Western Public Health Casebook 2016

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CASE 6

Safe Needles Save Lives

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Amardeep Thind, MD, PhD (Professor, Western University)

“Anything else?” Maria, the director of Counterpoint Harm Reduction Service in Regional HIV/AIDS Connection (RHAC), asked as the needle exchange meeting ended. Silvia, the manager of the Sexual Health Department at the Middlesex-London Health Unit (MLHU), felt challenged when she was asked to present recommendations for the development of the needle exchange programs in London. She knew how important the needle exchange service was, but she also realized how far behind this service was in London.

BACKGROUND

Silvia had been working at the MLHU for 11 years, responsible for managing programs and personnel in the Sexual Health Department. The Department is committed to offering sexual health education, promoting healthy decisions, and providing a confidential and comfortable atmosphere for discussing sexual health questions or concerns (Middlesex-London Health Unit, n.d.b.). It runs a clinic for birth control and Sexually Transmitted Infections (STIs). In collaboration with RHAC, the MLHU has operated the Counterpoint Needle Exchange service through the sexual health clinic. People who inject drugs can dispose of used needles and pick up clean injection equipment through a needle exchange service. Public health nurses give out sterile needles/syringes to drug users without limitations. Supplemented by health education, the needle exchange service aims to help prevent needle sharing and thus, reduce the possibility of transmitting diseases such as HIV, Hepatitis B, and Hepatitis C.

In 2014, a young child was injured by a used needle in a park, prompting public concern. Parents feared for the safety of their children playing in parks, and residents blamed the City for not managing needles and addressing the issues around injection drug use effectively. Some people even questioned the needle exchange service, arguing that health workers contribute to the increase of needles in society. Concerned by the public reaction, Maria called for a meeting to discuss possible measures of responding to the public’s concerns. The MLHU, London Community Addiction Response Strategy (London CARes), The London Police Service, RHAC, My Sister’s Place, and two community representatives gathered in downtown London to share opinions about London’s needle exchange program.

The first meeting was held on April 17, 2015. Responsible for managing harm reduction services in RHAC, Maria was asked to facilitate the meeting. During the meeting, the needle exchange program in London was reviewed. Project details such as who distributes and collects needles and how services are managed were summarized. “It is important for us to improve the needle exchange program in London because more and more used needles have been found in public areas. We need to protect residents from needle stick injuries. Safe injection and safe needle disposal are our goals,” Maria said.

“We have been committed to collecting used needles and keeping the street free of discarded syringes. Seventeen stationary needle collection bins have been installed at locations in...
downtown and priority areas for safe needle disposal. Outreach team members also take responsibility to pick up needles that have been discarded inappropriately,” said Paul, the representative of London CAReS.

“Do you think we should install more stationary needle collection bins?” asked Kris, the representative of London Police. “If more collection bins are available, dirty needles that drug users discard inappropriately might be fewer.”

“I don’t think the number of collection bins is the sole issue. I know some residents complain about needle exchange services, suggesting that needle exchange programs attract more drug users. Public awareness is too low,” Silvia replied.

“The number of clients coming to the Counterpoint Needle Exchange program dropped recently, and the number of clean needles distributed this season was lower than that of last season,” Maria said.

“We understand the importance of needle exchange services and really appreciate what public health organizations have done to promote safe drug injection, but I have to say that residents in our communities are afraid of these services. The installation of stationary needle collection bins attracts more drug users to our communities, which makes many parents worry about their children,” opined Mandy, the representative of South London Communities.

“It cannot be denied that there are still many residents not supporting our services,” Maria noted to Silvia.

Silvia asked the group, “Maybe we have to advocate health education campaigns to increase public awareness about safe needle disposal?”

“Do you have evidence to support the needle exchange program?” Kris asked. “My duty is to keep the city free of crimes and I do not want to see more criminal cases result from needle exchange.”

“Absolutely. Scientific evidence has shown the value of needle exchange programs. Many clients in our organizations have reflected that these services are helpful,” Maria replied.

“I know you are the director of RHAC and your priority is the health of intravenous drug users, but we have to consider the public’s perception. They are afraid of used needles that are discarded inappropriately in parks and public toilets. How could you persuade residents to accept these services and how do you ensure their safety?” Kris countered.

“I agree that taking actions to improve these services to ensure safety is important,” Mandy said.

Though possible measures were discussed in the meeting, without sufficient evidence it was hard to determine how to improve the needle exchange program in London. “I suggest that we review national and international needle exchange programs to see what services they offer and how needle exchange programs are operated in other areas. After comparing programs in different areas, we can identify the gaps. By addressing these gaps, I believe it will be easier for us to improve London’s needle exchange program,” Silvia said.

