overdose. This would entail knowledge development and dissemination (e.g. dangerous mixing of drugs, what to do if you or someone close to you overdoses, which drugs cause what physical effects), working with a group of Natural Helpers to create items such as pamphlets or posters. A group of Natural Helpers will meet 1-2 times per month to create overdose prevention resources and choose the most effective means of disseminating that information (pamphlets, posters, etc.). Each member of this group will receive a $10.00 per hour honourarium, and food & refreshments. The meeting will be held at the Boyle Street Co-op and will be facilitated by the project nurse. Depending on the group's dissemination decision, there will be printing costs attached. Overdose prevention programs from around the world will be researched and considered.

Prevention of death by overdose would include the development of a naloxone program for users to stop the effects of opiate overdose for themselves and others, modeled on the good work of the Chicago Recovery Alliance. It involves teaching drug users to administer an opiate "antidote" to themselves and possibly their peers. These folks are often much more likely to be in the vicinity of a friend or family member who overdoses, than a health care provider. Many are reluctant to call the Emergency Response Department out of fear, as they are vulnerable to arrest (many of these ambulance calls are accompanied by police). The idea of using naloxone at a community level is not unlike giving epinephrine to someone who is allergic to a bee sting. Naloxone is not an addictive drug and has no other use than reversing opiate overdose. The groundbreaking work in Chicago can be accessed through www.anypositivechange.com. Streetworks has a close relationship with Chicago, thanks to the 2004 Alberta Harm Reduction Conference, and the Chicago Recovery Alliance is very willing to share their resources, advice and

learnings. The naloxone program involves creating a course for street-involved IDUs in administering naloxone, to be delivered in a variety of settings. The project nurse will undertake the task of training community members. This course would include signs and symptoms of opiate overdose, rescue breathing, methods of drawing up and giving naloxone, side effects, and aftercare. It would be designed and written by appropriate health care providers such as the Streetworks physician, the project nurse, a RAH ER physician and EMS teaching staff, as well as utilizing the work of the Chicago Recovery Alliance. Community members who take the course will receive written information as a reference for later. A card, which denotes the reason for the person to be in possession of naloxone, would be provided by the program. Two physicians have committed to being involved with this portion of the project and to write the prescriptions needed for the medication. Accessing naloxone at a reasonable price is a challenge yet to be met. Community pharmacies, hospital pharmacies, and Internet pharmacies will be contacted. Early enquiries have shown that naloxone is considerably less expensive in Chicago. An awareness program for Emergency workers such as ER personnel, EMS and EPS would need to be undertaken. ER and EMS may have contact with a patient whose friend states that they administered naloxone. As this is typically a drug used by emergency workers only, it is important that they understand the situation, and work with the community member. It will also be an opportune time for support and further teaching, if time allows. Having ER and EMS personnel "on side" and supportive is necessary. The Edmonton Police Service must also be apprised of the project. Community members should not be arrested or have their naloxone confiscated, if the naloxone is the only concern of the officers. Orientating these 3 departments may be very brief (as in a notice to all workers) or very involved (in-services to all personnel). The best approach for disseminating this information will be decided by the departments and the project nurse.

Program goals/capacity - The mission of the program is "People who use injection drugs and/or work in the sex trade will have the harm reduction resources they need to be safe and healthy." The goal of the program, at the front-line level, is to provide or enhance the skills, knowledge, resources and support people need to lead safer and healthier lives. All three parts of this project are a perfect fit with what Streetworks does on a daily basis. Streetworks has demonstrated a high level of success in its operational work, as well as with any project it has undertaken. It will dedicate any additional time, resources, knowledge and expertise necessary to ensure this project is a success.

Please see the attached **workplan,** which outlines the **goals, objectives, activities, timelines, outputs, outcomes, outcome indicators and evaluation methods.**

Evaluation -Evaluation is an ongoing process, not to be saved for the end. Streetworks' aim is to determinewhether the project is following/followed the work plan, whether the project is meeting/met it's objective(s), and what is helping/helped to achieve the objectives, and what is making/made it difficult.

