

# **Safer Crack Use Kit Distribution in the Winnipeg Health Region**

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This document describes the distribution of safer crack use kits (SCUKs) and the impact of their distribution in the Winnipeg Health Region. It describes the systems context for distribution of SCUKs, evidence supporting distribution, WRHA experience with distribution, processes for distribution and the cost of SCUKs.

## **Systems Context for Distribution of SCUKs**

SCUK distribution is one part of a WRHA health equity promotion approach reaching out to populations vulnerable to high levels of disease and premature death. Crack use is associated with significant determinants of poor health, including sex trade work (Atkinson, Williams, Timpson, & Schonnesson, 2010; Fischer et al. 2010), profound poverty, justice system involvement (related to property crimes and drug trafficking), unstable housing, barriers to health service access (DeBeck et al. 2009; Fischer et al. 2010) and chronic mental health issues (Schonnesson, Williams, Atkinson, & Timpson, 2009). Through outreach and the distribution of SCUKs, Street Connections has developed trust and constructive relationships with core area residents of Winnipeg who smoke crack cocaine, which increases opportunities for health education and access to health and social services.

SCUK distribution is also done in the context of a harm reduction approach recognizing that some people will use drugs regardless of anyone's recommendation. The WRHA believes that every person deserves respect and has value, and that people have a right to self-determination. Drug use should not result in easily preventable illness, injury or death for people of any age. Some may view that argument as particularly salient for a significant number of those (Leonard&DeRubeis, 2006) who may start smoking crack before they are 18 years of age.

It is the opinion of the Canadian HIV/AIDS Legal Network that distribution of SCUKs is permitted under the Food and Drugs Act (section 2(2)(a)) which defines "device" as "any article, instrument, apparatus or contrivance, including any component, part of an accessory thereof, manufactured, sold or represented for use in diagnosis, treatment, mitigation or prevention of a disease, disorder or abnormal physical state, or its symptoms, in human beings or animals..." (Canadian Legal Aids Network, 2008)

**"I use a glass stem because it is easier to reduce the number of times that I use. When I was shooting up, I was using a lot more often. I'm planning on stopping and the pipes help me use less." (Winnipeg drug user)**

The WRHA Board is committed to:

- Provide a comprehensive continuum of services for persons who use licit or illicit substances. The services will include harm reduction, health promotion, illness prevention, early identification, treatment, long-term rehabilitation and support. These services are not mutually exclusive and, taken together, form an integrated, evidence-informed system of care.
- Support individuals, families and communities to lessen the harms associated with substance use without necessarily requiring abstinence.
- Seek practical solutions to the harms of substance use including working with individuals, families and communities to address key determinants of health such as socio-economic status, housing, nutrition and safety.
- Maintain a balanced approach in implementing strategies to achieve a reduction in harms for the individual and the community as a whole. Where community and individual goals appear to conflict, there is an active attempt to reconcile these goals.

SCUK distribution occurs in the context of other harm reduction efforts. These efforts include needle exchange, immunization against hepatitis B and other illnesses more serious among people experiencing addictions and homelessness, sexually transmitted and bloodborne infection (STBBI) testing to promote early detection and quick access to medical care, referral to drug treatment and other services when requested, information about risks and risk reduction and counselling. Condom distribution is also part of our harm reduction approach and particularly important with people who may experience increased compulsiveness and increased sex drive when using crack. Condoms are also important for those who may engage in prostitution to pay for their crack addiction.

SCUK distribution also occurs in the context of a variety of other community efforts and supports that affect use and availability of crack cocaine. These efforts include enforcement of drug laws, treatment services through the Addictions Foundation of Manitoba and others, as well as prevention initiatives most of which are directed at decreasing the factors that lead to drug use (e.g., promoting healthy parenting and early childhood development, retaining children in school, anti-bullying).

### **Evidence to Support Distribution of SCUKs**

High rates of hepatitis C have been associated with non-injection drug use (Tortu, McMahon, Pouget & Hamid, 2004; Scheinmann, Lelutiu-Weinberger, Stern, Jarlias, Flom & Strauss, 2007). The distribution of SCUKs is based on common sense, risk factor epidemiology using convenience samples mostly of injection drug users who smoke crack, and other risk factor evidence. There are insufficient or inadequately robust studies that report directly on the effect of harms on people who only smoke cocaine without ever having injected drugs. These types of studies might be a more appropriate methodology for confirming that using clean SCUKs prevents these harms. The causal pathways to infection are insufficiently documented using rigorous research methods (McMahon & Tortu, 2003; Scheinmann et al., 2007).