Everyone agreed with Silvia’s opinion, and since she had the most experience in managing needle exchange programs, she was asked to perform the task of reviewing national and
international programs to make recommendations for the development of London’s needle exchange program.

Ten minutes after the meeting ended, Maria and Silvia were still sitting in the office. “People seem to have different opinions about program improvement,” Maria said.

“It’s because they have different priorities.” Silvia looked at her to-do list in the calendar, feeling stressed by the task. The next meeting would be held in four months. How to promote safe injection and safe needle disposal remained an urgent issue in London. She decided to review national and international needle exchange programs first, and then discuss the gaps with the sexual health team before she started writing the report to present her recommendations.

THE HARM REDUCTION AND NEEDLE EXCHANGE PROGRAM IN LONDON

Harm reduction practices have been identified as an effective and promising approach to drug use. Instead of focusing on getting drug users to quit using, the principles of harm reduction are to reduce the harms associated with drug addiction (Ontario Harm Reduction Distribution Program, n.d.). By providing clean needles and syringes without a limit on the amount, the harm reduction approach encourages drug users to access the supplies needed to ensure they are injecting drugs safely and prevent the spread of blood-borne diseases. Scientific evidence has shown the value of needle exchange services, and needle exchange programs have been developed in various countries (Ontario Harm Reduction Distribution Program, n.d.).

In response to the increasing incidence of intravenous drug use and disease transmission, the Counterpoint Needle Exchange program began in London, Ontario in 1992. In collaboration with the RHAC, the MLHU has operated the needle exchange service through the sexual health clinic (Regional HIV/AIDS Connection, n.d.). Funded by the Ministry of Health and Long-Term Care, this program provides people who inject drugs with injecting equipment (e.g. syringes, needles, cookers, alcohol swabs, safer inhalation kits, and filters), education, referrals, and naloxone training. To serve more people, the street and mobile outreach team travels in an unmarked van to pick up used needles as well as respond to calls to the needle exchange service. This service is available in London from Monday to Friday, 11am-6pm (Regional HIV/AIDS Connection, n.d.).

All needle exchange fixed sites and mobile outreach units offer services for safe needle disposal. To increase safety, London CAREs, initiated in 2008 by the City of London, set up a syringe recovery program as a small part of their Homeless Coalition and focused on picking up used needles on the street. Funded by the City of London, “London CAREs is a highly collaborative community-based Housing First service aimed at improving the health and housing outcomes of individuals experiencing homelessness” (City of London, 2016a). The outreach team works 24 hours a day, seven days a week in London to keep the street free of used needles and decrease risk of transmission and exposure to blood-borne infections. In order to assist with safe needle disposal, the City of London has installed seventeen stationary needle collection bins throughout the city, primarily in the downtown core and in priority locations (City of London, 2016b). The outreach team with London CAREs takes responsibility of maintaining stationary needle bins and going to “hotspots” to pick up needles that have been discarded inappropriately (City of London, 2016a). Before the establishment of London CAREs, all needles were exchanged through needle exchange programs with one person providing mobile outreach with limited hours, and there was no outreach team picking up needles across the city available 24 hours a day, seven days a week (S. Dhinsa, personal communication, July 10, 2015).
The different stationary needle bins managed by London CAReS are located around and outside the city and are primarily located for easy access for IDUs (S. Dhinsa, personal communication, July 10, 2015). Even though the original intent was for disposal of prescription syringes, such as those used for insulin etc., these containers are often used by intravenous drug users (IDUs).

According to statistics, 1,582,888 needles were distributed and 31,647 returned through Counterpoint in 2014 (2% return rate), and 642,922 distributed and 1,002,800 returned through IDU outreach (156% return rate). The overall needle return rate in 2014 was 46%. In the last 2.5 years, the return rate at the Counterpoint fixed site was 25%, and IDU outreach achieved 56%. The total rate was 43% in the last 2.5 years (S. Dhinsa, personal communication, July 10, 2015).

TWO MONTHS LATER...

It had been two months since the first meeting ended. In this period, Silvia and her team had scanned and reviewed national and international needle exchange programs (see Exhibit 1) and broadly identified the gaps in London’s needle exchange program compared to other jurisdictions. Before the recommendations were to be presented, a town hall meeting was held on June 23, where discussion of safe injection and safe needle disposal took place.

“Currently, there is a research project in London. The City wants to see if a Safe Injection Site is feasible. There is also a Community Drug Strategy. It has been launched for safe drug injection. I heard from RHAC and London CAReS that they are organizing a campaign, which will focus on community clean-up and the needle exchange program. Based on the result of the environmental scan, what do you think we should do to improve the needle exchange program?” Silvia asked.

