

THE POLICY CONFLICT BETWEEN SYRINGE EXCHANGE PROGRAMS AND
POLICING PRACTICES IN THE UNITED STATES, AND ITS INFLUENCE ON THE
HEALTH RISK BEHAVIORS OF INJECTING DRUG USERS: A QUANTITATIVE
ASSESSMENT

by

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Abstract

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Daliah Heller

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Since the early years of the twentieth century, developments in United States (US) drug policy have cycled between tolerance for drug use, on the one hand, and restraint to prevent drug use, on the other (Musto, 1999). In the 1980s, AIDS emerged, just as neoliberalism grew to dominate the national policy agenda, reinforcing normative social standards with coercion and punishment (Abramovitz, 2004). With evidence for injecting drug users' particular vulnerability to HIV infection, advocates introduced syringe exchange programs to reduce the epidemic's escalation.

A conflict in drug policy persists for these programs, however. Most programs operate in states where syringes remain criminalized, and where syringe possession is authorized only as a public health emergency. The results of this conflict are evident 'on the streets,' in encounters between police officers and injecting drug users participating in syringe exchange programs.

This study examines the experiences of injecting drug users with police ‘on the streets,’ aiming to understand which individual characteristics of injecting drug users influence the likelihood for and severity of police encounters. The literature suggests the negative influence of these encounters on the health risks experienced by this population. Secondary analysis was conducted with an existing dataset of injecting drug users participating in US syringe exchange programs. Three characteristics of respondents – recent homelessness (street, and ‘other place’) and recent illegal income – were leading predictors for two scales assessing police encounters, measuring the likelihood and severity of encounters, respectively.

Findings from this analysis suggest opportunities for policy development. In some cities, law enforcement has become involved with human services partnerships, addressing homelessness as a social problem rather than a crime. Introducing syringe exchange programs into these ‘helping’ relationships could radically improve the experiences of homeless injecting drug users, while re-shaping the social environment developed by US drug policy. Syringe deregulation could accomplish this goal at the structural level, with legislative change.

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I. RATIONALE

The development of federal drug laws in the United States (US) began in the early years of the twentieth century, and these increased in both number and reach as the century progressed. Throughout this time, US approaches to drug policy cycled between tolerance for drug use, on the one hand, and restraint to prevent drug use, on the other (Musto, 1999). The tolerant approach was initially prevalent, as the professionalization of medicine in the earliest decades of the century centralized regulatory control over drug prescribing and dispensing with the allied health professions. Meanwhile, US foreign trade interests employed international anti-narcotic efforts as a vehicle for expanding influence and control, first in China, and subsequently in the Near East and Europe (Jonnes, 1999). As efforts to prevent drug use and trafficking increased internationally, US drug policy at home developed to mirror this stance, and federally-legislated prohibition and punishment grew in scope and strength through the middle of the century (Jonnes, 1999).

By mid-century, the scope of the allied health professions had developed to include mental health practices, supporting the introduction of new approaches for the treatment of drug addiction. The success of methadone maintenance as an effective treatment for opiate dependence provided a new vehicle for the tolerant, medical approach in the 1960s and 1970s, in tune with the liberal, social movements of the period (Musto, 1999). However, by the 1980s, the perception that rising crime in US cities was related to expansive problems of drug use and trade – of crack-cocaine in particular (Jonnes, 1999) – returned the emphasis of national drug policy to law enforcement and

drug use prevention. In fact, this shift reflected the wider development of a new policy agenda for government, following the presidential election in 1980.

A change in government often signals ideological change, and with it, the revision of existing and the introduction of new policies grounded in the new government's ideological values (Grafton & Permaloff, 2005). Furthermore, the formulation of public policy relies on a process of problem definition in which ideology shapes both perception of and response to the 'problem' itself (Rochefort & Cobb, 2005). In essence, public policies represent the ideological response of government to values-based perceptions of social and/or economic problems.

During the 1980s, the social liberalism of the previous two decades was reshaped in a neoliberal vision, with new social policies championing the role of individual responsibility over community values (MacGregor, 1999). In the neoliberal perspective, coercion and punishment reinforce normative social standards, in contrast with a tolerant and rehabilitative approach to social problems (Abramovitz, 2004). As this perspective grew to dominate the political landscape over the decade of the 1980s, US drug policy increasingly emphasized restraint, broadcasting the singular message that drug use was unacceptable, under any circumstance.

In this socio-political environment, the AIDS epidemic emerged, and injecting drug use was recognized as a primary vector for transmission of the fatal disease, facilitated by needle-sharing among injecting drug users. However, state-level laws adopted widely in the US during the 1980s labeled hypodermic syringes as paraphernalia (Burris, 2001). Moreover, pharmacy access to hypodermic syringes had been restricted under prescription laws enacted in the early decades of the century, when the allied

medical professions established their regulatory position as dispensers of drugs and related tools for drug administration (Musto, 1999).

As AIDS activists recognized the urgency of preventing HIV transmission in communities experiencing increasing rates of infection, they called for the provision of new, sterile syringes to injecting drug users. These efforts have resulted in the establishment of syringe exchange programs in some areas of the country, starting in the late 1980s. However, change has been partial. Among the 186 syringe exchange programs now operating in the US (Des Jarlais et al., 2009), fewer than 5 programs operate in either of the two states where syringes are decriminalized (Burris, 2001). For most, program operations are legislated as an emergency measure under public health law, but syringe possession remains stuck in a grey area – neither illegal, when the syringe has been dispensed by a syringe exchange program, nor definitively legal, because syringes remain in the paraphernalia law.

Syringe exchange programs present an inherent conflict for US drug policy, promoting tolerance and treatment within an environment dominated by restraint and punishment. This conflict embodies the cumulative historical effects of legislation and policies grounded in problem formulations which perceive drug use as the irresponsible behavior of non-normative individuals. The results of this conflict are evident ‘on the streets,’ in encounters between police officers and injecting drug users participating in syringe exchange programs. While the ‘law on the books’ allows the delivery of syringe exchange, it preserves the criminality of syringe possession as paraphernalia. As a consequence, police enforcing the ‘law on the streets’ are guided by contradictory

information when they confront an individual in possession of a syringe (Burris et al., 2001).

The emphasis on policing over socio-medical services as a social response to the problem of illicit drug use results in ‘category displacement,’ wherein the health and social problems of drug use are displaced to the category of ‘crimes’ (Fitzgerald, 2005). The effects of this displacement can result, therefore, in policing activities which impede injecting drug users’ use of syringe exchange programs. This study will examine the experiences of injecting drug users with police ‘on the streets,’ aiming to understand whether individual characteristics of injecting drug users influence the frequency and severity of police encounters.

Historical development of US drug policy

Many drugs, such as opium and cocaine, were once widely believed to have legitimate medical uses, including as sleep aids and stimulants, and were bought and consumed by many people in the US. Although habitual drug use sometimes resulted, consumers of heroin and cocaine were not viewed as ‘problem users’ or addicts until the late nineteenth century (Musto, 1999). However, by the first decade of the 1900s, a campaign to prohibit such use was sparked by lay reformers, who were motivated more by concerns about maintaining morality and public order than by the growing health problems associated with drug dependence and misuse (Musto, 1999). In particular, perceived drug use among the lower classes was touted as a problem requiring the intervention of law enforcement, arrest and punishment.

Physicians and pharmacists responded by asserting their professional role as prescribers and dispensers of drugs for legitimate medical concerns, and supported the

regulation of drug production and distribution (Musto, 1999). In 1914, Congress passed the Harrison Narcotic Act, introducing national drug regulation. In effect, the law required physicians and pharmacists to register with the Treasury Department, pay special taxes, and maintain records of all transactions when providing their patients with cocaine and opiate drugs (Inciardi, 2000). These measures asserted medical control over drug use in the population, while preserving the legitimacy of drug use under the supervision of a physician or licensed pharmacist.

Regulatory developments for drug paraphernalia proceeded along a similar timeline. During this same period, the problem of morphine injection was associated with the immoral behavior of “dope fiends” (Musto, 1999). In 1914, New York State became the first jurisdiction to recognize as a problem the use of hypodermic syringes for injecting drugs. The enactment of a prescription law, the Boylan Act, restricted non-medical access to narcotic drugs and the instruments necessary to administer (Gostin & Lazzarini, 1997). Most other states subsequently enacted their own syringe prescription laws, similar to New York’s, as general regulation of the medical profession expanded.