“I use Safer Crack Use Kits because it is safer than needles. I switched to using pipes because I have HIV and it is easier to look after my stuff and not share with other people. I want to protect my friends and I can get pipes for them so they don’t have to use mine” (Winnipeg drug user)

An Ottawa study (Leonard&DeRubeis, 2006) showed that availability of SCUKs decreased injection behaviour and increased drug smoking. Close to 19% switched drug use patterns entirely, while 40% decreased injection of drugs. Drug contamination, adulteration and dosing errors all result in the most significant consequences as a result of injecting illegal drugs. Shifting drug use from injection to smoking significantly reduces many injection-related risks including:

- Blood borne infections particularly HIV and hepatitis B and C,
- Abscesses and other soft tissue infections and infection-related problems at injection sites,
- Systemic and localized cardiovascular infections including phlebitis and endocarditis,
- Deposits of small solids that lodge in the lungs, and
- Overdose because the entire volume of the drug is often injected at once versus more controlled intake during smoking.

Availability of SCUKs in Ottawa decreased the number of people who share equipment every time by 35%, and for those who continued to share equipment they decreased this risky behaviour by 40% (Leonard&DeRubeis, 2006). In a time-limited Vancouver program, availability of SCUKs did not affect sharing but did result in increased use of mouthpieces which should result in fewer burns (Johnson, Malchy, Mulvogue, Moffat, Boyd, Buxton, Bungay & Loudfoot, 2008).

An evaluation of Ottawa’s safe inhalation program (Leonard, 2010) indicated a reduction in unsafe smoking practices, and HIV and hepatitis C related risk behaviours among participants who smoke crack cocaine. Unfortunately this outcome was not sustained throughout the evaluation period, which may be attributable to various environmental and system influences.

Ivsins, Roth, Nakamura, Krajden & Fischer (2011) found SCUK distribution programs in Victoria BC resulted in improved health awareness of participants who use crack cocaine, reduction in pipe/paraphernalia sharing, and reduction in property crimes for obtaining paraphernalia materials, demonstrating the value of SCUK distribution as an outreach and educational resource for public health. Barriers to SCUK distribution programs include resource constraints and police interference.

Mouth or lip burns, cuts or sores can result in risks for acquiring and transmitting hepatitis C (Fischer, Powis, Firestone, Rudzinski, & Rehm, 2008) and other blood borne infections. People who smoke crack have more than twice as many oral sores than those who do not (Farugue, Edin, McCoy, Word, Larsen, Schmid, Von Bargen & Serrano, 1996). An Ottawa study found that the presence of cuts, cracks, burns or other injuries to the mouth and lips was only marginally affected by the distribution of SCUKs

(Leonard&DeRubeis, 2006). It should be noted that the Ottawa program did not have a high uptake in use of pipe screens and many respondents continued to use Brillo™ or Chore Boy™. These cleaning products are not designed to be heated and pieces can frequently and easily break off and cause lip, mouth or throat burns (Porter& Bonilla, 1993).

**“The kits are safer than needles. Street Connections does a good job at helping us protect ourselves.”** (Winnipeg drug user)

Crack smoking has been associated with:

- hepatitis C (Shannon, Rusch, Morgan, Oleson, Kerr & Tyndall, 2008),
- HIV (Buxton, Cook, Durigon, Kraiden, Lem, & Remple, 2009; DeBeck, 2009; Nyamathi, Dixon, Robbins, Smith, Leake, Longshore & Gelberg, 2002; Tortu, Neaigus, McMahon, & Hagen, 2001; Shannon et al., 2008). and
- risky sex practices (Mehrabadi, A., Craib, K.J.P., Patterson, K., Adam, W., Moniruzzaman, A., Ward-Burkitt, B. & Schechter, M.T., 2008; Shannon et al.; Werb, Debeck, Kerr, Li, Montaner & Wood, 2010)
- methicillin resistant *Staphylococcus aureus* (MRSA) carriage and infection (Gilbert et al. 2006; Gwizdala et al. 2011; Quagliarello et al, 2002)
- invasive *Streptococcus pneumoniae* disease (IPD) (Romney et al. 2008; Vanderkooi, Church, MacDonald, Zucol, & Kellner, 2011)

Sharing of inhalation equipment for crack smoking has been found to be associated with increased rates of hepatitis C (Macias, Palacios, Claro, Vargas, Vergara, Mira, Mechante, Corzo & Pineda, 2008). This evidence points to the value of integrating SCUK distribution into a robust harm reduction program that includes information provision and other resources. Fischer & Coghlan(2007) call for safer crack use kit distribution programs to be allowed to demonstrate its public health impact and to be appropriately resourced to do so.