“The gaps between London and other areas were identified. Compared with Toronto’s needle exchange services, London’s needle exchange program does not have a strong partnership with communities. In Toronto, the City of Toronto, Toronto Public Health, community health centers, non-profit health organizations, and hospitals have participated in needle exchange programs. However, in London, the current service providers include only the MLHU, RHAC, My Sister’s Place, and London CAReS. It seems that creating a stronger partnership with communities should be the initial step to improve our program,” Kandy, one of Silvia’s colleagues, said.

“I believe we should install more needle recovery bins first. As you can see, the number of needle bins in Ottawa is more than four times that in London. I personally believe that the number of needle bins in Ottawa is closely related to their higher return rate. To protect residents from needle stick injuries, we need to ensure that no needles are thrown in public areas,” Sean, another colleague, said.

“I agree, and I think we need to encourage more businesses to participate in safe needle disposal. I think we can follow Melbourne’s footsteps to encourage restaurants, libraries, theatres, gyms, etc. to install needle bins,” Kandy replied.

“Don’t you think we should focus on health education first? Compared with Vancouver, London has had less public involvement. Some communities refuse to install needle bins in their neighbourhoods because they are afraid of drug users. I think we could take some of the lessons learned from Edmonton, by designing posters and a safe needle disposal toolkit, giving presentations in the community to educate people that drug use should not be discriminated
against, and teaching the public how to deal with used needles safely. Public awareness is very important,” Silvia said.

“Personally, I believe we should try to use social media platforms to engage with more people. It may be helpful to educate people about the existence of needle exchange services in London,” Andy, the program coordinator said.

“We also need more service models. Pharmacies are not controlled by the City of London, so they do not provide needle exchange services. Some drug users are not willing to access services because most are offered by governmental organizations. An option to explore may be to install needle vending machines and encourage pharmacies to provide services to increase availability and accessibility,” Andy continued.

The town hall meeting made Silvia feel that there were many areas that needed to be further analyzed. She had completed the program review, and her next challenge would be how to find the best practice examples of needle exchange services and make effective recommendations. The next meeting was scheduled for one month away. “How can I make recommendations that are effective and realistic? How can we promote safe drug injection and safe needle disposal?” she wondered.
EXHIBIT 1
Environmental Scan Table: Needle Exchange Program Overview

Note: This exhibit is an amalgamation of information on distribution, collection, exchange and disposal services from different sources that has been adapted or taken verbatim from the sources cited.

<table>
<thead>
<tr>
<th>Toronto</th>
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<tbody>
<tr>
<td><strong>The Works</strong></td>
</tr>
<tr>
<td>The Works is Toronto Public Health’s Harm Reduction Program for people who use drugs. Toronto Public Health (TPH) provides programs and services to reduce drug related harms for people who use drugs including preventing the spread of communicable diseases.</td>
</tr>
<tr>
<td>The Works opened its doors on August 9, 1989. During the last 25 years, The Works has played an integral role in reducing drug use related harms in Toronto by taking leadership in the area of harm reduction&quot; (City of Toronto, n.d.a.).</td>
</tr>
<tr>
<td><strong>Harm Reduction Supplies and Counselling</strong></td>
</tr>
<tr>
<td>The Works in partnership with community agencies provides counselling and distribution of free harm reduction supplies (City of Toronto, n.d.a.).</td>
</tr>
<tr>
<td><strong>Mobile Outreach</strong></td>
</tr>
<tr>
<td>The Works Van is on the road Monday to Saturday from 6:30 pm – 11:30 pm. Services include: distributing harm reduction supplies &amp; Counselling. POINT training, testing and vaccinations are also available (City of Toronto, n.d.a.).</td>
</tr>
<tr>
<td><strong>Supervised Injection Sites</strong></td>
</tr>
<tr>
<td>A recent Toronto Public Health report showed that the majority of participants (84-96% of residents) in a community consultation saw the benefits associated with implementing supervised injection services in Toronto (City of Toronto, n.d.a.).</td>
</tr>
<tr>
<td><strong>Support for Community Agencies</strong></td>
</tr>
<tr>
<td>In order to increase harm reduction access in Toronto, The Works provides safer drug use supplies, education and program support to many community agencies across the city (City of Toronto, n.d.a.).</td>
</tr>
<tr>
<td>Operated by City of Toronto and Toronto Public Health, The Works needle exchange program is responsible for disposal of discarded needles. The return rate of The Works in 2010 was 74%, and the average return rate between 2010-2015 was 70%.</td>
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</tbody>
</table>
Street Health

Street Health is a non-profit community based agency that strives to improve the health and well-being of homeless and under-housed people in downtown Toronto. It offers physical and mental health programs, as well as supports that improve clients’ ability to access other services. Its work is focused in the neighborhood around Dundas and Sherbourne Streets, an area with the largest concentration of homeless shelters and drop-in centres in Canada. On an average day, 115 clients visit Street Health, and it has approximately 40,000 client visits each year (Street Health, n.d.a.).