Following the ACHF guidelines, for each objective we will determine

1. Are we doing/did we do what we said we would?
2. What are we learning/have we learned (about what works and what does not work?)?
3. Does/did our work make a difference? How?
4. What can/could we do differently?
4. How can we use our evaluation findings for continuous learning?

Through formative and summative methods, the Streetworks program will monitor and report upon what worked and what didn't work. Data will come from several sources including program records, contact sheets, evaluation with program users, anecdotal reports, meeting minutes, partner's feedback and the project nurse's journal. Ongoing monitoring will provide opportunity for continuous reflection and practice changes. These changes will be incorporated into the program and learnings documented. There is an Emergency Physician who will be doing research on the project to determine outcomes on the overdose prevention portion of the project.

The Centre for Health Promotion Studies is presently involved with the National OPICAN Study and will soon be embarking upon a Social Dynamics Study of Edmonton IDUs. Dr. Cam Wild has agreed to include questions about overdose and overdose prevention in the study. This information/research will contribute greatly to the body of knowledge surrounding overdoses.

Partnerships – roles and contributions

HIV Edmonton – Streetworks Council chair, Streetworks site, ridealong agency, referral partner. Contributes space, staff, materials, expertise.

Boyle Street Co-op – Program banker, Streetworks site, ridealong agency, referral partner. Contributes space, staff, materials, expertise.
Boyle McCauley Health Centre – Council member, Streetworks site, ridealong agency, referral partner. Contributes space, staff, materials, expertise.
Regional Public Health (CHA) – Council member, Streetworks site (STD Centre), ridealong agency, referral partner. Contributes space, staff, money for materials (needles etc), expertise.
Northern Alberta HIV Clinic – Council member, ridealong agency, referral partner. Contributes staff, expertise.
Catholic Social Services – Council member, ridealong agency, referral partner. Contributes staff, expertise.
AADAC – Council member, referral partner, ridealong agency. Contributes expertise.
Primary Care Division (CHA)– Council member, Streetworks sites (Eastwood Public Health Centre, Northeast Community Health Centre), ridealong agency, referral partner. Contributes space, staff, materials, expertise.
Edmonton Police Service – Council member. Contributes expertise. Will disseminate information amongst its members.
Centre for Health Promotion Studies – Contributes expertise, research, & resources. Will provide advice, include questions in its ongoing research, links into CCENDU.
Emergency Medical Services – Will disseminate information amongst its members, may contribute to training of community members.
Royal Alexandra Hospital Emergency Department - Will disseminate information amongst its staff.
Dr. Kathryn Irwin – Will conduct research into the overdose prevention portion of the project.
Dr. Ginetta Salvalaggio – Provides auxillary medical services to Streetworks. Will contribute medical advice and will prescribe naloxone.
Myro's Pharmacy – Community pharmacy will provide advice and information to the drug booklet.
Chicago Recovery Alliance – Will provide advice and information. The CRA may provide assistance in developing resources and accessing naloxone.
The Alberta Association of Registered Nurses does not formally endorse projects, however, they have been contacted and have invited Streetworks to utilize their library and welcome an article being published in the AARN Newsletter. The College of Physician's and Surgeons of Alberta fully supports this project.

Sharing Knowledge - Streetworks will share the results through presentations at workshops and conferences, media opportunities, and submissions to newsletters and journals. Upcoming conferences of note are the International Harm Reduction conference in Vancouver (2006) and the American Harm Reduction Conference in 2007 and it is our hope to share our results through these events.

The program will also continue to share results with other harm reduction programs provincially and nationally, as well as through the NPNU Consortium and the ACCH.
Streetworks has a proven track record of sharing knowledge with a multitude of individuals, agencies and organizations across the province and beyond.