North American studies have pointed toward shared crack pipes (Gilbert et al. 2006) and other drug inhalation paraphernalia (Quagliarello et al. 2002) as vectors for the transmission of MRSA among crack cocaine using networks.

Crack cocaine use is associated with IPD in Western Canada, particularly the highly invasive *S. pneumoniae* serotype 5 (Romney et al. 2008; Vanderkooi, Church, MacDonald, Zucol, & Kellner, 2011). The sharing of crack pipes, and coughing induced by crack smoking are considered potential contributors to the transmission of this IPD strain.

## WRHA Distribution of SCUks

Street Connections is a WRHA mobile and office-based harm reduction service, operated by the Winnipeg Regional Health Authority (WRHA) Population and Public Health program, that provides harm reduction education and counselling, referral services, immunizations, testing for sexually transmitted and blood borne infections, needle exchange, safer crack use kits and referrals to various health and social services. A van is staffed by outreach workers and nurses and operates six evenings a week, Monday to Friday 5 pm - 1 am, and Saturday 4 pm – 12 pm. Street Connections services are also available at a fixed site during normal office working hours five days a week.

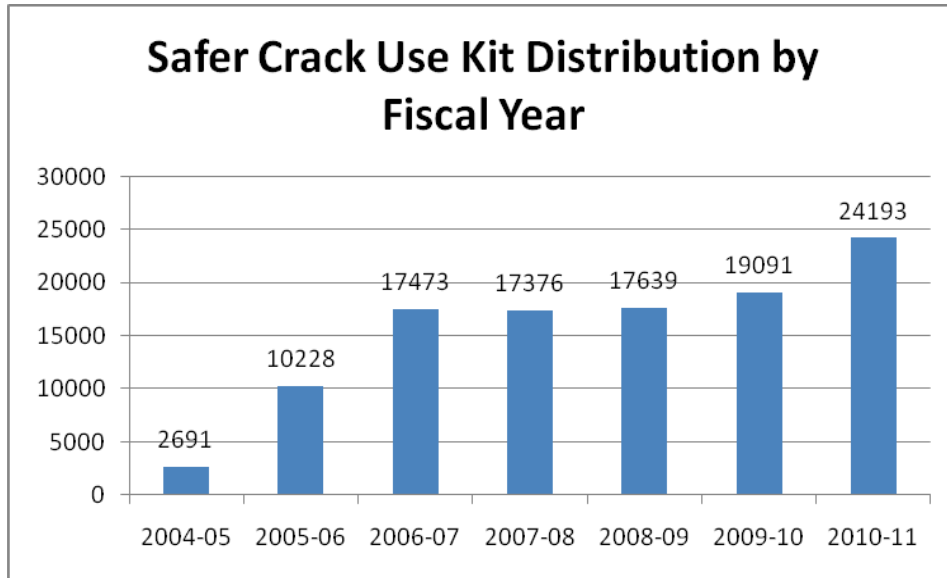
“I don’t want to share my pipe. I had a bad cough and I don’t want to pass it on to my friends. I’m HIV-positive and I’m scared that I may pass it on to friends if I share. I want to stop and find it easier when I use a kit. We definitely need the kits available to crack users.” (Winnipeg drug user)

Based on emerging evidence, the WRHA Population and Public Health program became one of the first Canadian public health departments to initiate distribution of safer crack use kits. Since August of 2004 Street Connections has been providing safer crack use kits (SCUKs), upon request, to people who report using crack cocaine. In the fiscal year 2004-05, within eight months, 2,691 SCUKs had been distributed. In the first months of operation distribution was limited to one kit per person per week because staff was learning about use of the kit and it was anticipated that one kit might be sufficient for individual users for one or more weeks.

A survey of 111 street-involved clients was conducted before and after the introduction of SCUKs in Winnipeg between August and October 2004. The reported frequency of pipe sharing decreased from 80% to 40% after the introduction of SCUKs, and about 60% of respondents indicated that they had less problems with cracked and/or burned lips/mouths after starting to use SCUKs. These observations were substantiated by outreach workers who also added that several clients had reported switching from intravenous administration of drugs to inhalation.

In 2006-07 the program shifted to work one hour later in the night ending at 1 AM. This resulted in significant increases in distribution that year. As well, recognizing that the limitation of one SCUK per week was insufficient, the distribution limit for kits was increased to one per person per day. In the same fiscal year the number of evenings of service increased from 5 to 6 days per week (20% increase in service availability). WRHA Street Connections distributed 17,473 SCUKs in 2006-2007, a 71% increase from the previous year, compared to an increase of only 14% in needles exchanged in 2006-2007 consistent with the anecdotal observation that clients were switching from intravenous to inhalation as the route of choice for drug administration. The inhalation of drugs (vs injecting), although still risky, is felt to carry a much lower risk of transmission of HIV or hepatitis C.