Street Health clients have lives characterized by extreme poverty, chronic unemployment, housing insecurity, poor nutrition, high stress and loneliness. They also have more frequent and serious illnesses, and die younger on average than the general population (Street Health, n.d.a.).

In addition, people who are homeless, and those experiencing income insecurity, often cannot afford or have difficulty following medical treatment plans. Many people living on the street have difficulty accessing mainstream health services due to barriers such as lack of valid ID, the cost of transportation or social stigma (Street Health, n.d.a.).

Street Health’s Harm Reduction program provides supports for community members dealing with addiction issues and the risks associated with substance use. It offers a needle exchange and stem distribution, as well as education and drop-in programming (Street Health, n.d.a.).

Safer drug use kits for both injection and smoking are also provided. These can be obtained on site at Street Health during office hours or through outreach services. (Street Health, n.d.b.).

Street Health employs a team of dedicated peer workers, who have lived experience with drug use and homelessness, to help facilitate drop-in programs, distribute supplies and educational materials on site, as well as provide street outreach (Street Health, n.d.b.).

2 Spirited People of the 1st Nations

2 Spirited People of the 1st Nations is a non-profit organization that strives to support Aboriginal people with HIV/AIDS. It offers services such as HIV/AIDS education and prevention, needle exchange, same sex domestic violence information, referrals, etc. (2 Spirited People of the 1st Nations, 2015).

Regent Park Community Health Centre

Regent Park Community Health Centre (RPCHC) was established in 1973, and is a non-profit, community-based organization dedicated to improving the health of Regent Park area residents (Regent Park Community Health Centre, n.d.a.).

Its staff distribute harm reduction information and materials on site and during outreach shifts. Workers provide information, referral and support to health and social services. Needle exchange supplies include stem kits, sharp containers, distilled water, ascorbic acid, syringes, alcohol swabs, filters and condoms (Regent Park Community Health Centre, n.d.b.).
Coordinated Access to Addiction Service, St. Michael's Hospital

Coordinated Access to Addictions Services is a central number…that individuals, family members and community agencies can call for addiction support within the City of Toronto (St. Michael's Hospital, 2013).

Coordinated Access has links to 35 addiction support provides as well as a number of community based networks, including:
- Residential, day and community withdrawal services
- Residential and community treatment
- Services for people with concurrent mental health and substance use problems
- Services to minimize the harm caused by an addiction (e.g. needle exchange programs)
- Rapid access to medical clinics
- Community case workers
- Family programs
(St. Michael's Hospital, 2013).

The emergency department [of St. Michael’s Hospital] offers a 24 hours per day, seven days per week needles exchange for injection drug users (St. Michael's Hospital, n.d.).

City of Toronto

City Parks
In Toronto, residents can contact 311 to submit a service request for pick-up if sharps have been discarded on the road, sidewalk, or boulevard. If needles are found in city parks, residents can report the incident to the park supervisor (City of Toronto, n.d.b.).

School Property
Custodial staff check school property every morning for needles. If they find a needle, it is usually reported to the school principal, and is placed in a sharps container and retained in a safe location. The school board coordinates the collection of all sharps containers for proper disposal (City of Toronto, n.d.b.).

Private Property
According to the City of Toronto, “individuals are responsible for disposal of sharps found on their residential property. Property management of an apartment building/commercial building is responsible for picking up and disposing of discarded sharps found on the property” (City of Toronto, n.d.b.).

Ottawa

City of Ottawa

The City of Ottawa’s Clean Needle Syringe has been in operation since 1991 and provides the following services:
- General counselling and support
- Health education/promotion
- Substance use counselling
- Harm Reduction supplies
Safe Needles Save Lives

- Needle/syringe disposal
- Condoms and lube
- Confidential hepatitis B and C testing
- Confidential testing for gonorrhea, chlamydia and syphilis
- Hepatitis A/B and influenza vaccination
- Anonymous HIV testing
- Emergency Contraception (Plan B)
- Pregnancy testing
- Referral to health and social service agencies including drug treatment services
- Peer Overdose Prevention Program (POPP)

(City of Ottawa, n.d.a.).

Fixed-site services are open from Monday to Friday, 8:30-4:30. The mobile outreach van works 7 days a week from 5pm to 11:30pm (City of Ottawa, n.d.a.).