For individuals unable to obtain a medical prescription, often those in the lower classes, the new drug regulations effectively criminalized non-medical drug use. However, although these developments did codify a role for law enforcement, policing problems of drug use remained a low priority, and the medical profession continued to experiment with new treatment approaches for addressing the problem of drug dependence. In 1930, new legislation supported the establishment of ‘drug farms’ – later re-named hospitals – to treat dependent users (Musto, 1999).

Neither experiments within the medical profession nor the ‘drug farm’ program demonstrated significant success in preventing relapse to drug use among patients post-treatment. As the decade progressed, the tolerant approach to drug use conveyed by these and other treatment ‘cures’ came under mounting attack from elected officials and from the recently-formed Federal Bureau of Narcotics. In 1938, federal passage of the Food, Drug, and Cosmetic Act, prohibiting possession and rejecting any use, even on therapeutic grounds, confirmed that the use of narcotics for any purpose was an illicit activity (Sweet & Harris, 1998). By the close of the 1930s, the legitimacy of drug use under medical control was under-mined by the total prohibition of narcotics, signaling the ascendance of law enforcement in US drug policy.

Under the leadership of Harry Anslinger, a gregarious, out-spoken man, the work of the Federal Bureau of Narcotics rose to prominence in the public eye, advocating the introduction and passage of increasingly punitive legislation against drug users (Valentine, 2004). From the 1940s to the 1960s, drug distribution and use became increasingly associated with poor, inner-city neighborhoods (Musto, 1999). The wide visibility of Anslinger and his agents reinforced the public perception for a need to control individuals in these communities (Valentine, 2004), and for drug policies to restrain and prevent drug use. Federal laws were expanded, imposing lengthy prison sentences on both drug distributors and users (Kleiman & Smith, 1990; McWilliams, 1990).

Then, in the 1960s, the introduction of methadone offered the medical profession an opportunity to re-establish credibility (Musto, 1999). Methadone treatment programs were quickly recognized as potent tools for preventing the criminal behavior of drug

addicts, and in New York City, where heroin dependence was the highest in the nation, the local government opened and operated several large clinics (Musto, 1999). By the early 1970s, methadone programs had proliferated, and were widely accepted as an effective response to the twin problems of drug dependence and petty crime (Ball, 2007).

In the context of these medical developments, the federal government renewed its interest in the development of a comprehensive response to the drug problem. The Office of National Drug Control Policy was established in the White House, and led the convening of numerous high-level committees and task forces to review and provide guidance on the matter (Musto, 1999). In 1970, Congress passed the Controlled Substances Act, replacing the accumulation of drug prohibition laws with a drug ‘schedule’ describing the abuse potential and medical uses of each drug (Dolin, 2001). Drugs were formally categorized by their relative harm, using the language of medicine to rate the abuse potential of each drug.

Although these developments were cloaked in a medical perspective, law enforcement retained a central role in policy development, based on the observed relationship between drugs and petty crime, violence, and public disorder. In 1973, Congress created the Drug Enforcement Administration (DEA), which unified the Office of Drug Abuse Law Enforcement, the Federal Bureau of Narcotics, and the drug-fighting role of US Customs (Baum, 1996). The creation of the DEA was supported by an eleven-fold increase in spending on drug law enforcement, with a budget jump from \$65 million per year in 1969, to \$719 million per year in 1974 (Baum, 1996).

As the 1970s progressed, the political mood in government underwent an ideological shift. Traditional liberalism, which relied on the government to mediate the

impact of the market on the well-being of individuals, families, and communities, was gradually replaced by neoliberalism, which favored reliance on market forces and a reduced role for government. This shift was fueled by national concerns about increased fiscal instability, global challenges to the national economy, slowed economic growth, and the demands of social movements (MacGregor, 1999; Abramovitz, 2004). In 1980, the presidential election affirmed the new direction for government, as neoliberal political leadership assumed national power.

The ideological shift from liberalism to neoliberalism in the US provided a platform for the subsequent shift in national drug policy. Ironically, although Reagan and his supporters called for an overall reduction in government, the conservative belief that public policy could appropriately be used to punish 'irresponsible individual behavior' supported a larger role for government in personal affairs (Abramovitz, 2004). During the 1980s, neoliberal policy-making combined with the emergence and proliferation of crack-cocaine in the US to encourage the delegation of expansive powers to law enforcement to exercise control over the drug use problem.

Over that decade and the next, federal spending for drug law enforcement grew rapidly, as did the emphasis on punishment and control. The Comprehensive Crime Control Act of 1984, the Anti-Drug Abuse Act of 1986, and the Anti-Drug Abuse Amendment Act of 1988 each raised federal penalties for drug-related offences, increased funding for drug control activities, and sought to improve the coordination of federal drug control efforts (Dolin, 2001). New laws also targeted drug paraphernalia, including hypodermic syringes, beginning with the Model Drug Paraphernalia Act in 1979, and

reinforced by the 1986 anti-drug abuse legislation (Gostin & Lazzarini, 1997; Burris et al., 2003). The political rhetoric of neoliberalism labeled this a ‘war on drugs.’

Policing and drug law enforcement

Domestic drug law enforcement involves a ‘reactive crime control’ approach where policing is problem-response work (Zimmer, 1990: 44). By 1990, questions arose about this approach: despite generous funding, some US police leadership admitted that expanded drug law enforcement initiatives had had little effect on the prevalence of illicit drug use (Williams, 1990). After falling slightly in the 1980s, reported past-month illicit drug use began to increase again in the early 1990s (Caulkins et al., 2005). First-time illicit drug use continued to increase over the 1990s, and total illicit drug consumption has remained steady since the 1980s (Caulkins et al., 2005). In addition, over the past two decades, retail prices for cocaine and heroin have continued to decline, suggesting increased availability of these drugs in the US (Caulkins et al., 2005).

Since the 1980s, law enforcement has debated two primary strategies: community policing and aggressive order maintenance, also known as “quality of life” policing (King & Dunn, 2004). Each offers a different prescription for policing ‘on the streets.’ Community policing encourages officers to respond constructively to problem situations with situation-centered solutions, rather than defaulting to formal responses such as arrest and use of force. In contrast, aggressive order maintenance encourages officers to use formal coercive action against citizens for even minor offenses, which may otherwise have been managed in an informal manner (King & Dunn, 2004).

In the context of problems related to drug use, community-policing seeks to use partnerships between the police and the community to influence informal neighborhood

norms and social control (Mason, 2007). ‘Quality of life’ policing has also partially adopted this partnership approach, as some have perceived aggressive order maintenance alone as a misguided approach for problems associated with the structural injustices of poverty and racism (Lombardo & Lough, 2007; Sun & Triplett, 2008).

Despite the gulf between nuanced, situationally-informed community policing, and the aggressive order maintenance on which quality of life policing is grounded (Nolan et al., 2004), quality of life policing activities have increasingly assumed the moniker ‘community policing,’ and the two are now frequently referred to interchangeably (Lombardo & Lough, 2007). The widespread embrace of aggressive order maintenance may have undermined the potential for policing responses to social problems, because such problems are routinely perceived as social menaces.

A review of the core tactics employed by quality of life policing demonstrates the strategies underlying an aggressive order maintenance approach. Five core tactics are described: zero tolerance, to enforce standards of behavior; stop and frisk, to disrupt patterns of weapon possession and low-level drug dealing; civil enforcement, to involve other city agencies in cooperation with policing efforts; the creation of new laws, rules and regulations, to eliminate disorderly behavior, and; flexible deployment, to allow re-assignment of officers to ‘trouble spots’ (Vitale, 2005). The summative effects of these strategies have been widely lauded as the cause for reduced crime rates in US cities, and in particular in New York City, where this approach was adopted wholesale in the early 1990s (Vitale, 2005). Indeed, some quality of life offenders report the cessation or reduction of disorderly behaviors following arrest for such infractions (Golub et al.,

2003), suggesting the success of this approach. Moreover, the volume of arrestees is assessed as a measure of its success.

