SAFER INJECTION FACILITIES IN NORTH AMERICA: THEIR PLACE IN PUBLIC POLICY AND HEALTH INITIATIVES

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The continuing threat posed by HIV, HCV, drug overdose, and other injection-related health problems in both the United States and Canada indicates the need for further development of innovative interventions for drug injectors, for reducing disease and mortality rates, and for enrolling injectors into drug treatment and other health care programs. Governmentally sanctioned "safer injection facilities" (SIFs) are a service that many countries around the world have added to the array of public health programs they offer injectors. In addition to needle exchange programs, street-outreach and other services, SIFs are clearly additions to much larger comprehensive public health initiatives that municipalities pursue in many countries. A survey of the existing research literature, plus the authors' ethnographic observations of 18 SIFs operating in western Europe and one SIF that was recently opened in Sydney, Australia, suggest that SIFs target several problems that needle exchange, street-outreach, and other conventional services fall short in addressing: (1) reducing rates of drug injection and related-risks in public spaces; (2) placing injectors in more direct and timely contact with medical care, drug treatment, counseling, and other social services; (3) reducing the volume of injectors' discarded litter in, and expropriation of, public spaces. In light of the evidence, the time has come for more municipalities within North America to begin considering the place of SIFs in public policy and health initiatives, and to provide support for controlled field trials and demonstration projects of SIFs operating in injection drug-using communities.

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INTRODUCTION

Injection drug use continues to be associated with an array of significant health and social consequences throughout North America. These consequences are tied directly to the consumption of illicit drugs of unknown potency and composition, and the sharing of contaminated injection equipment; and indirectly, through unprotected sex with drug injectors, and through injectors' immersion in black-market pursuits that result frequently in violent exchanges with criminals and the police.

In the United States, injection drug use accounts for approximately 25% of all cumulative AIDS cases nationwide, but closer to 50% of all cases in several north-eastern states (State of Connecticut Department of Health, 2000; State of New York Department of Health, 2000). The number of new HIV infections reported nationwide among injectors increased 300% in the 1990s, from 6,474 new infections in 1993, to 13,969 in 1995, 17,344 in 1998 and 18,882 in 1999 (Centre for Disease Control and Prevention, 2000). Injectors also suffer from very high rates of hepatitis C infection – 90% of people who have injected for 5 years or more are infected - and from endocarditis, an acute infection of the heart valves that is not commonly seen among young adults (Centre for Disease Control, 1998; Gershon, 1998). Fatal and nonfatal drug overdose (OD) is also a prevalent medical problem among injectors, and hospital emergency rooms throughout the country attend to ODs virtually everyday (Greenblatt, 1997; Sporer, Firestone, & Isaacs, 1996). Emergency room (ER) visits involving heroin alone doubled from 33,900 in 1990 to 70,500 in 1996, and some medical experts have recently declared that the United States is in the midst of another heroin epidemic (Sporer, 1999). On the other hand, injectors are known to use primary care services erratically and only after they are very sick, which drives up health care costs (Cherubin & Sapira, 1993; Mor, Fleishman, Dresser, & Piette, 1992). Injectors' pattern of avoiding primary care services, and over-relying on emergency rooms and acute care hospitalizations, has been well documented since the 1960s (Jouria, Hensle, & Rose, 1967; Sapira, 1968). Similarly, the vast majority of users are not interested in drug treatment; only 10–15% are enrolled at any given time, and drop-out rates are high (Bux, Iguchi, Lidz, Baxter, & Platt, 1993; Haverkos, 1991).

In Canada, the National Task Force on HIV, AIDS and Injection Drug Use declared that "Canada is in the midst of a public health crisis concerning HIV, AIDS, and injection drug use … The number of new HIV infections among injectors is increasing rapidly, with Vancouver now having the highest reported rate in North America." (Canadian National Task Force on HIV, AIDS and Injection Drug Use [CNTF], 1997, pp. 2-3). As recently as 1997, the HIV prevalence rate among injectors in Vancouver is between 23-28% with 18.6 new infections for every 100

person-years, compared to a 20% prevalence rate in Montreal with 8.2 new infections for every 100 person-years (CNTF, 1997; Strathdee et al., 1997). The proportion of new HIV infections due to drug injection has also increased. Injectors accounted for 24% of new HIV infections between 1987 and 1990, but this increased to 46% by 1996 (Centre for Infectious Disease Prevention and Control, 2000). Like the United States, hepatitis C infection among injectors in Canada is also extremely high: 85% in Vancouver and 70% in Montreal with annual incidence rates of 26% and 27% respectively (Laboratory Centre for Disease Control, 1999). As the CNTF emphasized, "Despite clear indications of an escalating problem since the mid-1980s and the use of a variety of approaches to address it, the spread of HIV among injectors is increasing, as is the incidence of hepatitis and tuberculosis" (CNTF, 1997, p. 4).

In light of the continuing threat posed by HIV, HCV, and other drug injection-related health problems in both the United States and Canada, there is a clear need for further development of innovative interventions for injectors for disease prevention, reduction of drug-related deaths, and for increasing the number of injectors enrolled in drug treatment and other health care programs.

Governmentally sanctioned "safer injection facilities" (SIFs) are a health service that several countries around the world have been adding to the array of public health programs they offer. These countries include:

- Canada where the federal government, in collaboration with the Federal, Territorial and Provincial Advisory Committee on Population Health, has created a task force to examine the feasibility of a national research-based trial of SIFs (Kerr & Palepu, 2001); Vancouver, B.C. where SIFs are included in the Mayor's "Four Pillar Drug Strategy," and a formal proposal to implement 2 SIFs has been put forward (Kerr, 2000; MacPherson, 2001)
- Germany with 13 SIFs operating in 4 cities
- The Netherlands with 16 SIFs operating in 9 cities
- Switzerland with 17 SIFs operating in 12 cities
- Spain with 1 SIF operating in Madrid
- Australia where an SIF began operations in May, 2001 in Sydney, and legislation has been approved to operate an SIF in Canberra and is pending in Melbourne (New York Times, 2001; Dolan, 2000).