The researchers, as well, will publicize the results through their usual channels. Sustainability - The

booklet will be distributed widely. Streetworks will continually seek opportunities to find dollars for reprinting as needed. The Speaker's Bureau members will be invited to join in presentations for as long as they have contact with Streetworks. The overdose prevention information will be an ongoing piece of Streetworks' harm reduction work. The challenge will be to continue the naloxone piece of the project. If Streetworks can demonstrate life-saving and cost-saving results, perhaps a funder can be found to sustain the project into the future.

Drug Education and Overdose Prevention Project, Streetworks

	Year 1 (04-05)	Year 2 (05-06)	Year 3 (06-07)	Total
Salaries				
1 FTE RN (includes 14% benefits)	$18,580.00	$44,995.00	$46,404.00	**$109,979.00**
Contracted services – banker agency	$750.00	$2,100.00	$1,600.00	**$4,450.00**
Subtotal	$19,330.00	$47,095.00	$48,004.00	**$114,429.00**
Honouraria				
Booklet	$1,800.00	$400.00	$0	**$2,200.00**
Speaker's Bureau	$0	$320.00	$0	**$320.00**
OD Prevention	$0	$2,680.00	$2,400.00	**$5.080.00**
Subtotal	$1,800.00	$3,400.00	$2,400.00	**$7,600.00**
Travel and Accommodations	$0	$250.00	$0	**$250.00**
Subtotal	$0	$250.00	$0	**$250.00**
Rent and Utilities	$750.00	$2,100.00	$1,600.00	**$4,450.00**
Subtotal	$750.00	$2,100.00	$1,600.00	**$4,450.00**
Materials and Supplies				
Handbook	$0	$7,500.00	$0	**$7,500.00**
Meeting costs	$120.00	$240.00	$120.00	**$480.00**
Cards/naloxone info sheets	$0	$200.00	$0	**$200.00**
Pamphlet/poster	$0	$1,000.00	$0	**$1,000.00**
Naloxone	$0	$5,000.00	$0	**$5,000.00**
General	$250.00	$500.00	$250.00	**$1,000.00**
Subtotal	$370.00	$14,440.00	$370.00	**$15,180.00**
Equipment Rental	$0	$0	$0	**$0**
Subtotal	$0	$0	$0	**$0**
Evaluation and Dissemination				
FTE RN	$1,000.00	$2,000.00	$2,000.00	**$5,000.00**
Contracted	$750.00	$1,500.00	$1,500.00	**$3,750.00**
Subtotal	$1,750.00	$3,500.00	$3,500.00	**$8,750.00**
Other	$0	$0	$0	**$0**
Subtotal	$0	$0	$0	
Totals	**$24,000.00**	**$70,785.00**	**$55,874.00**	**$150,659.00**

Budget notes:
I FTE nurse position includes 14% benefits. Nurses at Streetworks are paid less that unionized nurses. The salary starts at step 2 of the Boyle Street Co-op salary grid.
Banking services and rent by the Boyle Street Co-op are set at 3% each
Handbook final costs will depend upon the length, size, number of pages, and colour of the final product.

Naloxone costs will depend on Streetworks' ability to access the least expensive supplier of the drug.
A portion of the evaluation budget originates from the nurse's position, who will dedicate part of his/her time to evaluation. The researcher will be contracted for a small amount to contribute data to the evaluation.

In Kind:

The Streetworks Council and all other partners will contribute time for consultation and guidance. Streetworks will contribute computer, workspace, equipment, support, access to community members, data, and personnel (especially for presentations to youth).

In Kind:
Streetworks Council and partners: $5,000.00
Program Manager: $7,500.00
Computer, workspace, equipment: $1,000.00
Staff: $1500.00

Appendix C: O.P.I.P Interview/Survey data

Overdose Prevention and Intervention Project (O.P.I.P.)
Local Key Informant Survey Questions

Drug-related overdoses are a source of death and injury across the region. An overdose prevention and intervention program is currently being considered.