The promotion of neighborhood-level enforcement and situational policing reinforces the hypothesis of a spatial link between low-level criminal behaviors ‘on the streets’ and serious crime. Police have pursued this relationship with particular force in regard to drug use problems, because street-level ‘drug hot-spots’ often coincide with public disorder, and with more serious criminal offenses, such as property crime and violence (Weisburd & Mazerolle, 2000). Consequently, as enforcement increases its spatial focus on drug hot-spots, local surveillance expands. These efforts are described as ‘problem-oriented policing,’ and include crackdowns, with the sudden, increased visibility of policing and law enforcement initiatives in the community, and covert surveillance, to target and apprehend criminal behaviors (Nunn et al., 2006).

Criminalizing effects of policing

The expansion of both drug control legislation and law enforcement budgets increased the number of drug offenders in jails and prisons across the country. Since the 1950s, drug law enforcement policing has focused in particular on inner-city communities of color. However, by the 1990s, the problem of a racialized ‘drug war’ was widely apparent in the disproportionate incarceration rates experienced by communities of color across the US (Caulkins, 2005; Gray, 1998; Drucker, 1992). Between 1980 and 1996, the incarceration rate for drug offences rose from 15 to 148 per 100,000 adults (Galea & Vlahov, 2002), a twelve-fold national increase in the number of prisoners incarcerated for drug-related offences, the majority of whom were drug dependent (Bourgois, 2003). In New York State alone, a 40% increase in prison sentences for drug

offences contributed to the three-fold increase in the prison population between 1980 and 1998 (Dixon & Coffin, 1999).

However, the rapid growth in expenditures for drug enforcement and incarceration, from the late 1970s through the 1990s, was not complemented by a similar expansion in drug treatment programs (Drucker, 1999). Moreover, higher incarceration rates have been accompanied by civil sanctions imposed on drug-related arrestees, including the denial of welfare benefits and access to public housing (Caulkins et al., 2005; National Research Council, 2001; Dixon & Coffin, 1999). The neoliberal ‘scape-goating’ which dominated federal drug policy over the past two decades justified such sanctions against irresponsible or unruly individuals as appropriate forms of social punishment (Friedman et al., 2001).

Syringe exchange programs and US drug policy

As US drug policy expanded the restraint function and capacity of law enforcement in 1980s, AIDS emerged in the US population as a fatal infection of potentially epidemic proportions. Once public health authorities identified injecting drug use as a vector for disease transmission, they, along with community advocates, proposed syringe exchange programs. The effectiveness of these programs, usually described as a ‘harm reduction’ approach, has been widely documented in US-based and international health and social science studies (Ball, 2007).

In general, harm reduction involves three common elements: (i) emphasis of short-term pragmatic goals over long-term idealistic goals, (ii) establishment of a scale of means to achieve specific goals, and (iii) viewing illicit drug users as full members of the community, worthy of respect, and capable of both rational and altruistic behavior (Des

Jarlais & Friedman, 1993). The term ‘harm reduction’ is often used to denote the particular activities of syringe exchange programs. Practically, syringe exchange programs offer injecting drug users free sterile syringes (usually in exchange for used syringes), to reduce blood-borne disease transmission (McKnight et al., 2007).

This revival of a tolerant approach to drug use focused on preventing the harmful effects of continued injecting drug use with a humanistic orientation towards drug users. However, in nearly every jurisdiction in the country, paraphernalia laws prohibit the possession and distribution of syringes, and prescription laws prevent syringe access. In addition, the political rhetoric of neoliberalism prevents widespread adoption of these programs. As a result, the development of syringe exchange programs in the US has been slow, sometimes illegal, and always locally-operated and without federal support.

A health and social perspective on illicit drug use recognizes a social imperative for engaging problem drug users in a system of care. In the wake of syringe exchange program development during the 1990s, several states repealed or amended prescription laws restricting syringe sales ‘over-the-counter’ at pharmacies, in an effort to increase access to sterile syringes (Burris, 2001). However, the dominant neoliberal framework perceives an inextricable relationship between drug use and petty crime, necessitating punitive measures of social control. The development of a grass-roots effort to establish syringe exchange in the US has exposed the clash between the social values of tolerance and restraint, a clash that undermines the expansion and embrace of these programs as a legitimate social service (Hathaway, 2001).

Meanwhile, program users and police encounter one another daily in neighborhoods across the country. Although program staff may act as intermediaries in

this relationship to ensure program access for injecting drug users in the community, more often than not, they are also caught in a position of conflict with the police. When program staff find themselves ‘protecting’ injecting drug users to ensure syringe access, they are positioning themselves in opposition to law enforcement.

The intersection of syringe exchange programs and policing often poses a dilemma for individual drug users, as visiting a program and/or carrying syringes implies one’s status as an illicit drug user – hence, engaged in criminal behavior, and subject to arrest. Even when the ‘law on the books’ has established legislative exemptions to formally authorize the syringe exchange service, it may be significantly compromised by pressures on police to enforce the ‘law on the streets,’ and enact arrests as a measure of their productivity and success (Burris et al., 2004). On the streets, this presents a conundrum for both the injecting drug user and the police officer.

Furthermore, in most jurisdictions where syringe exchange and over-the-counter syringe purchase at pharmacies are authorized by public health law, syringe possession remains in the penal code as a violation of paraphernalia law (Martinez et al., 2007). In effect, syringe possession remains in a ‘grey area’ of the law for program users and pharmacy purchasers. The implementation of policies allowing syringe access remains incomplete (Bardach, 1977). This furthers the conundrum for both the injecting drug user and the police officer, because for each party, the law remains incomplete and unclear.

Problem statement

How do injecting drug users participating in syringe exchange programs in the US experience local policing? What is the likelihood of police encounters for this group, and

what is the content and severity of these encounters? Do individual-level factors predict injecting drug users' experience of such encounters?

II. LITERATURE REVIEW

Laws and institutional authority represent structural factors influencing the social contexts and environments in which we live. For injecting drug users, the predominant US approach to individual problems of drug use – favoring punitive restraint over compassionate tolerance – shapes a ‘risk environment’ through laws preventing syringe access and possession. The prohibitive orientation of the syringe laws are reinforced by the attitudes and beliefs of structural actors, such as police officers and pharmacists, towards injecting drug use. The impact of these laws is evident in the practical effects of policing on the health risks of injecting drug use. Moreover, these practices engender ‘fear’ among injecting drug users, a factor associated with significantly increased risky injecting drug use.

Within this risk environment, syringe exchange programs attempt to establish a tolerant space, where syringe access and community health are prioritized alongside engagement and counseling strategies to reduce risky behaviors. In effect, syringe exchange programs carve out a health-promoting social space within the broader, socially-punitive framework of US drug policy.

However, several case studies in the literature report the direct interference of local policing practices with syringe exchange services. In a recent California study, injecting drug users participating in legally-authorized syringe exchange programs were more likely to have experienced recent arrest, in comparison with their counterparts participating in illegal, ‘underground’ programs (Martinez et al., 2007). Syringe exchange programs themselves may offer a local environment attractive for policing, simply because these sites host services for illicit drug users who, by definition, are engaged in

illegal activity. The visibility of these programs may increase the likelihood for police encounters with participants. Moreover, particular socio-demographic characteristics of injecting drug users – reflected by race, gender, and housing and income status – and behaviors such as injecting in public and engaging in sex transactions – may increase program participants' vulnerability for such encounters.

The frequency and severity of injecting drug users' encounters with police represents the central focus of this study because the literature suggests the negative influence of these encounters on the health risks experienced by this population. Thus, if policing practices exacerbate health risks, then identifying the characteristics of injecting drug users more likely to experience these situations can yield policy recommendations for improved collaboration at the intersection of syringe exchange services and policing. A review of the existing literature provides guidance for the study analysis.

A. The influence of structural factors on injecting drug use practices

Syringe access and syringe possession laws

In the US, state-wide syringe prescription laws and paraphernalia laws restrict individual access to and possession of syringes. In metropolitan statistical areas where state-wide syringe prescription laws exist, the mean HIV prevalence is significantly higher among injecting drug users (Friedman, Perlis et al., 2001). Notably, there may be a historical correlation between a higher local prevalence of injecting drug use and the subsequent development of state-wide syringe prescription laws to prevent and control syringe access. However, such laws may have subsequently contributed to heightened

HIV infection rates among injecting drug users in these states (Friedman, Perlis et al., 2001).