Public health efforts for injectors in all of these cities, as well as in many major cities throughout the United States and Canada, typically include a range of street-based outreach services, needle exchange programs, HIV-test counseling centers, drug treatment/drug-substitution programs, and broad-based, multi-targeted

educational initiatives (Kerr, 2000; Normand, Vlahov, & Moses, 1995). As such, SIFs are clearly additions to, but still only parts of, much larger comprehensive public health approaches to reduce drug-related harm.

To date, there have been no systematic evaluations conducted on the operation and effectiveness of SIFs. However, a significant body of program evaluations, government and conference reports, and research articles has accumulated. Two comprehensive and frequently updated compilations where some of these materials can be found are the Lindesmith Center-Drug Policy Foundation website (www.lindesmith.org/cites_sources/cites.html) and the Australian Drug Foundation website (www.adf.org.au/injectingrooms/index.htm).

The discussion below draws on these materials, and from field observations and interviews made by the authors who, as a team, divided-up and visited 18 SIFs in Germany, Switzerland and the Netherlands over a ten day period in November, 2000. The first author also visited the SIF in Sydney, Australia in the following year. Below, we examine whether SIFs offer a significant, public health option that more communities in North America may wish to consider adding to their array of public health services for injectors. Specifically, we address the following policy questions:

- What specific problems do SIFs address over other services in responding to drug-related harms?
- What agreements need to be considered and negotiated in order to implement an SIF within a municipality?
- What rules of operation do SIFs generally follow?

First, however, we provide an overview of how SIFs are described and defined in various countries, including their staffing requirements and services offered.

AN OVERVIEW OF SIFS

In Hannover, Germany in November, 1999 the Addiction and Drug Research faculty of Carl von Ossietsky University, under the auspices of the German Federal Commissioner for Drugs (1999), sponsored the symposium entitled *Consumption Rooms as a Professional Service in Addictions-Health: International Conference for the Development of Guidelines.* The SIF Conference was attended by over 180 social workers, psychologists, nurses, doctors, public prosecutors, lawyers, and police officers from Germany, the Netherlands, Switzerland, Austria, France, and Australia. In the Conference *Guidelines* drafted by the conference participants, and in other documents, SIFs are referred to by several different names around the world, including "Gassenzimmer," "health-rooms," "safer injection rooms," "lane-

room," "fix-rooms," "Fixerstubli," "drug consumption rooms," "consumption rooms," "medically supervised injecting centres," "supervised injecting places," "supervised consumption rooms," and "off-street injecting facilities" (Schneider & Stöver, 1999, p. 19). Despite the difference in names, the conference participants found common agreement on a simple definition: "[SIFs] are legal facilities that enable the consumption of pre-obtained drugs in an anxiety and stress-free atmosphere, under hygienic and low risk conditions" (Schneider & Stöver, 1999, p. 19). SIFs, therefore, stand in sharp contrast to what are generally referred to as "shooting galleries," which are private rooms or spaces in abandoned buildings, outdoor areas, and so on, that "operate informally and illegally … are unsterile, do not provide clean syringes or needles or the means of safe disposal, are unsupervised and do not provide medical assistance. These should not be confused with [SIFs] under discussion here" (Australian Drug Foundation, 1998, p. 2).

A distinction has been made between "pure" versus "comprehensive" SIFs, referring to the range of services that different projects offer (Schneider & Stöver, 1999). At one end of a continuum are "pure" SIFs that offer a safe and hygienic environment in which injectors can consume their pre-obtained drugs using sterile equipment provided on-site, overseen by a staff trained in basic first aid and cardio-pulmonary resuscitation. At the other end are "comprehensive" SIFs that, in addition to the above, offer a much larger array of health and social services for injectors administered by professionals.

In actuality, all of the SIFs we observed in Western Europe, as well as those discussed in the existing literature, are comprehensive programs. For example, Dolan and Wodak (1996) described the SIFs they observed in 1996 in Bern, Zurich and Basel, Switzerland as "housed within Centres that also contain a café, a counseling room and a clinic for primary medical care. The injecting rooms are discrete rooms within the Centres" (p. 3). (While some SIFs offer spaces for smoking drugs and "chasing the dragon," these facilities – which are more broadly referred to as "consumption rooms" - are not reported on in this analysis.) Similarly, the 19 SIFs we visited in Germany, Switzerland the Netherlands and Australia offered the following comprehensive range of services on-site (see Table 1):

Finally, all of the SIF planning documents in Australia and Vancouver, B.C. make a point of emphasizing the comprehensive nature of the programs being proposed, especially the services or referral capabilities to be offered on-site for linking injectors directly to drug treatment, primary care, counseling, and other social supports (Australian Drug Foundation, 1998; Kerr, 2000).

Because SIFs tend to offer many of the same services in general, what is most significant to note in comparing them is the amount of resources that different SIFs are able to invest in any given service. In this respect, SIFs can be found to vary