The purpose of the program is to reduce injuries and the number of deaths from drug-related overdoses by training people who use drugs and service providers about:
1) How to prevent overdose (risk factors, myth-debunking, etc.)
2) How to intervene in the event of an overdose (recognizing the signs, first aid, administering naloxone, calling 911, etc.)

The following survey provides some preliminary data to inform program design and is not binding.

Would you or your organization be interested in learning more about the program?

Yes
No
Maybe

2. Do you think this program would be useful for (check all that apply):

The clientele at your organization
The staff at your organization
Not useful
Other (please specify)

3. Would you or your organization be interested in providing a resources (e.g. small staff contribution, in-kind and/or financial) to assist a program of this nature?

Yes
No
Maybe

4. Would your organization be interested in hosting an event/training session?

Yes
No
Maybe

5. Any further questions/comments?

O.P.I.P External Key Informant Interview Questions

Programs Offered?
A: Prevention
1. Do you offer any programs that:

1a. offer training to prevent overdose with the use of opiates and/or cocaine?

1b.. if not, why not?

1c.. if so, what drugs are the subject of the training?

1d. if so, is this training aimed at:
service providers, and whom? and/or people who use drugs (pwud)? and/or anyone else?

1e. how frequently is the program offered and how long does the session last (e.g. 1x per month for 2 hours)

1f. Could you describe the program(s) Is anything else covered in the program (e.g. safer injecting, other harm reduction tools)

1g. Who delivers the training?
Service provider(s) pwud other

B. Intervention

2. Do you:
2a. offer training about what to do/how to intervene in the event someone is overdosing?

2b. if not, why not?

2c. if so, what drugs are the subject of the training?

2d. if so, to whom is this training aimed at?

Service providers pwud other

2e. how frequently is the program offered and how long does the session last (e.g. 1x per month for 2 hours)

2f. Could you describe the program(s). Is anything else covered in the program (e.g. safer injecting, other harm reduction tools)

2g. Who delivers the training?
Service provider(s) pwud other

C. Narcan/Naloxone

3a. Is this provided? If so, in what form (e.g. preloaded syringe/epi pen?)

3b. If so, how is it provided to avoid regulatory conflict?

3c. If so, any issues with liability identified?

3d. If so, training is provided?

3e. If training provided, what is involved?

3f. Is Naloxone something you would recommend for our program? If so, what should we be aware of to avoid conflict and liability issues?

Adminstration

4a. Who is the host or lead group?
Service provider(s)(who?) pwud other

4b. Is this a paid position(s)?

4c. Is there a lead agency that administrates and/or delivers the program? If so, who?

5. How (or by whom) is the program funded?

5a. Is this core funding or is it on a grant by grant basis or a bit of both?

5b. Is any of the funding "in-kind"? If so, what kind of "in-kind" resources are being provided?

6. Do you keep any data regarding program delivery?

6a. Is any evaluation data available?

6b.Participant statistics (may be covered in evaluation, if not, what kind of data is collected)?

6c. Is there a budget available?

6d. Is a program description available?

6e. Are any promotional materials available?

6f. If so, could you make it available for us? Please please please!

Reflection

7a. When you were **<u>developing</u>** the program, is there anything that worked well?

7b. Looking back, is there anything that you would do differently?

8. Has there been any reaction from:
8a. police

8b. primary health providers:

8c. service providers:

8d. media

8e. community at large

8f. other

8g. Have you communicated with these groups about the program or when you were developing the program? :

9a. What about the program is successful now?

9b. What are the current challenges?

10. Do you have any tips for us?

11. Do you know anybody else doing this sort of work?
    11a. If so, do you have their contact info?

12. Do you know of any key articles or research pieces?

13. Is there anything you would like to add?

14. Is there anything we can do to assist you? (e.g. copy of the final report)

Key Informant Interview Results by Section

A. Prevention &
B. Intervention (sections have been combined)

1.a)b)c) What type of drug?
Chicago: Opiates, because we give out naloxone, and cocaine is harder to deal with
Toronto: Opiates, stimulants, party drugs – whatever is used in that part of the city
San Fran.: Opiates mainly, because we give out naloxone. Also stimulants, depressants (they are harder to deal with).
Edmonton: Opiates, because we give out naloxone

1)d) Training aimed at pwud or s.p. or both?
Chicago: Both; users mostly – they train their peers
Toronto: Both (often one and the same). The goal was to train users.
San Fran.: Both; two different versions of the training.
Edmonton: People who use drugs only (pwud).