Since the emergence of injecting drug use-related HIV infection, a number of states have amended historical syringe prescription and possession laws to allow low levels of over-the-counter syringe purchase and possession. A legal review of state laws governing drug paraphernalia, syringe prescription, syringe exchange, and related case law in 59 jurisdictions identified paraphernalia laws in 31 jurisdictions, prescription laws prohibiting possession in 7 jurisdictions, and only two states without legal barriers to safe syringe disposal for injecting drug users (Burris et al., 2002).

The evidence is mixed for the health effects of state-level legislative amendments to syringe prescription and possession laws on injecting drug users. Following changes to syringe prescription and possession laws in Connecticut in 1992, in the state's largest city, where there was a higher prevalence of injecting drug use, fewer injecting drug users reported ever sharing syringes, fewer reported sharing in the past thirty days, and fewer reported syringe purchase from the streets, while a greater number reported ever purchasing a syringe at a pharmacy (Taussig et al., 2000). Reported pharmacy syringe sales also increased to include nearly 40% of pharmacies across the state (Taussig et al., 2000).

However, in California, among injecting drug users with and without pharmacy access for syringe purchases, there was no reported difference in syringe-sharing (Bluthenthal et al., 2004). For those residing in an area with no legal options for syringe access, there was an independent association with police contact, in comparison with residence in areas with amendments to the syringe prescription law (Bluthenthal et al.,

2004). At a minimum, relaxation of syringe prescription laws can reduce police contact for injecting drug users, although other factors may reinforce syringe-sharing behaviors.

Attitudes and beliefs of pharmacists for syringe access and possession

However, in states where amendments to syringe prescription laws allow some level of syringe purchase at pharmacies, simple legislative change has not guaranteed syringe sales to injecting drug users. Following a change in Connecticut's law, although pharmacists reported at least some level of syringe sales, about half of pharmacists in the state indicated they would sell syringes at their own discretion (Taussig et al., 2000), and discretionary sales were influenced by managers' beliefs about what other pharmacists in the state thought or did (Wright-De Agüero et al., 1998).

Similarly, slightly more than half of pharmacists in Baltimore, Maryland reported discretionary syringe sales only, despite a state law permitting syringe purchase from a pharmacy without a prescription (Gleghorn et al., 1998). Up to three years after the repeal of Maine's syringe prescription laws in 1993, although 94% of pharmacists reported a willingness to sell syringes without a prescription, only half were willing to sell syringes to an injecting drug user (Case, Beckett et al., 1998). Pharmacists' attitudes towards syringe sales to injecting drug users directly affect syringe access for this population, even when syringe sales are legal.

Syringe exchange programs

Participation in syringe exchange programs has demonstrated reduced syringe-sharing, and longer-term outcomes of reduced HIV and other blood-borne virus incidence

among injecting drug users. New York City's experience with expanding syringe exchange programs during the 1990s offers a potent example of program impact, as HIV prevalence reduced from 54% to 13% among local injecting drug users over the course of the decade (Des Jarlais et al., 2005). Similar results are found in California, where program access and utilization has reduced the odds of HIV risk via syringe-sharing (Bluthenthal et al., 1998; Bluthenthal, Anderson et al., 2007). Conversely, in areas where neither syringe exchange nor syringe access via pharmacy purchasing is available, injecting drug users are far more likely to report syringe-sharing and re-use (Neaigus et al., 2008).

However, as with any social service, the mere presence of a syringe exchange program does not guarantee improved syringe access and reduced syringe-sharing among local injecting drug users. In Rhode Island, a considerable number of injecting drug users were completely unaware of a local program's existence, and particularly non-white injecting drug users (Rich et al., 1999), who may experience greater social marginalization than their white counterparts. Furthermore, program policies and operations can differentially impact syringe-sharing behaviors. While program presence positively influences syringe access in general, restrictive syringe exchange policies within a program, where the number of syringes provided per individual is explicitly limited, do not significantly reduce syringe-sharing among injecting drug users (Bluthenthal et al., 2007). In California, restrictive policies at some programs have been inadequate for meeting the sterile injecting needs of program participants, in comparison with programs where additional or unlimited syringes improved syringe coverage and resulted in reduced syringe-sharing and re-use (Bluthenthal, Ridgeway et al., 2007). The

impact of syringe exchange services on injecting health risk behaviors may vary with particular program-level factors, although these factors will not be considered in the present study.

Attitudes and beliefs of police towards injecting drug use

Despite revisions to prescription laws and the establishment of syringe exchange programs, the dominant drug policy environment in the US emphasizes punitive restraint in response to individual drug use. The professional attitudes and beliefs of police towards injecting drug use offer a representation of this approach. Following legislative amendment allowing some syringe access and possession in Rhode Island, officers remained generally misinformed about the laws' details, and existing knowledge of the legislative change had little impact on their actions and beliefs towards injecting drug users, whom they blamed for making "poor life choices" and a perceived unwillingness to abstain from drug use (Beletsky et al., 2005). Officers were also particularly anxious about the potential for occupational needlestick when dealing with injecting drug users, and felt unprotected by the laws or the police department in this regard (Beletsky et al., 2005).

Two other studies have examined police attitudes towards injecting drug users, although neither study was US-based. In a Russian city, officers explained the rationale for policing practices involving the identification, detainment, and arrest of injecting drug users as a pre-emptive measure, to prevent subsequent criminal behaviors by this group (Rhodes et al., 2006). In Tijuana, Mexico, stakeholder interviews with health, community, and law enforcement professionals indicated that despite high levels of

support for the establishment of syringe exchange programs, the police remained a significant barrier to feasible implementation (Philbin et al., 2008).

Policing practices

The attitudes and beliefs of law enforcement towards injecting drug use are reflected in policing practices with individual injecting drug users. In turn, policing practices mediate the impact of syringe exchange programs and legislative revisions to prescription and possession laws intended to improve syringe access for injecting drug users. In an analysis of the 96 largest metropolitan areas in the US, ‘legal repressiveness’ was defined by three independent measures for each geographic area: the proportion of arrests for heroin and cocaine possession or sale, the proportion of police employees per capita, and correctional expenditures per capita (Friedman, Cooper et al., 2006).

Although there was no association between the local prevalence of injecting drug use per capita and measures of local ‘legal repressiveness,’ all three measures were associated with a higher area HIV prevalence among injecting drug users, and police employees per capita represented the most significant association (Friedman, Cooper et al., 2006). In other words, a higher proportion of police employees per capita contributed to a social risk environment where risky injecting drug use resulted in a higher area HIV prevalence.

Qualitative studies identify similar associations. In a Bronx, New York precinct during a police drug ‘crackdown,’ most injecting drug users reported re-using their own syringes, and some reported using borrowed syringes at least once during this period (Cooper et al., 2005). The increased risk of police stops and body searches prevented a reduction in syringe-sharing among injecting drug users (Cooper et al., 2005). Similarly, an ethnographic study associated prohibitive paraphernalia laws with the sharing and re-

use of injecting paraphernalia observed among the injecting drug users in the sample (Clatts et al., 1998).

Recent arrest, generally referring to the past six months, is frequently associated with increased risky injecting among injecting drug users. The experience of arrest creates a substantial disincentive for carrying syringes in the future, because of the perceived likelihood of re-arrest with syringe possession. This problem embodies the cultural influence of paraphernalia laws on injecting drug use. Injecting drug users in New Haven, Connecticut and Denver, Colorado described arrests as a police tool for undermining social cohesion among marginalized and overlapping groups, including injecting drug users and sex workers (Blankenship & Koester, 2002). For these groups in particular, social cohesion reflects a protective factor of their social networks; the fragmentation of these networks may exacerbate health risks. In-depth interviews conducted with injecting drug users in the Mexican-US border cities of Tijuana and Ciudad Juarez identified arrest and extended detainment as common police responses to syringe possession (Miller et al., 2008).

The relationship between recent arrest and risky injecting can also be quantified. In a suburban area of Sydney, Australia, injecting drug users reporting incarceration in the past year were significantly more likely to convert to hepatitis C seropositivity, reflecting increased risky injecting drug use in this group (Maher et al., 2004). In a cohort of injecting drug users in Vancouver, Canada, recent incarceration was independently associated with reported syringe-sharing practices (Milloy et al., 2008). Among injecting drug users in a city in the Russian Federation, those reporting their last arrest or police detainment was related to drugs were significantly more likely to report syringe re-use in

the past four weeks (Rhodes et al., 2004). In Tijuana and Ciudad Juarez, arrest for possession of an unused syringe was reported by half of the injecting drug users interviewed, although syringe purchase and possession is legal in Mexico – and such arrests were more likely among those who reported injecting with used syringes (Pollini et al., 2008).