Needle Hunters Program
The Needle Hunters Program is a part of the City of Ottawa’s corporate response to discarded drug paraphernalia including needles and crack pipes. The Needle Hunters are a group of people who proactively search for and dispose of these items in priority neighbourhoods across the City (City of Ottawa, n.d.b.). In 2015, the Needle Hunters recovered 17,169 needles and 1,531 crack pipes (City of Ottawa, n.d.b.).

Sandy Hill Community Health Centre
The Sandy Hill Centre provides medical and social services for people living with, or concerned about HIV and/or hepatitis C, and who encounter barriers to services because they use street drugs, have a mental illness, are homeless or are involved in the sex trade. Its services include a drop-in center, medical staff, counselling, street health outreach, an experienced dietitian, needle exchange services and complementary care (Sandy Hill Community Health Centre, 2014).

Wabano Centre for Aboriginal Health
The award-winning Wabano Centre for Aboriginal Health provides a wide range of medical clinics, social services and support, and youth programs for Ottawa’s nearly 40,000 Aboriginal people (Wabano Centre for Aboriginal Health, n.d.b.).

Ottawa Public Health
Needle Drop Box Program
It is illegal to dispose of needles, crack pipes (glass stems), or other sharps in the garbage or recycling as per the City of Ottawa’s by-laws (By-law 2009-396 Schedule J). As a result Ottawa Public Health has created the Needle Drop Box Program, which provides secure and tamper-proof drop boxes located at 78 locations across the City to allow for the safe and convenient disposal of sharps. In 2015, approximately 876,765 needles were retrieved from the Needle Drop Boxes (City of Ottawa, n.d.b.).
<table>
<thead>
<tr>
<th>Working with City services to quickly respond to discarded needles</th>
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<tbody>
<tr>
<td>Ottawa Public Health works with other City departments through the City Contact Centre 3-1-1 to respond to requests for the pick-up of improperly discarded used needles. The City targets a response time of one hour for all needle retrieval requests (City of Ottawa, n.d.b.).</td>
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<table>
<thead>
<tr>
<th>Working with individuals who use needles</th>
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<tr>
<td>Ottawa Public Health operates the Site Clean Needle Syringe Program, which is based on the principle harm reduction by providing clients with an adequate amount of sterile needles to meet their requirements for safe injecting. The main goal of this program is to prevent the spread of communicable diseases, primarily HIV and Hepatitis C, and minimize the risks associated with substance use in the greater community. It also educates intravenous drug users on proper safe needle disposal, provides sharps containers and information on disposal locations. In 2015, the Site Clean Needle Syringe Program and its partners retrieved approximately 453,371 discarded needles (City of Ottawa, n.d.b.).</td>
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According to the Needle Report, in 2009, 366,895 sterile needle syringes were distributed through the Site Clean Needle Syringe Program, and the needles recovered by Ottawa Public Health and City partners, as well as Needle Hunters and needle drop boxes were 516,242 needles (141% retrieval rate) (Steve, 2009).

<table>
<thead>
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<th>Edmonton</th>
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<th>Streetworks Needle Exchange Program (“Streetworks”)</th>
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<tr>
<td>Established in 1989, Streetworks is funded by the Alberta Community HIV Fund, Alberta Health Services, and Alberta Health. The Streetworks team is composed of a Team Leader, three Nurses and four Outreach workers (Streetworks, n.d.). It offers services for injection drug users or those working in the sex trade. Services include nursing services (e.g. basic health check, HIV testing, and counselling), outreach services, referrals, harm reduction supplies, and prison programs (Streetworks, n.d.).</td>
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It also offers a free needle exchange service with six sites and a mobile van, and exchanges nearly 800,000 needles each year (University of Alberta, n.d.).

<table>
<thead>
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<th>City of Edmonton</th>
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<th>Capital City Clean Up (CCCU)</th>
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<tr>
<td>Capital City Clean Up is the City of Edmonton’s year-round litter and graffiti management program (City of Edmonton, n.d.b.). The City has installed 10 safe needles boxes in Edmonton for safe needle disposal, including two Eco Stations for safe needle retrieval (City of Edmonton, n.d.a.).</td>
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Other services provided include: |
- An online Safe Needle Disposal Tool Kit |
- Posters about needle safety aimed at children, general public and needle users. |
- Information on how communities can explore the need for a safe needle box in their neighbourhood (City of Edmonton, 2012). |

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<thead>
<tr>
<th>Pharmacies</th>
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<tr>
<td>Pharmacies also provide needle disposal services (City of Edmonton, n.d.a.).</td>
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Insite is North America's first legal supervised injection site. Opening in 2003, it is operated by Vancouver Coastal Health which provides all the funding, senior administrative and health care workers for the facility (Vancouver Coastal Health, n.d.a.).