TABLE 1
SIFs IN GERMANY, SWITZERLAND, THE NETHERLANDS, AND AUSTRALIA

Name of SIF	Injection Spaces	Injection Equip.	Medical Care	Metha-done	Coun-seling	Café	Beds	Laundry/ Shower	Job Training	Needle Exchange
Frankfurt										
Niddastrasse	12	Yes	Yes	No	Yes	No	No	No	No	Yes
Elbestrasse	8	Yes	Yes	Yes	Yes	Yes	17	L+S	No	Yes
La Strada	6	Yes	No	No	Yes	Yes	22	L+S	No	Yes
Eastside	8	Yes	Yes	Yes	Yes	Yes	80	L+S	Yes	Yes
Hamburg										
Drop-In	7	Yes	Yes	No	Yes	Yes	No	L+S	No	Yes
Fix Stern	7	Yes	Yes	No	Yes	Yes	No	No	No	Yes
Zurich										
Neufrankengasse	6	Yes	Yes	No	Yes	Yes	No	L+S	Yes	Yes
Selnaustrausse	10	Yes	Yes	No	Yes	Yes	No	L+S	Yes	Yes
Seilergraben	5	Yes	Yes	No	Yes	Yes	No	L+S	Yes	Yes
Allmendstrasse	6	Yes	Yes	No	Yes	Yes	No	L+S	Yes	Yes
Wallisellenstrasse	5	Yes	Yes	No	Yes	Yes	No	L+S	Yes	Yes
Bern										
Anlaufstelle Naegeligasse	10	Yes	Yes	No	Yes	Yes	No	L+S	No	Yes
Rotterdam										
St. Paul's Church	20	Yes	Yes	No	Yes	Yes	80	L	Yes	Yes
CommunityCenter	6	Yes	Yes	No	Yes	No	No	L+S	No	Yes
Keetje Tippel	8	Yes	No	No	Yes	Yes	No	L+S	No	Yes
Amsterdam										
HVO	1	Yes	Yes	No	Yes	Yes	No	L+S	No	Yes
AMOC	5	Yes	Yes	No	Yes	Yes	No	L+S	No	Yes
Arnhem										
IT	5	Yes	Yes	Yes	Yes	Yes	No	No	No	Yes
Sydney										
MSIC	8	Yes	Yes	No	Yes	Yes	No	No	No	Yes

widely. For instance, virtually all SIFs offer "counseling" to injectors, but the type and level of counseling offered by different programs can vary significantly. For example, during the site visit to an SIF in Hamburg, a professional social worker commented that, "We'd like to think of ourselves as a counseling and referral agency that also offers a consumption room. But frequently we feel like we offer a consumption room and offer counseling on the side." This comment is interesting in light of the fact that the SIF in question enjoys a large staff of 11 full-time social workers and nurses, in addition to a front-line staff to oversee everyday operations. Being highly trained, the professional staff place a great deal of emphasis not just

on counseling clients, but on "quality" counseling; ie., working in-depth with clients over time in helping them deal with the many difficult problems injectors commonly struggle with: eviction, homelessness, legal entanglements, loss of custody, mental illness, debt, deportation and, of course, drug addiction, a problem that many clients regard as less urgent than other problems. The social worker's comment above, therefore, must be understood in context: she works in an SIF that invests considerable resources in counseling as a service, and the staff of professionals embrace high standards of what "real" counseling involves. But because of such high standards and investment of resources, in the face of very high client-need, the professionals feel they are falling short professionally.

In comparison, during a site visit to an SIF in Frankfurt, a staff member commented, "Most of the time I feel like we are basically referees." This comment is interesting because the SIF in question also lists "counseling" as a service that it offers. However, the resources of this SIF are very different, and invested very differently, than those of the SIF in Hamburg. The Frankfurt SIF is administered by a large, part-time staff of university students, supervised by two professional social workers. The students are trained in basic first aid and cardio-pulmonary resuscitation, as well as in how to work with clients in a nonjudgmental manner. The staff feel like "referees" because the main focus of their work is on monitoring clients, enforcing the house rules, reacting to problems as they arise, and moving clients along at a reasonable pace to minimize congestion in the SIF. The SIF provides "counseling," but this primarily means orienting injectors on how to behave in the SIF, responding to clients' questions, engaging clients in mundane interactions and information-sharing, and referring clients who request help to on- or off-site services.

Similarly, virtually all SIFs offer medical care, yet what this means in terms of the nature and availability of actual services on-site, and the types of medical practitioners available, is highly variable. Some SIFs have medical practitioners on-site at most times providing basic primary care services, as well as training and assistance to clients experiencing problems in the injection room. Other SIFs provide medical care, but only with limited hours of operation by visiting practitioners, who offer a more limited range of medical services. To date, primary care facilities, themselves, have not incorporated SIFs into their own comprehensive planning and prevention programs, and the majority of SIFs rely on referral to outside facilities for many primary care services.

Given that SIRs, in general, offer similar services, and differ only in the resources they invest in them, SIRs tend to share similar logistical arrangements.

To begin with, SIFs have a main entrance for clients that staff monitor and control in order to prevent over-crowding inside, to receive and direct visitors to

different services, and to block clients who have been temporarily or permanently expelled from the SIF for disciplinary reasons. (In Zurich, a police official checks clients' documents to ensure that they have legal residency in the city before allowing them to enter.) In general, the entrance leads to a waiting room from which all other services and amenities emanate. SIF staff emphasize that the larger the waiting room is, the better. They also prefer that a café be part of the waiting room in order for the staff to interact and monitor clients with ease. A large waiting room minimizes the need for injectors to loiter outside a project before gaining entrance, and which helps protect an SIF's public image and relationships with neighbors. It also reduces the risk that injectors will be identified as SIF-clients. (An exception to the above is the Sydney SIF. The waiting area is large enough to accommodate 8–10 clients, but usually much fewer are waiting because the staff attempt to usher clients into the injection room quickly. As they leave the injection room, clients enter into a large lounge area where they are encouraged to remain, have some coffee or tea, relax for awhile, and to stabilize under the staff's supervision.)

Access to an SIF site may be limited by a number of factors. First, local police activity may limit potential clients from entering. For example, to reduce individuals from outlying Cantons or counties from using public services, police in Zurich monitor the SIFs to allow only Zurich citizens to frequent them. To be a citizen, individuals must reside in the city for two or more years in order to obtain an identification card that allows access to services. In general, however, SIF staff in other cities report that routine policing poses no obstacle for their clients. For instance, in Frankfurt, police on foot patrol are seen frequently around downtown SIFs, but they work to prevent serious offenses and maintain public order. The many SIF-clients we spoke to, both within SIFs and on the street, reported that they are seldom if ever hassled by the police.