Police stop-and-search practices alone appear to increase risky injecting drug use. Among injecting drug users who had experienced recent police detainment without arrest in Vancouver, Canada, the police confiscated syringes from half the sample, and 6% of this group reported immediately borrowing used syringes to inject (Werb et al., 2008). Moreover, recent arrest predicted recent police detainment in this sample, indicating the increased risk of police encounters for those with previous arrests (Werb et al., 2008). These findings suggest that police contact and/or arrest has a prohibitive effect on syringe access and utilization for particular sub-groups, because the social reinforcement of fear of re-arrest or police detainment causes individuals to share and reuse syringes instead of obtaining new ones.

Although heightened policing is intended to reduce drug availability, its effects may also include increased risky injecting among injecting drug users. An oft-cited analogy for the consequences of policing on drug markets envisions a ‘squishy balloon’ – when the balloon is reduced in one area, it expands in another (Maher & Dixon, 1999). The health problems associated with drug market displacement are considerable: increased public injecting, the fragmentation of social networks with the dispersal of drug users and locations of drug use, and problems reaching drug users for health and social services, because individuals have been driven further ‘underground’ (Maher & Dixon,

1999; Aitken et al., 2002; Small et al., 2006; Wood et al., 2006). Shifts in the modality of drug use may also occur, from smoking to injecting drugs, because injecting requires less substance to achieve a euphoric high, drugs have become more difficult to obtain and to use, and drug quality may be reduced during the period of intensive policing (Maher & Dixon, 1999; Wood et al., 2006).

In a community experiencing ongoing targeted drug law enforcement in Vancouver, Canada, injecting drug users reporting police interference on their usual source of drugs were significantly more likely to report syringe-sharing (Wood et al., 2001). Among drug users entering drug treatment in London, United Kingdom in the two-week period following coordinated police drug raids across the city, significant decreases in heroin prices, increases in heroin purity and availability, and corresponding increases in heroin use were reported (Best et al., 2001). The squishy balloon effects of policing on drug markets may simply displace drug activity from one area to another, while injecting risks increase as a consequence of the drug market displacement.

Fear of police

It is not remarkable that injecting drug users are keenly aware of their vulnerability to arrest. However, the cultural experience of ‘fear’ can also be linked to risky injecting in this group. The literature characterizes this experience of vulnerability with at least one of the following perceptions among injecting drug users: fear of police harassment, fear of being identified as an injecting drug user, fear of carrying injecting equipment, and fear of police detainment and/or arrest.

Several qualitative studies have identified fear of police as a barrier to reduced risky injecting. In a suburb of Sydney, Australia, where syringe possession is not a

criminal offence, injecting drug users associated their syringe-sharing and reuse practices with their reluctance to carry injecting equipment, because of reported past experiences with police harassment and syringe confiscation (Maher & Dixon, 1999). There was a general lack of awareness that the law actually allowed syringe possession (Maher & Dixon, 1999). On the Lower East Side in New York City, ‘fear of apprehension by police’ was a significant contributor to risky injecting, including syringe-sharing, among injecting drug users (Clatts et al., 1998). ‘Fear of police detainment’ was a significant situational factor associated with syringe-sharing among injecting drug users in a Russian city (Rhodes et al., 2003), and in Viet Nam, this same factor was explained by injecting drug users’ reluctance to carry syringes legally obtained from local syringe exchange programs (Thanh et al., 2009).

Quantitative studies assessing ‘fear of police’ among injecting drug users are rare, because the problem must be queried in a direct question, consequently influencing the response, rather than being introduced by the subject. In a sample of more than one thousand injecting drug users recruited from the San Francisco Bay Area in California, respondents reporting ‘concern about arrest while carrying drug paraphernalia’ were significantly more likely to report syringe-sharing than their counterparts not concerned about arrest (Bluthenthal, Lorvick et al., 1999). Despite the leading nature of the question, the large sample size supports the significance of this association.

The social context of injecting in public is negatively influenced by ‘fear of police,’ and can increase risky injecting. Heightened police surveillance of public spaces forces hurried and unsafe injecting practices, and pushes injecting drug users to the geographic spatial margins to inject, such as rooftops, alleys, and basements (Cooper et

al., 2005; Maher & Dixon, 1999; Aitken et al., 2002; Small et al., 2006; Strathdee et al., 2005). ‘Fear of police interference’ distracts from the complexities of preparing and injecting drugs, consequently increasing risky injecting because attention is displaced from the act of injecting (Small et al., 2007). However, injecting drug users report that policing practices do not reduce the actual prevalence of public injecting (Small et al., 2007), and may even cause it to increase (Wood et al., 2003).

Reported ‘fear of police’ is not unique to injecting drug users, and may be characteristic of other groups experiencing social vulnerability. A quantitative study of individuals entering the homeless shelter system in Toronto, Canada found significantly fewer individuals expressed a willingness to call the police in an emergency, in comparison with paramedics, and lower levels of trust in police were reported (Zakrisson et al., 2004). During the police drug ‘crackdown’ in a Bronx, New York precinct, high proportions of both precinct residents and injecting drug users reported witnessing physical, sexual, and psychological police violence on others, although both groups reported injecting drug users were likely to sustain more frequent and severe harm from police (Cooper et al., 2004).

Policing practices and syringe access

Policing practices may interfere with syringe access and possession among injecting drug users participating in authorized syringe exchange programs. Even when the establishment of syringe exchange programs is authorized by public health officials, policing practices can mediate syringe access and program utilization among local injecting drug users.

In Massachusetts, two years after an amendment to the state syringe prescription law permitted the establishment of syringe exchange programs, injecting drug users continued to experience arrest for syringe possession (Case, Meehan et al., 1998). A state-wide legal review of Connecticut drug laws found that although possession of ten or fewer syringes was exempted from the paraphernalia law, police harassment for any syringe possession resulted in reduced syringe-carrying among injecting drug users, including those using syringe exchange programs (Bray et al., 2001). Injecting drug users in New Haven, Connecticut reported police refusals to honor syringe exchange program cards as proof that syringe possession was legally authorized (Blankenship & Koester, 2002).

The availability of syringes via local syringe exchange programs or over-the-counter pharmacy purchase does not necessarily reduce the negative influence of ‘fear of police.’ Injecting drug users participating in programs that were illegal but tolerated by public authorities in Richmond and Oakland, California reported ‘fear’ as a significant factor for increased ‘risky’ injecting practices (Bluthenthal, Kral et al., 1999). Injecting drug users in both New Haven, Connecticut, where syringes are available from pharmacies and programs, and Denver, Colorado, where syringes are available from pharmacies but syringe possession is a misdemeanor offense punishable by arrest, reported a similar ‘fear of police,’ which reduced their willingness to carry syringes (Blankenship & Koester, 2002).

Similarly, during a police drug ‘crackdown’ in a suburb of Melbourne, Australia, injecting drug users reported an unwillingness to carry used syringes, and also unsafe syringe disposal, despite the local availability of a legally-operating syringe exchange

program (Aitken et al., 2002). Injecting drug users in three cities in the Russian Federation described their ‘fear of police interference’ around pharmacies and syringe exchange programs, which prevented them from carrying used syringes or accessing local programs (Sarang et al., 2008). While these studies reflect the international, non-US-based experiences of injecting drug users, the risk environment for this population is similarly shaped by policing practices.

Targeted policing may reduce syringe exchange program participation when it occurs in the geographic vicinity of the program site, increasing the likelihood of syringe-sharing and reuse among injecting drug users discouraged from visiting the program. After a police drug ‘crackdown’ local to syringe exchange operations in a Philadelphia neighborhood, program utilization data showed a reduction in both the volume of syringes distributed and the number of participant visits, and significant declines in total visits, visits by Blacks, and visits by males (Davis et al., 2005). A similar analysis of program utilization data for a syringe exchange operating during night-time hours in the area of a police drug ‘crackdown’ in Vancouver, Canada identified a significant decline in syringes distributed in the four-week period following the enforcement effort (Wood et al., 2003). In Marseilles, France, a reduction in program utilization was associated with increased local police harassment, and was accompanied by an increase in reported syringe-sharing among local injecting drug users (Lovell, 2002).