Insite operates on a harm-reduction model, with the aim of reducing the adverse health, social and economic consequences of drug use without requiring abstinence from drug use (Vancouver Coastal Health, n.d.a.).

Services provided
The 13 injection booths where clients inject pre-obtained illicit drugs are overseen by a team of nurses, counsellors, mental health workers and peer support workers (Vancouver Coastal Health, n.d.b.). It also supplies clean injection equipment such as syringes, cookers, filters, water and tourniquets (Vancouver Coastal Health, n.d.b.).

Nurses provide overdose resuscitation, wound care and immunizations. Research shows that since InSite opened, overdoses in the vicinity of the site have decreased by 35% - compared to a 9% decrease in the city overall (Vancouver Coastal Health, n.d.b.).

Other staff at InSite connect clients to community resources such as housing, addictions treatment, and other supportive services (Vancouver Coastal Health, n.d.b.).

In 2014, crack pipe vending machines were installed at two locations in the Downtown Eastside. Much like the idea of giving out free needles, crack pipe vending machines are expected to improve health and safety on the streets by offering crack pipes for 25 cents apiece (CTV News, 2014).

The success of supervised injection sites and crack pipe vending machines reveals strong public support for harm reduction programs. Vancouver Coastal Health, the BC Centre for Disease Control, AIDS Vancouver Island, among others, are providing harm reduction supplies. Some programs offer peer group services. For example, DTES HIV/IDU Consumers’ Board is an entirely peer-driven non-profit organization. It operates needle exchange 18 hours per day and 365 days per year. Statistics show that DTES HIV/IDU Consumers’ Board distributes around 15,000 syringes per year (DTES HIV/IDU Consumers’ Board, n.d.). A telephone survey of BC residents showed that 78% of people support harm reduction, 75% support needle distribution, and 54% support the distribution of safer inhalation equipment (Tzemis, Kuo, Harm Reduction Strategies and Services & Buxton, 2012).

City of Vancouver

The Needle Recovery Program “coordinates recovery and safe disposal of inappropriately discarded needs” (City of Vancouver, n.d.).
Australia

Needle distribution in Australia
The first Australian needle and syringe program began in Sydney in 1986. Since then, needle and syringe programs in Australia have aligned with the harm reduction framework, to reduce the spread of infections such as HIV and hepatitis C among IDUs (Dolan, MacDonald, Silins, & Topp, 2005). Currently, the service models for needle and syringe programs (NSPs) operated in Australia are needle and syringe exchange programs, health service-based NSPs, pharmacy-based NSPs, and needle vending machines (Dolan, MacDonald, Silins, & Topp, 2005).

Clean needles and syringes are provided to users through needle and syringe exchange programs. Typical examples are the Western Australian Substance Users’ Association (WASUA) and the Western Australian AIDS Council (WAAC). These two non-government organizations receive funding from the Sexual Health and Blood-borne Virus Program (SHBBVP) (Communicable Disease Control Directorate, 2008). WASUA and WAAC are peer-based organizations and provide needle exchange services at fixed sites.

Fixed sites provide a range of services including injecting equipment, swabs, sterile water, filters, tourniquets, vein care cream, testing for blood-borne viruses (BBVs) and sexually transmitted infections (STIs), vaccinations, pharmacotherapy advocacy and education, and referral to support services (Communicable Disease Control Directorate, 2008).

WAAC operates a mobile van, making stops at ten sites within the metropolitan areas. The mobile van provides injection equipment, education, and referrals services (Communicable Disease Control Directorate, 2008).

Health service-based NSPs are provided by regional and rural hospitals, public health units, and community health centres (Government of Western Australia, 2014). Fitpacks® (five sterile needles and syringes, five plastic disposal sleeves, and information pamphlets), which are provided by the SHBBVP, are given to injection drug users (Communicable Disease Control Directorate, 2008). Fitpacks® are labeled with specific safe disposal information to educate people on how to dispose of used needles safely. Regional and rural hospitals that provide emergency after-hours services are also required to provide after-hours access to needles and syringes (Communicable Disease Control Directorate, 2008).

Pharmacy-based NSPs in Australia are run on a commercial basis. In Australia, all pharmacies can sell packaged injection equipment if they hold approval from the local health department (Dolan, MacDonald, Silins, & Topp, 2005). The packaged injection equipment is distributed in Fitpacks®, offered by City Council and Substance Use Association. Each Fitpack® is $6 to $8. Pharmacy-based NSPs are available during business hours, but they do not offer needle disposal services (Dolan, MacDonald, Silins, & Topp, 2005).