Once inside the SIF waiting room, the staff requires clients to sign-up for admission to the injection room on a first-come, first-serve basis. SIF-staff allow clients to enter the injection room after their name or some other identifier has been called. As clients enter the room, a staff member may ask clients to display a registration card, to register at that time, to sign a liability release form, or to provide some other information. Clients are then given the sterile injection equipment they need, which typically includes a preferred type of syringe, water, dissolving agent, cooker, cotton filter, tourniquet, alcohol wipes, bandages, and paper towels for cleaning-up after themselves.

Injection rooms generally provide 7 to12 injection spaces, and clients are allowed 30-45 minutes to inject. The SIF Conference *Guidelines* state that, "experience indicates that the capacity of a room should not exceed 10-12 places and that there should be enough space for safe consumption, movement, and for the management

of drug consumption related emergencies" (Schneider & Stöver, 1999). At least one staff member is present in the injection room at all times to monitor clients and respond to problems. Clients sit at either stainless steel tables or along counters bolted to the wall. Injection rooms also contain a large sink with a soap and paper-towel dispenser for clients to use before and after injecting. There is a cabinet containing additional injection materials for clients from which the staff can draw, as well as basic medical equipment such as mechanical respiration devices (resuscitation mask, air bag), biting wedges, a blood pressure apparatus, oxygen, stretcher, blanket, first-aid kit, dressing materials and ointment. The injection room is also equipped with a buzzer that allows the staff to signal for help, and a telephone to call for outside emergency assistance.

Finally, the total client-load that any single SIF can hope to accommodate is far less than the number of active injectors in most large cities. That is why cities that sponsor SIFs, or propose to, typically have more than one SIF (Dolan et al., 2000; Kerr, 2000). In addition, the optimum operating schedule of SIFs in many cities may be 7 days a week, 24 hours a day, as the SIF Conference *Guidelines* recommend (Schneider & Stöver, 1999). However, due to the practical politics of funding, SIFs typically have far shorter schedules (Dolan et al., 2000; Schneider & Stöver, 1999). Thus, for planning purposes, conservative estimates would suggest that a 10-space SIF open 12 hours a day, allowing clients 30 minutes per visit in the injection room, can accommodate approximately 200-250 client-episodes a day, approximately 800-1,000 a week, or around 3,500-4000 client-episodes a month. Assuming this involves approximately 1,000-1,500 separate individuals per month, managing such a client-load is challenging, especially for an SIF of several full-time social workers, medical practitioners and frontline staff whose mandate is to get to know all clients, individually, and move as many of them as possible into drug treatment, primary care, or some form of counseling/rehabilitation service.

PROBLEMS ADDRESSED BY SIFS

A point emphasized in the SIF Conference *Guidelines* is that a "prerequisite in setting up of consumption rooms is …to *point out service delivery gaps* and to do so in close cooperation with drug assistance agencies, the police, the public prosecutor's office and public health authorities, etc." (Schneider & Stöver, 1999, p. 19). This point was highlighted because gaining community support for SIFs is frequently dependent on SIFs coming to be seen as overcoming important deficiencies in a municipality's array of public health efforts for injectors, and/or if the number of HIV-infections and other health problems among injectors continue to increase despite the operation of conventional services in place. As already noted, many cities in North America already typically provide street-based outreach

services, needle exchange programs, HIV-test counseling centers, drug treatment facilities, and broad-based, multi-targeted educational initiatives.

The available literature indicates that SIFs target three significant problems largely neglected by conventional public health efforts for injectors.

I. Reducing Rates and Risks of Drug Injection in Public Spaces. SIFs are seen as targeting the significant health risks that injectors run when they inject in public spaces. Needle exchange and street-based outreach services work with injectors in providing harm reduction materials and education, but there is no evidence that such services lead to a reduction in injectors' use of public spaces for injection. But to prevent or ameliorate the onset of withdrawal symptoms, or to get high as fast as possible, injectors commonly consume drugs close to where they are purchased (McCoy & Inciardi, 1995). Doing so results in injectors frequently injecting drugs in public and quasi-public spaces, such as restaurant and public restrooms, abandoned buildings, cars, stairwells, parks, and alleys. Injection in public spaces is not limited to injectors situated in large urban areas. A study by the first author in Windham, Connecticut, a rural town of 22,000 residents, found that injectors regularly injected in four outdoor areas: two in the woods surrounding a 600-unit public housing project (where many of the injectors live), and two other sites located on the banks of a river running through downtown (Broadhead, van Hulst, & Heckathorn, 1999).

Injectors' use of public spaces to inject drugs creates a number of risks to their health and well-being. It increases their risk of being assaulted and robbed by street-predators, or confronted by the police. In reaction, injectors are prone to rush when injecting in public spaces, which leads to mistakes and carelessness: in the preparation of injection sites, in the injection procedure, and in following important risk reduction measures throughout the process (Canadian HIV/AIDS Legal Network, 1999). When people inject in haste, mistakes are more likely to spiral into crises, such as when users have trouble hitting a vein and begin digging and jabbing themselves in a panic. Cutting-corners in order to save time increases risks, especially when drugs are injected quickly (eg., not tested for strength) and when injection equipment is re-used but not properly cleaned (increasing the likelihood of bacterial and viral infections). Carrying out risk reduction measures takes time and resources. For example, cleaning a used syringe with bleach requires that it first be flushed several times with clean water, then filled entirely with bleach at least 3 times, and leaving the bleach in the syringe for at least 30 seconds. After removing the bleach, the syringe then needs to be flushed several more times with clean water. All other used injection equipment, such as spoons or cookers, must also be cleaned with bleach and rinsed with clean water (Normand, Vlahov, & Moses, 1995). The pressures and anxieties of injecting in public spaces work against users' ability to adhere calmly and carefully to these risk-reduction procedures.