1)e) How frequently is program offered and how long does session last?
Chicago: 7 days/week, 14 locations, 5min-30 min sessions (depending)
Toronto: 10 trainings over 9 months, 5 hour sessions, 110 people trained altogether
San Fran.: Pwud: 15 minute sessions; Service Providers: one hour sessions
Edmonton: Drop-in basis; 10-20 min sessions

1)f) Describe the programs
Chicago: Pwud: medical history forms, palm card, distribute naloxone, watch the naloxone video (full 30 min version). Service providers: physiology of overdose, rescue breathing, signs of OD, dispelling stereotypes.
Toronto: Peer trainers: Basic CPR, rescue breathing, mixing drugs. Peers training peers: prevention, rescue intervention, OD physiology, myth-busting, risk factors.
San Fran.: Preventing ODs, mixing drugs, risk factors, recognizing and responding, rescue breathing, calling 911, how to use naloxone
Edmonton: Prevention, risk factors, recognizing an overdose, administering naloxone.

1)g) Who delivers the program?
Chicago: CRA outreach staff, trained by a physician. Trained volunteers.
Toronto: Peer trainers + staff member (also, service providers at training sites)
San Fran.: Overdose educators + 1 full-time staff. Some pwud, some not.
Edmonton: 3 registered nurses

C. Naloxone

3)a) Do you provide naloxone?
Chicago: Yes.
Toronto: No
San Fran.: Yes- single dose vials

Edmonton: Yes – 10 ml. vials + syringe

3)b)c) How is it provided? How do you avoid regulatory conflict/liability issues?
Chicago: Medical director for needle exchange assumes responsibility for pre-printed prescription labels. Labels are put on the bottles, the person's name is written in. No liability problems so far. Can look to the epi-pen for 3rd party protection precedent.
Toronto: N/A
San Fran.: Medical director's name is on every prescription; medical records and registration are kept for each client. Everyone gets a prescription + info. card + naloxone. There is no 3rd party liability protection in California but we have not had any problems so far.
Edmonton: Prescription for physician co-signed by a nurse + dated. A copy is kept for legal purposes. Information is put on the vial + the box that the naloxone comes in. Insurance increased, but so far no problems.

3)d)e) Do you provide training? What is involved?
Chicago: Yes; watch the video/do a demo
Toronto: N/A
San Fran.: Yes ; how to administer it (quick and dirty version)
Edmonton: Yes; what it's used for, how to draw it up, where to inject it, how much to give, how many times to repeat the injection, how to monitor the person after injection.

3)f) Do you recommend naloxone for our program? Tips?
Chicago: Yes! Do it right now!
Toronto: N/A
San Fran.: Yes.
Edmonton: Yes, it's very beneficial. Do a report on OD deaths in your region, get community partners including physicians, emergency departments, police, EMS, and people who use drugs.

<u>Administration</u>

4)a) Who is the host or lead group?
Chicago: Chicago Recovery Alliance
Toronto: Toronto Harm Reduction Task Force/St. Michael's Hospital
San Fran.: D.O.P.E. project
Edmonton: Streetworks

4)b)c) Paid position? Lead agency?
Chicago: 5 paid staff, 20 volunteers (most are pwud). Medical director + research director work pro bono.
Toronto: 1 paid staff on the St. Michael's Hospital payroll. Volunteer peer trainers.
San Fran.: 1 full-time + 6-8 part=time paid staff. Some pwud, some not.
Edmonton: 3 full-time paid nurses.
5)a)b) Funding

Chicago: City of Chicago (core – 80% of funding). Private donations, federal government, 2-3% "in-kind."
Toronto: One-time Toronto Public Health grant in partnership with The Works.
San Fran.: City of San Francisco (core). Some private funding; Harm Reduction Coalition.
Edmonton: Capital Health (Alberta Health region); core funding. The physicians donate their time "in-kind."