In Australia, syringe vending machines usually operate 24 hours and provide clean needles and syringes to IDUs who do not want to access health service-based NSPs. Syringe vending machines dispense needles and syringe in the form of Fitpacks® (Communicable Disease Control Directorate, 2008). Syringe vending machines are normally located in hospitals, community or sexual health centers. A safe needle bin is located at each vending machine to allow for safe disposal. NSP staff are responsible for monitoring and restocking these machines (Communicable Disease Control Directorate, 2008).
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Needle collection in Australia
In Australia, City Councils take a variety of measures to keep public areas safe and clean. In the City of Melbourne for example, 400 syringe disposal bins have been installed across the municipality (including in public toilets) to collect used needles and syringes. The Cleanup team works five days a week to pick up used needles in priority areas (City of Melbourne, n.d.). If people find an inappropriately discarded syringe in the City of Melbourne, they can contact the City to arrange free disposal (City of Melbourne, n.d.). Residents in Melbourne can access free syringe containers from the City if they are interested in needle disposal.

The City of Melbourne encourages eligible businesses to participate in safe needle disposal. Businesses that have public toilets or facilities accessible to the public such as restaurants, cafes, carparks, shopping malls, cinemas, churches, community centers, universities, gyms, etc. are viewed eligible to install needle bins (City of Melbourne, n.d.).

United Kingdom

Needle Distribution in the United Kingdom
In the United Kingdom, pharmacy-based NSPs play a vital role in needle and syringe distribution. Some pharmacies provide injection equipment in the form of pre-prepared packs, which contain needles and syringes, and other paraphernalia such as swabs and condoms. Some pharmacies allow clients to choose different injection equipment. In 2008, pharmacies provided over 70% of needle exchange services in England (Dima, Dawn, David, & National Treatment Agency, 2007).

Non-pharmacy NSPs such as specialist-based NSPs, outreach services, and hospital-based services are important in the UK as well. Specialist-based NSPs are operated by public health organizations. Service providers distribute clean needles and educate IDUs on how to dispose of needles and syringes appropriately. Testing, referrals, and counselling are also available (Dima, Dawn, David, & National Treatment Agency, 2007). Outreach services, taking the form of a mobile unit (e.g. van or bus) on the street, are usually offered to a particular sub-population of drug users, especially those who have difficulty accessing services provided during business hours. Hospital-based services offer 24 hours a day needle exchange services for IDUs (Dima, Dawn, David, & National Treatment Agency, 2007). Needle and syringe dispensing machines in the UK operate on a 'one for one' basis, which means a used syringe or a token has to be deposited for a clean one to be dispensed (Dima, Dawn, David, & National Treatment Agency, 2007).

Scotland imposes limits on the equipment that can be provided during a visit. The current limits on needle and syringe provision are:
- Maximum 20 needles/syringes on the first visit (up from 5)
- Maximum 60 needles/syringes on subsequent visits (up from 15)
- An exceptional upper limit of 120 for holiday periods when facilities are closed or where facilities are difficult to access (up from 30)
(Driesbach, Abdulrahim, Gordon, & Dowell, 2006).

Needle collection in the United Kingdom
In the United Kingdom, City Councils take responsibility for disposal of needles. Safe needle drop boxes are installed across the city, and needle disposal bins are placed in public toilets. For example, Belfast set up the first needle disposal bins in the toilets for IDUs in 2014. Since then, more needle disposal bins have been installed in public toilets (Robbie, 2015). Residents can return used needles through needle and syringe programs as well.
<table>
<thead>
<tr>
<th>Location</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>241 Simcoe Street – The London and Middlesex Housing Corporation</td>
<td></td>
</tr>
<tr>
<td>580 Dundas Street – The London and Middlesex Housing Corporation</td>
<td></td>
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<tr>
<td>130 King Street – Covent Garden Market, Market Lane</td>
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<tr>
<td>459 York Street – Mission Services, The Gathering Place</td>
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<tr>
<td>Forks of the Thames</td>
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<td>Victoria Park</td>
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<td>Harris Park</td>
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<td>186 King Street – Regional HIV/AIDS Connection</td>
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<tr>
<td>London Police Service – underground sallyport</td>
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<tr>
<td>Bathurst Street at Clarence</td>
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<td>Bathurst Street at The Salvation Army Centre of Hope</td>
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<tr>
<td>Municipal Parking Lot – Queens and Adelaide</td>
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<td>Municipal Parking Lot – Queens and Lyle</td>
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<tr>
<td>Campbell Park – 380 Dundas Street</td>
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<tr>
<td>Carfrae Park West (entrance to the park)</td>
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<tr>
<td>Carfrae Bridge (north side)</td>
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<tr>
<td>Municipal Parking Lot – King and Adelaide (near Tolpuddle Housing Co-op)</td>
<td></td>
</tr>
</tbody>
</table>

Source: City of London, 2016b.
EXHIBIT 3
Needle Recovery Fact Sheet

What should I do if I come across a needle in the community?
If needles are found on public property, please contact:
London CARES: 519-667-2273

To dispose of found sharps or broken glass:
- Use caution at all times.
- If possible, only use tongs to pick sharp up.
- If tongs are not available, use thick gloves or a thick cloth; do not touch the sharp/edge.
- Teach children to never touch sharps but to tell an adult when they find one.