In addition, when injecting outdoors, injectors are more likely to lack the supplies needed for safer injection. For example, injectors are often reluctant to carry injection equipment when they are out and about town, usually from fear of the police (Grund, Broadhead, Heckathorn, & Anthony, 1995). After copping, they may then not be able to obtain new syringes because local pharmacies and needle exchange services may be closed or far away. Not being able to obtain sterile injection equipment increases injectors' risks of using contaminated equipment, either by borrowing someone else's syringe or using one that has been discarded. Injectors may be good at keeping a supply of new injection equipment at home, but that does not help them when they are away from home and run into unexpected opportunities to get high. Finally, temporary and long-term homelessness is common among injectors. Many do not have a living space in which to store new injection supplies.

The public spaces in which injectors inject are also unhygienic. Typically there is no source of clean water or clean injection equipment on-site, and used paraphernalia is frequently scattered about, including syringes. When injecting outside, injectors typically must proceed without cleaning either their hands or their injection sites, or cleaning and dressing their wound sites afterwards.

Finally, just as the risk of fatal drug-overdose increases when drug users inject by themselves, research indicates it also increases when they inject in public spaces. There are frequently no telephones on-site to call for help; many spaces, such as alleys, abandoned buildings and parked cars have no real address to guide emergency workers to; some spaces are difficult to reach with emergency equipment; and competent bystanders are less likely to be available in many spaces, such as alleys, abandoned buildings, and highway and railroad underpasses, to help or seek assistance (McGregor, Darke, Ali & Christie, 1998; Sporer, 1999).

Thus, SIFs are seen as overcoming a significant service gap in existing public health programs. The provide an alternative "public" space for injectors to use that offers a hygienic and relaxed environment, clean injection materials, and trained personnel to respond to emergencies, and to enroll injectors in drug treatment, primary care and other support services. Some observers find it ironic that many municipalities offer needle exchange services but not SIFs, as an Australian observer pointed out: "A central anomaly in the current policy regarding needle-exchange services is that, while federal and state governments support programs where sterile needles and syringes are given out to injecting injectors, those same users are often forced into unhygienic environments (… toilet blocks, alleyways or behind business premises) in order to inject" (Micallef, 1998, p. 5).

II. Creating Opportunities to Work with Injectors. SIFs are seen as providing a far greater opportunity for health workers to connect meaningfully with injectors than conventional public health services and programs. First, needle exchange and

street-outreach workers make frequent contact with injectors, but it normally happens when injectors are out and about town, intent on "taking care of business" (ie., when they are working to cop drugs or get the money needed to buy them). The great majority of these interactions, therefore, tend to be cursory and on-the-run (Broadhead & Fox, 1993; Murphy, Sales, Choe, McKearin, & Murphy, 2000). As the Drugs and Crime Prevention Committee (1999) of the Victoria Parliament found, "[I]n contrast to needle exchange outlets where clients generally visit briefly, [SIFs] allow for a more prolonged interaction between health-care staff and client" (p. 16). This is because SIFs place trained staff in direct proximity with injectors while they are waiting to consume their drugs, as well as after they have done so and have returned to the waiting room to relax. SIFs that offer a café and other services give clients even more reason to remain on-site and interact with staff, during which time the clients become further stabilized.

Moreover, compared to needle exchange and street-outreach, SIFs provide greater opportunity for health workers to engage clients because they offer many needed services on-site: needle exchange, counseling, primary medical care, and frequently drug treatment, shower and laundry, temporary sleeping accommodations, and still other services depending on resources. There is substantial research that indicates that injectors will avail themselves of drug treatment and other services at much higher rates if they are offered on-site rather than referring them to such services elsewhere (Altice & Friedland, 1998; Umbricht-Schneiter, Ginn, Pabst, & Bigelow, 1994). In addition, when services are offered in a comprehensive package, as SIFs do, then staff members have frequent contact with clients which creates a *social support mechanism* that facilities injectors' abilities to follow through and adhere to appointments, regimens, and schedules (Broadhead et al., in press).

As noted above, once inside an SIF waiting room, clients must sign-up to gain admission for the injection room and then wait their turn. While they are waiting, clients and staff have the opportunity to connect with one another, discuss problems, or make arrangements to see a counselor or a health provider. If nothing else, clients have the opportunity to relax and reflect in a non-threatening environment. When clients finish in the injection room, they are encouraged to return or go to a waiting room and stay for a half-hour or so until they have stabilized. This gives staff a further opportunity to monitor clients' condition and connect with them at a time when they are not agitated, stressed-out or dope-sick. Because many people inject drugs simply to "get straight" and feel "normal," one of the best times for staff to interact with clients can be when they return to the waiting room after using the injection room (Rosenbaum, 1981; Siegel, 1989; Waldorf, 1973). In general, an SIF's waiting room is the most opportune space for staff to engage clients, either as a group in terms of presentations, videos, and announcements; or as individuals, in

terms of getting to know them as persons, enrolling them in counseling or medical and drug treatment, or consulting with them about any number of things. If an SIF runs a café, this makes the waiting area even more inviting for clients to spend time in, which further increases the staffs' opportunity to work with them.

Within the waiting area, clients gain access to all other services and/or amenities an SIF may make available: medical, drug treatment and counseling services; private consultations; safe sex and injection education; needle exchange; restrooms, showers and laundry; overnight beds; and other possible activities such as playing pool, ping pong, cards, chess, bingo, watching television or videos, reading newspapers and magazines, and checking bulletin and message boards. These combined opportunities and experiences create the potential for far greater and more meaningful contact between a health workers and IDU-clients than any other type of risk reduction service. Still, this optimum situation should not be over-drawn; connecting meaningfully with active drug injectors is still a challenge. While waiting to shoot-up in an SIF, some IDUs are anxious or dope sick, and not in the mood to communicate. After shooting-up, they may go on the nod for a half hour or so before stabilizing. Yet, despite these obstacles, SIFs appear to provide much better opportunities to interact with active IDUs than do street outreach or needle-exchange programs, in order to help injectors deal with, and take responsibility for, any number of problem they may be facing. This includes outpatient methadone programs as well, since they typically discourage "patients" from hanging out after they have received their dose.