6)a) Evaluation data?
Chicago: No. We collect self-report data. Since 2003: 820 self-reported reversals with naloxone.
Toronto: A report was written at the end. No formal evaluation with outcomes.
San Fran.: No formal evaluation. Research has been done about us, and papers have been published.
Edmonton: Demographics kept on people being trained, number of kits distributed and number of people we've trained.

6)b) Participant statistics?
Chicago: Not currently, but we would like to.
Toronto: 110 people were trained.
San Fran.: 1265 prescriptions since 2003. 315 reported lives saved.
Edmonton: Age, gender, reading level, experience with OD + naloxone

6)c) Budget?
Chicago: Budget last year was $65,000. 3 million syringes per year; 10,000 doses of naloxone per year.
Toronto: $21,000 for nine months
San Fran.: $75,000 last year (slight increase this year).
Edmonton: see appendix B

6)d)e)f) Promotional materials available?
See appendix A and/or web resources

<u>Reflection</u>

7)a) Developing the program – anything work well?
Chicago: (didn't ask)
Toronto: Peer delivery was great; people told their friends. Staff were great.
San Fran.: Had dedicated people working on this program + a courageous doctor.
Edmonton: Support from agencies/organizations, community, staff. No support from provincial government. Having a researcher and an emergency physician involved worked very well.

7)b) Anything you would do differently?
Chicago: Streamline it, abbreviate it. Try to develop a 10-min version.
Toronto: Set up a schedule at the beginning. Establish rules ahead of time. Don't ask more people than you can accommodate.

San Fran.: (unknown)
Edmonton: Find funding that is operational, not project-based.

8)a) Police
Chicago: Done some trainings with police. Tell them what naloxone is.
Toronto: Many police don't get it; they crush people's crack pipes…they won't agree to come and speak re: calling EMS
San Fran.: No.
Edmonton: Supportive, but will not change their OD investigation practices.

8)b) Primary Health Providers
Chicago: Medical doctors don't always get it.
Toronto: Great feedback but we only collaborated with people who were on board with harm reduction.
San Fran.: (didn't ask)
Edmonton: Often shocked at first, then supportive.

8)c) Service Providers
Chicago: About 60-40 split in favour. If they are pragmatists, they get it.
Toronto: Excellent feedback from many agencies.
San Fran.: (didn't ask)
Edmonton: Interest in naloxone from other agencies.

8)d) Media
Chicago: Largely favourable. NBC documentary re: heroin; National Public Radio show re: naloxone; Chicago Tribune report was favourable.
Toronto: No.
San Fran.: (didn't ask)
Edmonton: Can't get them interested.

8)e) Community at large
Chicago: Generally supportive, but hard to say. Some people don't like it. About a 40-60 split in favour of naloxone.
Toronto: No.
San Fran.: No. We want a safe injection facility; this is more controversial.
Edmonton: They don't really know about it.

8)f) N/A all around.

9)a) What about the program is successful now?
Chicago: We have saved at least 1000 lives; we know this for sure. When people are not dead, recovery is always a possibility for the future.
Toronto: N/A. But it was very successful. We would like to do an ongoing project, but it hasn't happened yet.
San Fran.: Collaboration with needle exchanges; offering different trainings for service providers and pwud.

Edmonton: Always training new community members; lots of interest.