In 2010 a decision was made to raise the maximum number of SCUks distributed per person, within reasonable limits. This was based on the high level of requests for additional kits, reported breakage of stems and obvious need. The majority (75%) of client contacts with Street Connections are for SCUks.



Between fiscal years 2004-05 and 2005-06 syringe distribution rates were reduced by 16%. Once again, staff reported significant anecdotal evidence that this may have been due to people shifting the route of cocaine use from injection to inhalation.

Of note, syringe distribution numbers rebounded to 2004-05 numbers in 2006-07. A portion of this rebound may have been due to a 20% increase in service evenings.

## WRHA Process for SCUK Distribution

The following describes the process used for SCUK distribution:

- SCUks or any components of safer crack use kits are provided to a user upon request. Up to 5 SCUks/day provided, and secondary distribution is acceptable to active users.
- People must attend for a SCUk in person. The program does not do home visits for SCUks. The only exception to this is for someone with a legitimate mobility disability that makes it impossible for them to get to the street. In this situation someone else can pick a SCUk up for this person or a home visit can be made.
- Those requesting additional kits for friend(s) with whom they are planning on using are allowed up to five SCUks per day.
- Reselling of SCUks is discouraged.
- If cracked or burned skin on the lips or fingers are observed, it is an opportunity to discuss safer use.
- When a client reports that the stem was broken within a week it may indicate unsafe use and reports of breakage within a week is an opportunity to review safer use.
- Clients are informed regarding:
  - Risk of HIV and HCV if sharing glass stems and other devices for inhaling or smoking drugs.
  - Correct single-person use of stems. This includes the assembly of the kit with the brass screens folded like an umbrella before inserting into the stem, round side down. This allows for the screens to bind together when compacted so that they do not come loose and damage the user's airway.
  - Health consequences of using products other than brass screens (e.g., Brillo™ brand steel wool). Harms associated with steel wool use include: toxic volatile organic carbons released when steel wool is burned. This coating is burned off after the first use and not likely to be a persisting problem. Use of steel wool is also associated with loose shards breaking off and potentially damaging the inner mouth or airway. Use of brass screens reduces these harms. If a client is unwilling to use brass screens rather than steel wool, they can be encouraged to use screens between the steel wool and the user as a barrier for loose shards and to burn their steel wool before use.)
  - Correct disposal of used glass stems and mouth pieces.
- Safer crack use kits are never provided at home visits. If someone other than the person being visited requests a SCUk while the van is stopped for a home visit, an offer may be made to distribute the SCUk at the end of the street or some other nearby location. Clients may not realize that this is not a regular stop. This practice supports privacy while meeting client needs.
- During the daytime, SCUks can be accessed from Monday through Friday at the office site. Van stops can be arranged for distribution of SCUks to supply groups of people requesting SCUks. (e.g., We may offer to stop at a particular street corner at 2 PM.)
- All clients are requested to identify current drug use practices.



- Only clients currently using drugs by a particular route (e.g., inhalation, injection) will be provided with supplies for that route of drug use.

The following agencies participate in distribution of safer crack use kits: Sage House, Sunshine House, and 595 Prevention Team.

### Cost of Safer Crack Use Kit Contents

Product	Unit	Cost/order	Qty in 1 SCUK	Price
Pipe stems 10cmx1cmx1.5mm	100/box	\$35.00	1	\$0.35
Brass pipe screens .75cm	100pks/box/5 screens/pk	\$7.50	1 pk of 5	\$0.08
PVC Tubing 3/8 45 PSI	100'/roll	\$33.29	2" pc cut	\$0.06
Ziplock bags 4" x 6"	1000/pk	\$9.85	1	\$0.01
Alcohol swabs	4000/cs	\$55.80	1	\$0.01
SCUK inserts, bilingual	10000	\$700.00	1	\$0.07
Chopsticks	Offered but not always wanted		1	\$0.01
<b>Total Cost per Kit</b>				<b>\$0.59</b>

The cost for distribution of SCUK supplies in 2010-2011 was approximately \$14,000. The average annual cost of treating one patient with hepatitis C infection is \$10,000 (estimated lifetime cost of \$100,000) and of treating one HIV patient is \$10,000-25,000 (estimated lifetime cost of \$600,000). Preventing only one case of hepatitis C or HIV infection annually with the use of SCUKs would translate into a very cost effective harm reduction program.

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