III. Reducing the Burden of Illicit Drug Use on the Community. SIFs are described in the available literature as reducing the nuisance, costs, and risks to the larger community caused by drug injection in public spaces. Injecting in public spaces results in large amounts of litter that is unsightly and costly to collect. Such litter, particularly discarded syringes, pose a health risk of accidental needle sticks and the transmission of blood-borne pathogens, especially to municipal workers and custodians who collect such litter, and trash haulers and sorters who separate and process it. Needle exchange programs endeavor to collect as many needles and syringes as they dispense. But some programs are more successful than others and, to our knowledge, no program in operation works to collect any drug-related litter other than syringes (Broadhead, van Hulst, & Heckathorn, 1999). For example, in the four outdoor injection areas in Windham, Connecticut mentioned above, the scheduled surveys that were carried out of drug-related litter found syringes, plastic syringe wrappers and caps, paper and plastic dope bags, bottle caps (cookers), one-ounce plastic bottles for bleach or water, filters, condoms and wrappers, match books, and assorted cans and bottles. In terms of dope bags alone that had been discarded in only one of the outdoor areas, 776 and 534 dope bags were collected in

the summer and fall of 1997, respectively, and 643 bags in the summer of 1998 (Broadhead, van Hulst, & Heckathorn, 1999).

But in addition to the problem of drug-related litter, congregations of injectors are widely regarded by the public-at-large as a nuisance and a threat. Moreover, some inner-city areas have been *de facto* expropriated by injectors, including whole sections of municipal parks, street corners, vacant lots, sidewalks, and alleys. SIFs are seen as offering an innovative way to reduce significantly the expropriation of such public spaces, as well as the nuisance and fear that public drug use creates, by giving injectors a sanctioned, alternative space that accommodates the needs and sensibilities of both injectors and the larger community. As the State of Victoria Drug Policy Expert Committee (2000) reported, "Overseas experience suggests that communities find a well run [SIF] more acceptable in their neighborhood than the intense street-using situations that preceded them" (p. 17).

Conversely, there is no evidence in the available literature that indicates that the establishment of an SIF results in an increase in improperly discarded injection equipment, an increase in drug users congregating in public spaces and becoming a greater nuisance, or an increase in drug dealing and other forms of drug-related crime within a community.

NEGOTIATING SIFS' PLACE IN THE COMMUNITY

In seeing SIFs as a public health option that municipalities throughout North America may wish to pursue to overcome deficiencies in their existing efforts, the active involvement and support of four different components of the community is essential: law enforcement, city officials, drug assistance agencies, and injectors themselves.

LAW ENFORCEMENT

Law enforcement agencies in the United States and Canada vigorously pursue illicit injectors, dealers, traffickers and producers. However in many municipalities throughout North America, law enforcement agencies have also entered into a "hands-off" relationship, working in collaboration with public health programs for injectors. They have agreed, sometimes under court pressure, to curb their surveillance and arrest efforts of injectors utilizing health services such as needle exchange, and to not interfere with outreach workers attempting to access injectors for the purpose of disseminating health education and risk reduction materials (American Civil Liberties Union, 2001). In municipalities that may wish to implement SIFs, a similar collaborative agreement with the police is necessary. As the Australian Drug Foundation (1998) advised in its *Position on the Provision of Injecting Facilities*, "the legal issue must be addressed to protect both the injectors

and those working and running the facilities" (p. 3). Legally, what SIFs need is the same working agreement that the police already honor for the clients and staff of needle exchange programs, street-based outreach services, HIV test counseling centers, drug treatment facilities, and other public health programs. Honoring such an agreement, as Malkin (2001) observed, "…does not even require going one step further than what has already taken place with the establishment of syringe and needle exchange" (p. 17). For example, during our site visits in Western Europe, we found that police enter SIFs only if called, or if there is a pressing need to find someone. In Bern, the police station is directly across the street from the SIF, but the police pay little attention to it as long as the "public nuisance" outside the SIF is minimized. Such a policy allows the police to focus their energy on reducing upper-level forms of drug trafficking and organized crime. As an alternative to these types of working agreements, some countries have opted to create new legislation specific to the operation of SIFs in order to ensure the full legal protection of injectors and staff (Malkin, 2001).

Lastly, it is important to note that, like most countries, both the United States and Canada are signatories to various international covenants pertaining to illicit drugs. The most notable covenants are the 1961 Single Convention on Narcotic Drugs, the 1971 Convention on Psychotropic Substances, and the relevant portions of the 1998 United Nations Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (cited in Gilmour, 1995). While it is commonly assumed that these conventions require signatories to adopt a criminal-prohibitionist approach to dealing with illicit injectors, each contain provisions allowing for public health approaches. For example, two recent international reviews found that all three conventions advocate for the "treatment, education, aftercare, rehabilitation and social reintegration" of injectors, and require signatories to "take all practical measures" for reducing disease and addiction (Swiss Institute of Comparative Law, 2000, p. 1; Gilmour, 1995). While the conventions do not specify what these measures should be, many countries, including the United States and Canada, already offer needle exchange, street-based outreach, drug treatment, and other services for injectors. As Australia and several western European countries have demonstrated, there are no treaty-based legal obstacles to adding SIFs to this list of public health measures for drug injectors.

LOCAL GOVERNMENT

Community implementation of an SIF requires the knowledge and endorsement of local governmental officials, especially from the offices of the major, city council, city attorney, zoning and planning, health department, and relevant task forces. Officials need to be informed sufficiently about the public health implications of a

proposed SIF in order to explain it to others, and to defend its goals and operations. Ideally, officials should be integrated into the development and implementation of an SIF, including deciding where it will be located, the range of services it will offer, its operational procedures, and the composition of its staff.