In California, where state-wide law has decriminalized syringe exchange programs when explicit support from local authorities is established, injecting drug users participating in legally-operating programs were significantly more likely to report arrest or citation in the past six months, in comparison with those who participated in illegally-

operating programs (Martinez et al., 2007). Despite formal authorization for syringe exchange, participants in these programs experienced increased risk of police harassment for syringe possession, because syringe paraphernalia laws remained ‘on the books’ (Martinez et al., 2007). Although syringe exchange programs intend to reduce risky injecting among their participants, the influence of local policing practices persists as a mediator for program access and utilization.

The literature on policing practices experienced by injecting drug users participating in syringe exchange programs presents a pattern of findings suggesting the need for the present study. First, these studies highlight the weakness of legislative revisions to the public health law, because without concurrent reform of the paraphernalia laws, syringe possession remains a criminal offense. Public health law amendments have supported the establishment of syringe exchange programs in many local and state-wide jurisdictions, but in most states, syringe paraphernalia laws remain in the penal code. The elimination of syringes from state-wide paraphernalia laws may offer a necessary next step in policy change towards overcoming the impetus for and negative influence of policing practices preventing effective program utilization by injecting drug users.

Second, and as a consequence of continued syringe paraphernalia laws, this partial reform has weakened the policy implementation process for syringe exchange programs, because conflicting laws govern the practices of various actors on the ground, resulting in the ill-defined ‘law on the streets’ (Burris et al., 2004). Although police and syringe exchange providers operate within the prescribed bounds of particular laws, the laws themselves may act at cross-purposes with one another. The policy formulation and

implementation process supporting the establishment of syringe exchange programs has been only partially realized in the laws, and this problem results in a policy conflict that can harm the individuals whom programs seek to help.

B. The influence of structural factors on socio-demographic characteristics associated with risky injecting

Race and gender in injecting drug use social networks

Within social networks of injecting drug users, race and gender emerge as significant factors predicting differential risky injecting practices. In a homeless encampment of heroin addicts in San Francisco, as African-Americans experienced greater vulnerability to institutional repression and social exclusion, their risk for syringe-sharing was heightened by their lower social status within the already-marginalized group (Bourgois et al., 1997). Because the women in the network didn't or couldn't self-inject, their risk of syringe-sharing was increased by their dependence on male group members for injecting them (Bourgois et al., 1997). During the police drug 'crackdown' in a Bronx precinct, women injecting drug users were at greater risk of police encounters because they were excluded from male-dominated social networks of injecting drug users, which otherwise served as protection from police (Cooper et al., 2005).

Age of initiation to injecting drug use

The age at which an individual initiated injecting drug use serves as a descriptor for current injecting drug use, marking the chronicity of use in the individual's life course. As the chronicity of use lengthens with time, the individual becomes more

physically identifiable as an injecting drug user, as the behavior literally tracks itself on the body. Such physical evidence of injecting drug use may make older injecting drug users, whose history of injecting drug use is likely to be longer, more vulnerable to police encounters, simply because their injecting drug use status is more visible.

The age of injecting drug users is less-explored in the literature examining risk factors for law enforcement encounters in this population. Among young injecting drug users in Sydney, Australia, initiation to injecting drug use during early adolescence was associated with exposure to contextual risk factors during childhood, including injecting drug use in the family, homelessness, and unstable family income (Abelson et al., 2006). In a cross-sectional survey of injecting drug users in Australia, injecting drug users under the age of 25 years were more likely to have initiated injecting earlier than their older counterparts, and reported riskier injecting behaviors, including syringe-sharing and more frequent daily injections (Degenhardt et al., 2008). Injecting drug use initiation during adolescence may predict increased social risks, concurrent with these health risks.

As the chronicity of injecting drug use lengthens, these risks may become entrenched. In a large community-level analysis of injecting drug users in the San Francisco Bay Area, long-term chronic injecting drug users reported greater injection-related HIV risk behaviors, regardless of their residential location in the region and unlike those with shorter injecting careers (Bluthenthal, Do et al., 2007). To the extent that injection-related HIV risk behaviors such as syringe-sharing are mediated by social factors – for example, by encounters with police – then increased chronicity of injecting drug use may predict these factors.

Injecting in public spaces

The settings where injecting drug use occurs can be characterized by both geo-spatial and social definitions of risk (Weeks et al., 2001). While ‘private’ sites are generally controlled by an individual, limiting accessibility, ‘public’ sites are characterized by limited to no social interactions between injecting drug users, and are accessible to anyone (Weeks et al., 2001). This typology was adopted for a study of the health risks associated with drug-sharing among networks of injecting heroin users, dichotomizing private injecting sites as ‘safe’ with public sites as ‘unsafe’ (Koester et al., 2005). Individuals who reported syringe-sharing or reuse were more likely to report injecting in an unsafe, public location; particular social environments can increase risky injecting (Koester et al., 2005).

Among injecting drug users experiencing the socially vulnerable positions of poverty and unstable living arrangements, injecting in public and semi-public spaces may occur more frequently. Drug use in public spaces has been qualitatively identified as a significant ‘drift factor’ for homelessness, progressing the experience of marginalization for this group (Coumans & Spreen, 2003). Individuals injecting in public are significantly more likely to report not always using clean needles (Latkin et al., 1994) and to report sharing used syringes (Latkin et al., 1996). These practices result in health problems: among injecting drug users, injecting in public is associated with the increased likelihood of acquiring the blood-borne hepatitis C virus (Maher et al., 2004).

Homelessness

Although the causal relationship between substance use and homelessness is likely multidirectional (Johnson et al., 1997), higher rates of substance use remain a significant co-factor among the homeless (Gelberg et al., 1988; Teesson et al., 2003).

Continued substance use may entrench the problem of homelessness. One study identified ‘social affiliation’ – measured by the available support of family and friends – as a significant predictor for exiting homelessness only among non-current substance users (Zlotnick et al., 2003).

Homeless injecting drug users are more than twice as likely to report syringe-sharing as their stably housed counterparts (Salazar et al., 2007). When injecting drug users’ housing status improves, they are half as likely to use or share syringes, in comparison with those reporting the same or deteriorated housing status (Aidala et al., 2005). Similarly, unstably housed injecting drug users may have a higher cumulative probability for HIV seroconversion, likely due to syringe-sharing behaviors, in comparison with their stably housed counterparts (Corneil et al., 2006). These findings offer compelling evidence for the prospective association between homelessness and increased risky injecting.

Homelessness increases the visibility of injecting drug users, and augments their social vulnerability. Being homeless exacerbates injecting drug users’ exposure to physical violence, and for homeless men in particular, to physical violence perpetrated by police officers and strangers (Marshall et al., 2008). In a sample of injecting drug users in Vancouver, Canada, homelessness predicted recent police detainment without arrest (Werb et al., 2008). Even with participation in syringe exchange, homeless and unstably housed injecting drug users are at least twice as likely to report injecting with used syringes, in comparison with their stably housed counterparts (Des Jarlais et al., 2007).

Sex work

Involvement in street-level sex work as a survival strategy is frequently associated with chronic drug use, in particular for women who inject drugs or smoke crack-cocaine. Few programs, however, target this population in particular, and significant barriers such as travel costs, program hours, social stigma, and fear often prevent street-based sex workers from accessing health and social services (Kurtz et al., 2005).

Similarly, experiences of violence among street-based female sex workers often represent structural factors, rather than individual or interpersonal factors, of their position (Shannon et al., 2009). Homeless women who inject drugs are more likely to experience physical violence from their sex work clients than from strangers, unlike their male counterparts (Marshall et al., 2008). Street-based female sex workers describe the ‘everyday violence of bad dates’ as a significant cause of risky injecting practices (Shannon, Kerr et al., 2008). Prior assault by police and police confiscation of drug use paraphernalia – without arrest – are associated with neither the individual nor the interpersonal characteristics of street-based female sex workers, but appear instead to represent structural correlates of violence against this group (Shannon et al., 2009).

Heightened local policing appears to exert an adverse distal effect on experiences of both violence and risky injecting among street-based sex workers who inject drugs. As targeted policing increases, women injecting drugs and involved in street-based sex work are pushed to less-populated spaces to solicit work, increasing their vulnerability to violence from their sex work clients (Shannon, Rusch et al., 2008). Moreover, their likelihood for risky injecting increases as they relocate to less-frequented areas, because syringe exchange services are scarcer (Shannon, Kerr et al., 2008). Thus, intensified

policing of spaces where drug use is more prevalent may effectively protect street-based sex workers from police encounters, because they move away from these spaces.