What are Sharps?
- Used syringes with needles attached
- Used needles
- Used razor blades
- Broken glass that has come in contact with blood or other bodily fluids
- Lancets

Why should sharps be handled safely?
- Sharps may have blood from other people and this blood can carry infections like Hepatitis B, Hepatitis C, and HIV.

For more information on sharps disposal contact:
London CARES (city outdoor disposal bins): 519-667-2273
www.london.ca/residents/neighbourhoods/Pages/London-CARES.aspx
Regional HIV/AIDS Connection: 519-438-1601
www.hivaidscarinconnection.ca/safe-needle-disposal
Middlesex-London Health Unit: 519-699-5317 ext. 2330
www.healthunit.com/sharps-disposal

How should I handle my own sharps in a safe manner?
- Do not recap, clip, bend or break syringes or needles.
- Package in a hard plastic container or metal bin can with a tight fitting lid. Tape the lid and mark the container with "biohazard".
- Do not use glass or cardboard containers to dispose of sharps.

EXHIBIT 4
Outdoor Stationery Needle Bin

REFERENCES


BACKGROUND
Harm reduction practices have been identified as effective and promising approaches to drug use. Instead of focusing on drug users giving up using drugs, the principles of harm reduction aim to reduce the harms associated with drug addiction (Ontario Harm Reduction Distribution Program, n.d.). Providing clean needles and syringes without a limit on the amount, harm reduction practices encourage drug users to access the supplies needed to ensure they are injecting drugs safely and prevent the spread of blood-borne diseases (Ontario Harm Reduction Distribution Program, n.d.).

In response to the increasing incidences of intravenous drug use and disease transmission, the Counterpoint needle exchange program began in London, Ontario in 1992. In collaboration with the Regional HIV/AIDS Connection, the Middlesex-London Health Unit has operated the needle exchange service through the sexual health clinic (Regional HIV/AIDS Connection, n.d.). In 2008, fully supported by the City of London through the London Homeless Prevention System, London CAReS was established, and one of its roles was to keep public areas free of discarded needles (Regional HIV/AIDS Connection, n.d.).

In 2014, a six-year-old boy got a needle stick injury in a public toilet. This accident immediately created public panic, engendering a public discussion on how to manage needles safely and educating needle users on safe needle disposal. To improve the needle exchange program in London, it is important to understand project details and review the landscape of community programs, policies, and activities related to needle/syringe disposal. By comparing different programs, similarities and differences will be identified.

OBJECTIVES
1. Understand the principles of the harm reduction approach and the operation of needle exchange programs.
2. Environmental scan: review national and international needle exchange programs, and understand project details
   a. Areas: London, Toronto, Ottawa, Edmonton, Vancouver, Australia, United Kingdom, Europe
   b. Project details:
      • Existing community programs, policies, and activities related to needles/syringe disposal
      • Who distributes and collects needles? How?
      • Relevant stakeholders and their interests
      • What services each organization offers and how these services are operated.
3. Analyze the similarities and differences between programs, evaluate needle exchange programs in London, and identify the gaps between London and other areas.
4. Recognize best practice examples of programs and learn how to make recommendations for program development.
5. Understand how to promote safe drug injection and safe needle disposal.

DISCUSSION QUESTIONS
1. Discuss the definition of a harm reduction approach and needle exchange programs.
   a. What are the values and potentials of a harm reduction approach?
   b. How do you evaluate the implementation and operation of needle exchange programs?
2. Discuss the gaps in needle exchange programs between London and other areas.
   a. What are similarities and differences between programs?
   b. Can you describe the gaps between London and other areas?
   c. If the gaps cannot be identified clearly, what information do you think is absent?
3. Discuss the recommendations for safe drug injection and safe needle disposal in London.
   a. What recommendations will you present to improve needle exchange programs in London?
   b. What is the most urgent issue?
   c. What are the main barriers and how can we address these barriers?

KEYWORDS
Harm reduction; needle exchange programs; safe drug injection; HIV prevention; infectious disease prevention; safe needle disposal.