In addition, it will be incumbent on officials to work out the legal framework within which an SIF can operate. This legal framework will articulate the rights and obligations of an SIF's sponsoring agency and staff, and circumscribe its potential liabilities. By rights, we mean the program staff's authority to specify and enforce the SIF's rules of operation and code of conduct for clients and staff. Obligations include the staff's "duty to care" for eligible clients, and the protocols staff members will be expected to follow in conducting business, and in responding to problems and emergencies. Finally, an SIF's liabilities can be limited through the use of a legally binding release-form signed by all clients. In the release form, clients will acknowledge, and accept full responsibility for, the risks they will take as free adults in using an SIF to inject illicit drugs. The release-form will explicitly state that an SIF is free of responsibility for morbid outcomes that any given client may experience in the injection room, despite the staff's good faith efforts to prevent such outcomes (Drug Policy Expert Committee, 2000). Naturally, in the event of gross negligence or recklessness on the part of a staff member, an SIF would be liable, but in the same way that conventional health-care facilities are already legally vulnerable, including needle exchange programs and HIV counseling centers. An SIF would need to take steps to indemnify itself, but such steps do not appear to involve anything out of the ordinary.

Finally, agencies that receive government funding, at least in the United States, are required to certify that they provide a "drug-free" workplace for their employees. For example, they are required to notify "employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violation of such prohibition" (U.S. Government, 1988, p. 1). These legal requirements apply to agency employees rather than clients. For example, needle exchange and street-outreach workers, drug treatment providers, and medical practitioners interact with clients who are commonly in the possession of controlled substances. Many personnel also work in the immediate vicinity of persons consuming drugs, or are high. The agencies of such personnel, however, are still able to certify that their employees work in a drug-free workplace. The sponsoring agency of an SIF would be able to do so as well.

DRUG ASSISTANCE SERVICES

The SIF Conference *Guidelines* uses the term "drug assistance services" to refer to the full range of programs to help injectors and the community in reducing drug-

related problems, including access to drug treatment, risk reduction, medical care, and social-welfare programs (Schneider & Stöver, 1999, p. 20). Because SIFs can provide many services on-site, and refer clients to still others in the community, local drug assistance agencies have essential contributions to make in the development and ongoing operation of an SIF. As the SIF Conference *Guidelines* emphasize, "[t]he primary goal is…a consumption room model embedded in the existing service delivery system" (Schneider & Stöver, 1999, p. 20). To this end, in implementing an SIF, memoranda of understanding will need to be developed on how SIF staff can call upon the many different drug assistance agencies that make up most city's health and social service system to help SIF clients.

But, in addition to establishing referral arrangements for services elsewhere, it is important to recall that SIFs are by design meant to offer a comprehensive array of services on-site. Thus, the optimum is for drug assistance services within a municipality to set-up ancillary operations within safer injection facilities themselves, and SIFs are ideal venues for maximizing the delivery of such services. For example, it is well established that active drug users use primary medical care services erratically and only after they are very sick. As a result, they also over-use emergency rooms. This pattern significantly drives up health care costs (Cherubin & Sapira, 1992). It is also well documented that if drug users are offered medical care services on-site, as part of other services which they may be receiving, their utilization of, and adherence to, care increases substantially while minimizing its cost (Umbricht-Schneiter et al., 1994). SIFs create the opportunity to offer primary care services to injectors in a very cost-effective manner, and the need for such care is enormous. The spectrum of diseases that drug injectors suffer from, especially if HIV and HCV infected, puts them in a class all their own (O'Connor, Selwyn, & Schottenfeld, 1994). Injectors have much higher rates of bacterial infections, including pneumonia, endocarditis, sepsis, and sexually transmitted diseases, all of which can be treated on-site in an SIF. Injection drug use was identified as a risk factor for tuberculosis even before the AIDS epidemic (Reichman, Felton, & Edsall, 1979), which can also be tested for and treated within an SIF. Injectors also suffer from very high rates of dermatological problems such as staphylococcus infections, abscesses and skin ulcers, which are highly responsive to lo-tech primary care if treated. Finally, comprehensive SIFs are ideal locations for the provision of gynecological and prenatal health care for women injectors.

In general, the potential cost-savings and effectiveness of offering primary care and social services to drug injectors within SIFs should not be underestimated. Whether those services include a full range of drug treatment interventions, medical care, and multi-faceted counseling and testing services, is a decision that officials must decide as they consider the role that safer injection facilities can play in reducing the drug-related public health problems that exist in their own communities.

ACTIVE INJECTORS

Successful implementation of an SIF requires support and advice from active members of the drug-using community. Their expertise in representing the needs and concerns of injectors is critical in identifying the best location to establish an SIF, and how to maximize the SIF's relevance and appeal to injectors. In turn, injectors' ability to vouch for an SIF, to spread the word about its services – including its concern for protecting clients' confidentiality - is invaluable for successful implementation and ongoing operations. As such, injectors who are indigenous leaders within the drug-using community need to sit on an SIF's board of directors, and play an active, advisory role along with representatives from drug assistant agencies, local government, and law enforcement (Latkin, 1998).

SIF "HOUSE RULES"

Examination of the research literature, plus our own site visits, revealed a number of house rules that are commonly applied to SIF-clients and staff. These are listed below with minimal discussion.

RULES GOVERNING SIF CLIENTS

SIFs post some of the rules below, as well as distribute printed copies of house rules to clients:

- Clients are prohibited from dealing drugs on-site, or from injecting anywhere except in specifically designated rooms.
- Some SIFs allow clients to divide-up the drugs they bring into a SIR together, and assist one another in injecting.
- Some SIFs require clients to be registered and show an I.D. before admission to the injection room, and/or to demonstrate that they are injectors, city residents, and of minimum age (typically 18 years).
- SIRs limit the amount of time clients can use the injection room (30-45 minutes), but clients are allowed to return to the room several times throughout the day or evening.
- Clients are prohibited from threatening or intimidating staff members and other clients, and from using loud or offensive language.
- Clients are required to clean up after their use of an injection space and to dispose of all used materials in garbage containers before leaving.
- Clients are encouraged to assist in keeping the SIF clean, and to collect drug-related debris in the SIF's vicinity.