9)b) Challenges?
Chicago: Funding, get a solid legal infrastructure, trim the training, be more public, raise awareness, engage with police, convince and engage the medical community
Toronto: N/A
San Fran.: Funding – find a home. No leadership from government around best practices. Legal restriction on Narcan; lack of support for harm reduction. Getting people to pay attention (by drawing attention to the number of deaths); cultural competency; doing the work respectfully; successful collaboration.
Edmonton: Allotting nursing time to the project, getting the word out to community members and professionals, evaluation.

10) *Tips*

Chicago: Collaborate early but only when you've proven yourself; gather data on reversals (ask the clients); support the claim that you are saving lives (imperative!). Start something right now- don't wait. Don't be afraid of the grey area.
Toronto: Don't let people's workers sit in on the training; don't give out an honorarium until the end (be clear about this) and don't give it out on cheque day; allow people time to talk about their experiences; allow time to discuss barriers to calling 911 + what to say.
San Fran.: Keep it short and sweet; be flexible; be accurate; allow for discussion when doing a longer version; tailor your trainings to the group; do education about Narcan + why it is important; don't promise more than you can deliver (in a proposal).
Edmonton: (see above)

Appendix D: Other O.P.I.P. resources

Peer -Based Cascade Training Model

Phase One: Train the Trainers

An appropriate service provider(s) and a person(s) who uses drugs (PWUD) are identified and work together to develop a curriculum that will be used to train their respective peers. Two curricula are developed in this phase: one tailored to the service providers and one tailored to PWUD. Both trainers jointly deliver the training. Each trainer supports the other to ensure that information is real, relevant and understandable.

Caution: The curriculum that is developed needs to be basic so that the when the content is funneled down the branches, the main points remain intact.

Phase Two: Spread the word.

After the above training sessions the service provider and PWUD will be able to run subsequent training sessions with their peers. In these sessions the trainers will be asked to identify "leaders" and ask them to inform others in their peer group about what they have learnt, perhaps in a group setting themselves and/or by arranging opportunities for the trainers. This process can be repeated.

Phase Three: Common Knowledge

After a number of the above sessions have been facilitated, a threshold of people will be reached. From there, the message will be passed on through world of mouth, peers acting in a particular way when they are faced with an OD and the second hand distribution of training materials. It is expected that approaches to intervention and prevention of drug overdoses will change from the current knowledge and practice base.

At this stage it is expected that the initial message conveyed in phase one will be muddled. If the original message is simple, there a greater chance it will be effective at this phase. Also, by phase three there will be a significant number of peers (both service providers and drug users) who have been through the training sessions multiple times.

Rationale

Premise One: If a Service Provider (SP) works together with a PWUD, they will develop a curriculum that is knowledge based and practical, based on experience and expertise.

Assumption: SP and PWUD will be willing to work together or see the value in working together.

Assumption: The service provider has the necessary skills, the DU has the practical experience; both are "experts in their field."

Assumption: There is a difference between the SP and the PWUD in their ability to understand and communicate with their peer group.

Premise Two: Peer training establishes trust early and the message are more likely to be absorbed.

Assumption: Peers will be willing to train others

Assumption: SPs are more likely to trust other SPs than PWUD and, PWUD are more likely to trust other PWUD than SPs.

Assumption: An understanding of the material can be enhanced depending on presentation style or presenter.

Premise Three: If peers train numerous SP and PWUD then the message will also reach community members.

Assumption: The SP and PWUD who go through the training will discuss the training with friends and/or family and/or other SPs etc..

Assumption: The main messages of the training will get passed on.

Assumption: Being trained by your peer is more of a motivation to share what you know than being trained by a "professional"

Premise Four: If the majority of people in the community receive pertinent information then it could re-define how ODs are treated and improve the effectiveness of prevention-intervention.

Assumption: Through a word of mouth transfer people will begin to change their perceptions and practices.

Assumption: The key points from the original curriculum will be repeated to SP and PWUD from many different peers.

Assumption: Receiving a message multiple times can change ones perception and practice.

Conclusion

A branched peer-training model has the potential to effectively communicate relevant information that will prevent overdose incidents and deaths.

Peer- Based Cascade Training Model