However, because they have also moved away from an area targeted by syringe exchange services, access to sterile syringes is reduced, and the likelihood of risky injecting increases.

Income from illegal sources

Although individuals obtaining income from illegal sources are, by virtue of these activities, more likely to encounter police, the literature provides some evidence for the relationship between these activities and other health and social risks. Among injecting drug users in Iran, recent income from an illegal source was associated with recent arrest and increased syringe-sharing (Rafiey et al., 2009). In a sample of injecting drug users in Vancouver, Canada, half reported engaging in illegal income-generating activities in the past thirty days, predominantly drug dealing and sex work. Two-thirds of the women in this sample reported engaging in sex work solely as a source of funding for drugs (Debeck et al., 2007). In effect, although obtaining income from an illegal source may de facto correlate with a greater likelihood for encountering police, this activity is also intertwined with other health and social factors associated with police encounters.

C. Summary and hypothesis

Although the relaxation of state-level syringe prescription laws and the introduction of syringe exchange programs have improved sterile syringe access for injecting drug users in some areas of the US, similar change has not occurred in the approach of law enforcement to injecting drug use. Injecting drug use remains an

unsanctioned, illegal activity, and state-level syringe paraphernalia laws persist, preserving syringe possession as a crime despite the revision of public health laws to support sterile syringe access. However, policing practices such as ‘stop-and-search,’ ‘crackdowns,’ and arrests may exacerbate the health risks of injecting drug use; even ‘fear of police’ may have this effect. For injecting drug users accessing syringe exchange programs, such policing practices may interfere with or reduce the intended health consequences of the program.

No published studies have attempted to identify whether particular social characteristics of injecting drug users participating in US syringe exchange programs predict their vulnerability for encounters with police. This vulnerability may reflect demographic characteristics associated with patterns of social exclusion, such as among African-American injecting drug users, or behavioral characteristics of injecting drug use, such as earlier initiation or more frequent injecting drug use. Heightened public visibility as an injecting drug user may predict vulnerability for police encounters. Police encounters may be more likely or more severe for injecting drug users who are homeless, or who are engaged in sex work or obtaining income from illegal sources. This study will examine a representative cohort of injecting drug users participating in syringe exchange programs across the US to identify the individual-level predictors for the likelihood and severity of police encounters in this population.

Expected findings were as follows: among injecting drug users participating in syringe exchange programs in the US, particular characteristics influence the likelihood for and severity of their encounters with police. Specifically,

- Individual demographics may explain law enforcement encounters among syringe exchange program participants, including:
 - Male gender
 - Older age
 - Black race/ethnicity
- Individual social contexts may explain law enforcement encounters among syringe exchange program participants, including:
 - Greater instability in housing status in the past 6 months
 - Income from possibly illicit sources in the past 6 months
- Individual drug-related behaviors may explain law enforcement encounters among syringe exchange program participants, including:
 - Higher frequency of visits to SEP in the past 30 days
 - Greater frequency of reported injecting drug use in the past 30 days
 - Earlier age of initiation to injecting drug use
 - Receipt of money or drugs for sex in the past 30 days

As the study results will demonstrate, however, the actual findings of the analysis differ somewhat from these hypothesized relationships.

III. METHODOLOGY

A. Data

To identify and describe the characteristics of injecting drug users predicting the likelihood and severity of police encounters they experience, both qualitative and quantitative methods may be used. This study adopts a quantitative methodology to examine this question, using a large, cross-sectional, secondary dataset. These data were collected with surveys administered as structured interviews to injecting drug users participating in a representative sample of syringe exchange programs in the United States (US).

Data used in this analysis were collected as part of a study conducted by the Chemical Dependency Institute of Beth Israel Medical Center (New York City). The Institute has conducted a considerable proportion of the US-based research on injecting drug user health risks and behaviors, including process and outcome evaluations of US syringe exchange programs (Des Jarlais et al., 2009). The dataset for this study was collected as part of a research study entitled the National Syringe Exchange Evaluation Study (Braine et al., 2005), and includes 4,346 cases in the sample.

Secondary data

The most common sources of secondary data are institutionally-sponsored datasets. Often, these data have been collected as a component of ongoing population surveillance conducted by public agencies, to assess or measure health and social indicators at the population level, such as the National Health and Nutrition Examination Survey (NHANES) sponsored by the US Centers for Disease Control. As secondary

sources, these data may be utilized to analyze or track particular trends in the population. Data collected for another research study represent another form of secondary data, and can be used to test hypotheses not examined by the original researcher.

The use of research-developed data for a new study may be limited by decisions made in the development and implementation of the original study. For example, the selection of sites and populations for recruitment, the content focus of the survey instrument, and the methods used in the collection of the data each ascribe the utility of the resulting dataset for subsequent secondary research. If the secondary analysis is based on a hypothesis differing substantially from the original, the validity of findings will be questionable (Weinbach & Grinnell, 2004).

This study uses secondary data collected from a randomized sample of injecting drug users participating in a stratified sample of syringe exchange programs operating in the US in 1999. Because this study assesses the individual-level characteristics associated with the likelihood and severity of police encounters experienced by injecting drug users participating at programs in the US, it is within the scope of the program evaluation conducted by the original researchers. To that end, the use of this secondary dataset is appropriate for the study.

Data reported by respondents in the Evaluation Study included demographic characteristics, injecting and sexual risk behavior in the past 30 days, program satisfaction, housing and income status in the past 6 months, police encounters in the past 6 months, physical and mental health indicators, health and social services utilization, and perceptions of stigma associated with drug use (see Appendix A for complete survey).

Sampling strategy

In the original study, syringe exchange programs were randomly identified for study participation. In the US in 1999, 154 programs were known to be operating. Those reporting fewer than 60,000 syringes exchanged annually or providing syringe exchange solely through delivery services were excluded from the selection process as too small or with insufficient infrastructure, respectively, to support study data collection. This decision may have reduced the representativeness of the sample overall. In all, 51 syringe exchange programs were excluded using these criteria. The remaining 103 programs were stratified by region, and 23 syringe exchange programs were randomly selected for participation from the resulting list. (Braine et al., 2005)

Data collection was conducted with participants at the selected programs over a five-year period, between 2000 and 2004, and was completed at 23 syringe exchange programs. For the purposes of this study, data from respondents at 2 programs were eliminated, because fewer than 50 respondents were included in each of these program samples. Together, the 21 syringe exchange programs included in the final study dataset represented all regions of the US except the southeast, were based in cities or towns of varying size, and distributed anywhere from 60,000 to more than one million syringes each year. (Braine et al., 2006)

Participant recruitment was conducted at each syringe exchange program using a randomized selection process to invite individuals exchanging syringes, the only inclusion criteria, to participate in the study. Respondents were recruited following an exchange transaction on any given day at the program. Using a table of numbers from 1 through 5, interviewers selected a random number and invited the corresponding

individual waiting to exchange syringes to participate in the study. For example, if the number 4 was selected, then the fourth person exchanging syringes on that day was invited to participate in the study.

Although the random selection process could result in the same individual being selected to participate in the research study on different days at the program, repeat participation was allowed in the recruitment process. Subsequent interviews with the same individual were eliminated from the final dataset using a unique respondent identifier code to identify repeat respondents. This random selection approach prevented a selection bias by either participants or interviewers from skewing the recruitment process. (Braine et al., 2005)

The researchers examined reasons for refusal to participate in the study at a sample of the recruitment sites. Although approximately 15% of refusals involved absolute reasons (e.g., “No way,” “I’m too private”), the vast majority of reasons given for refusal to participate were contingent, reflecting individuals’ competing time commitments (e.g., “I have to get back to work,” “I don’t have time right now”). Given the study’s ongoing random selection process, these individuals could have been recruited again on a subsequent day they visited the program, and thus may be included in the final dataset. (Braine et al., 2005)

Survey administration

All Evaluation Study interviews were conducted using audio computer-assisted self-interviewing technology (ACASI). This tool involves the programming of a structured survey instrument into a computer, such that as a question and its response

categories are displayed on the computer screen, the question and its response categories are simultaneously heard by the respondent through headphones. The respondent selects the response category by pressing the appropriate key on the computer's keyboard. The ACASI method does not require the respondent to be literate, because questions and answers are heard through the headphones. Question skip-patterns are programmed into the technology, eliminating the need for the respondent to understand or follow skip-pattern instructions. When used correctly, ACASI allows the respondent complete privacy, because s/he is the only person to see the individually-selected responses to the questions as the interview is conducted. (Des Jarlais et al., 1999).