RULES GOVERNING FACILITIES

- Staff members are generally prohibited from assisting clients in preparing or injecting their drugs, although some SIFs allow medical professionals to provide clients with safer injection training.
- Staff members are expected to be "acceptance-oriented" toward clients; that is, nonjudgmental about clients' behavior that does not affect others, including whether or not to follow the staffs' advice or referral to other services.
- SIFs need to be physically located in or near neighborhoods with large number of injectors.
- SIF-staffing and operating hours should be determined based on need, which may require some facilities to never close.
- Staff members are trained to follow written protocols on how to manage the facility, to discipline clients who violate house rules, and to respond to emergencies.
- Many SIFs have direct phone lines to police and ambulance services.
- At least one staff member is in the injection room at all times.
- Staff members rotate their time in the injection room at appropriate intervals.
- The atmosphere in an injection room is to be peaceful and unhurried.
- All necessary injection equipment and supplies are provided for each client in an injection room, as well as the means for disposal.
- The floors and walls of an SIF are regularly cleaned and disinfected.
- SIFs employ a queuing system that requires clients to wait their turn before entering the injection room.

Our observations of the 19 SIFs we visited found that these rules are enforced, and that SIF staffs are able to work in an environment that is as orderly, safe and routinized as is found in methadone clinics, drop-in shelters, needle exchanges and primary care centers that provide care to large populations of impoverished inner-city residents. The same problems of stress and burnout that are found in those settings are also found in SIFs, but the latter are not qualitatively different work environments in terms of occupational risks (Broadhead and Fox, 1993).

CONCLUDING DISCUSSION

Our review suggests that SIFs target several public health problems that municipalities in North America may wish to consider, problems largely unaddressed by needle exchange, street-outreach, education campaigns, HIV counseling, and other conventional services. SIFs target injectors' use of public spaces to inject

drugs in order to reduce the many risks associated with the practice. Compared to conventional services, SIFs provide greater opportunities for health workers to connect with injectors, and to move them into primary care, drug treatment, and other rehabilitation services. Finally, SIFs target the "nuisance factor" of drug scenes - the hazardous litter and intimidating presence of injectors congregating in city parks, public playgrounds and on street corners - by offering them an alternative, supervised "public" space. Our review also suggests that, for municipalities considering SIFs in order to address these problems, their implementation would not necessarily require any significant or fundamental changes in public policy or law: SIFs require the same working agreements with social service providers and the police that needle exchange, street-outreach, drug treatment and similar health programs for injectors already receive. As Malkin observed, SIFs "could sit comfortably alongside what already exists…" (Malkin, 2000, p. 18).

Still, systematic evaluations of the effectiveness of SIFs have yet to be conducted. What evidence is available, while considerable, consists primarily of descriptive reports of SIFs operating in Western Europe. But this evidence bears on very important matters. For example, in Frankfurt, where SIFs were first implemented in the early 1990s, the number of fatal drug overdoses fell from 147 in 1991 to 22 in 1997, and none of those fatalities occurred in an SIF (Kerr, 2000). In addition, individuals overdosing in SIFs are 10 times less likely to receive hospitalization than those who overdose on the street (Böllinger, Stöver, & Fietzek, 1995). Finally, "so far, there has not been a single death in a [SIF] in Europe, although an overdose occurs approximately once every 500 visits" (Wodak, 2000, p. 2). This remarkable result follows thousands upon thousands of injections within safer injection facilities, some of which have been in operation for over 10 years.

With respect to "the nuisance factor," there are several reports of public drug use declining since the implementation of SIFs in several western European cities (Nickolai, 1997; Kemmesies, 1999; Ronco, Spuhler, Coda, & Schopfer, 1996), as well as reports of fewer discarded syringes found in all Swiss cities that have implemented SIFs (Haemming, 1996). While the nuisance factor is less of an issue in most North America cities, namely because the drug scene has been driven underground, the most compelling reasons to consider implementation of an SIF are public health and medical.

Finally, SIFs have been described as effective gateways to other systems of care and treatment. For example, data collected at an SIF in Frankfurt in 1997 revealed that 194 clients asked for referral to detoxification services and 64 were successful in completing the detoxification process, while an additional 93 clients were referred to treatment, resulting in 34 admissions to treatment programs (MacPherson, 1999). Projects have also reported that SIF-clients' contact with other health and social

services on-site or via referral improved their general health, stability and level of functioning (MacPherson, 1999).

Given the resistance to needle exchange programs in North America, many may argue that the likelihood of SIFs being implemented is remote, regardless of the specific public health problems they address over existing services, and the evidence regarding their effectiveness. However, it must be remembered that 15 years ago, many communities actively resisted projects that proposed distributing small bottles of bleach to active injectors for use in disinfecting their used syringes, but now "bleach kits" are standard prevention materials given out to IDUs by health departments and service agencies throughout the United States and Canada (Broadhead, 1991; Normand, Vlahov & Moses, 1995). Approximately 10 years ago, needle exchange services in North America were virtually nonexistent, but now, according to the North American Syringe Exchange Network, there are 164 needle exchange programs operating throughout North America, most of which are legal and part of larger health and social service networks within local communities (Coffin, 2001). So it is fair to predict that, in light of the evidence reviewed above, it is likely that municipalities in North America will begin considering the implementation of SIFs in order to increase significantly the effectiveness of their public health efforts at combating HIV, HCV, over-dose, and other problems related to drug injection. In light of the evidence, certainly the time has come for government support within North America of research initiatives, in terms of controlled field trials and community demonstration projects, for studying the impact and effectiveness of safer injection facilities to better protect the public's health.

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