ACASI technology is useful because it offers an improved method for collecting socially sensitive data on stigmatized behaviors. In populations with low risk for HIV infection, ACASI reduced under-reporting of sexual or drug risk behaviors, in comparison with traditional face-to-face interviews (Turner et al., 1998a; Turner et al., 1998b). Similarly, although injecting drug users recruited at a program site should feel comfortable reporting injecting practices, particular risky injecting behaviors such as syringe-sharing may be socially stigmatized even in this environment.

A study examining the difference between injecting drug users' responses to questions measuring such behaviors compared data collected at four syringe exchange programs using the traditional face-to-face method and the ACASI method on alternating weeks (Des Jarlais et al., 1999). Although baseline characteristics were comparable between the two respondent groups at each program, respondents in the ACASI group were significantly more likely to report renting or purchasing used syringes, injecting with borrowed used syringes, and renting or selling used syringes (Des Jarlais et al.,

1999). Based on these findings, the researchers conducting the National Syringe Exchange Evaluation Study selected the ACASI method for data collection, to reduce potential under-reporting of these and other health and social risk behaviors of interest (Braine et al., 2005).

B. Statistical analysis

All data management and analysis are conducted using the SPSS software package (version 11.5). The two study hypotheses – characteristics predicting the frequency and the severity of police encounters, respectively – were examined separately. Univariate analyses were conducted first to examine the internal variability of each relevant descriptive variable considered for inclusion in the two hypotheses. Results of the univariate analyses are presented as descriptors of respondent characteristics in this sample.

The respondent sample represented by this dataset was large ($n = 4,282$). Analyses involving a large quantity of subjects are more likely to result in Type I errors, because the likelihood of significant ‘chance’ patterns occurring in the data may increase with larger sample sizes. To decrease the likelihood of committing a Type I error in the results, a lower p-value, or test of ‘chance,’ was set for the statistical analysis in this study, at .01 instead of .05. Given the p-values for the results observed in the study’s analyses, this adjustment does not appear to alter the study’s findings. In addition, the study includes the presentation of respective effect size and proportionate explained variance in the analyses of relationships among variables. These tests represent the

relative strengths of observed measures of association, and reflect the ‘true’ meaning of significant findings.

Bivariate analysis was conducted for each of the respondent characteristics displaying substantial internal variation ($> 10\%$ variability). Bivariate analysis tests the relationship between an independent variable and the dependent variable of interest, to determine whether observed associations with are statistically significant, tested here at a $p\text{-value} < .01$. Respondent characteristics meeting these criteria were included in the final multivariate analysis. Bivariate tests were selected to maximize statistical sensitivity, given the level of measurement for each of the selected characteristics. Nominal variables were tested for associations using Pearson’s chi-square test, ordinal variables were tested for nonparametric correlations using Spearman’s rho test (one-tailed, because the hypothesis was directional), and continuous variables were tested for correlations using Pearson’s correlation test.

Multivariate analysis was conducted using the stepwise statistical method, and predictor variables were entered into the model based upon the observed strength of their association with the dependent variable in bivariate analysis. Multivariate analysis tests the relationship of multiple independent variables together on the dependent variable of interest, controlling for the effects of the others as each variable is tested, and arranging the variables in a hierarchy reflecting their influence on the dependent variable. The stepwise method was selected for multivariate analysis to focus the findings from this large dataset on the particular respondent characteristics associated with each of the two dependent variables. To validate findings from this analysis, the dataset was subsequently split into two random halves, and stepwise multivariate analysis was repeated with each

of these two halves. The results of this validation are discussed alongside results for each of the full multivariate analyses.

C. Data management

Respondent data

Respondent data was eliminated from three of the 24 programs where study recruitment took place. Fewer than 50 respondents were included from each of these three sites, suggesting the possibility that program participants were not well-represented from that particular syringe exchange program. These data were removed to reduce the potential for program-level bias in the respondent data.

Respondent demographics included age, gender, and race/ethnicity. Respondent age was self-reported as a numeric variable at the time of survey completion, and treated as a continuous variable in the analysis. Although 0.9% of respondents reported gender as “Transgender” (n = 37), this group was re-coded as “Female,” because other survey responses indicated individuals identifying in this category were likely male-to-female transgendered individuals. Race/ethnicity was collapsed into four variables, merging the original “Caribbean” and “Asian/Pacific Islander” categories into the “Other” category, because the number of respondents in each of these categories represented less than 5% of the sample altogether.

Social-contextual factors were measured in two domains: housing status and income sources. Although respondents’ primary housing status in the past six months was examined in univariate analysis, it was not used for subsequent bivariate and multivariate analyses. To capture the variability of respondents’ housing experiences in the past six

months, each of five possible housing status categories were used instead: own house/apartment, other's house/apartment, SRO hotel/shelter, streets/shanties, some other place. Because respondents could have experienced more than one type of housing status in the past six months, these 'dummy variables' reflected the overall prevalence of each possible experience in this sample. Similarly, each of the four variables assessing respondents' income sources in the past six months was tested and reported separately in the analyses, including income from a part-time/temporary job, from a regular job, from entitlements, and from a possibly illegal source.

Injecting drug use characteristics were captured by respondent reports of injecting drug use practices and history. Variables directly related to the injecting drug use of respondents were examined together in univariate analyses, offering a snapshot of drug use patterns and behaviors in this sample. Injecting drug use variables, measured for the past thirty days, included the frequency of syringe exchange program visits, the frequency of injecting drug use, syringe use more than once, and injecting with any rented/purchased used syringe or with any borrowed used syringe. Among these, syringe use more than once was captured by respondent reports of the average frequency of syringe re-use, and recoded from continuous into a 'dummy' variable for use in the study dataset. Reported age at initiation to injecting drug use was captured as a continuous variable, and preserved in this format for the multivariate analysis, although it was reported in age group categories in the univariate analysis, to describe respondent distribution.

A sub-sample of respondents also responded to questions regarding sex transaction involvement in the past thirty days. Respondents reported separately on the

receipt of money and on the receipt of drugs, respectively, in exchange for sex during the past thirty days. The frequency of responses to each of these variables is presented as population descriptors and in combination, to create a single ‘dummy’ variable assessing whether respondents participated in at least one of these sex transaction types during the past thirty days. Combining the two variables increased the internal variability of this factor, and was included in the multivariate analysis in this format.

Finally, respondent reports of used syringe disposal were examined in the univariate analysis, including whether used syringes were returned to the program, and if not, how respondents’ reported disposal. Because this variable lacked sufficient internal variation (i.e., did not show >10% variability), it was not included in the final multivariate analysis.

Recent police encounters reported by respondents represent the central variable of interest in this study. In the study dataset, fourteen questions assess various aspects of police encounters experienced by respondents, each as a ‘dummy’ variable. However, for the total sample of respondents, only two of these questions were completed, while the remaining twelve items served as sub-questions directed only to those who responded in the affirmative to one of the two main police questions.

The two main ‘police encounter’ questions assessed whether respondents observed police near the program in the past six months, and whether respondents had been stopped by the police on the street in the past six months. Together, these two items were combined to form the dependent variable for the main hypothesis, as a measure of the frequency of police encounters experienced by respondents. Respondents confirming police had stopped them on the street in the past six months were asked eleven additional

questions regarding the actions of the police at that time. Together with the main question capturing whether respondents had experienced any recent police stops, these eleven items were combined to form the dependent variable for the secondary hypothesis, as a measure of the severity of police encounters experienced by respondents. Scale construction is described below.

Program data

Program-level data is presented for descriptive purposes only, to offer a sketch of the representative sample of US syringe exchange programs from which injecting drug users were recruited for collection of this study's data. Program data was available for only 16 of the 21 programs where respondents in the study dataset participated. This data was extracted by the original researchers from a separate biannual study conducted by their institution to examine and report on the 'state of syringe exchange programs' in the United States. Every two years, the researchers disseminate this survey to program directors at all known programs in the country. Program participation is voluntary, and survey questions assess program characteristics, methods of operation, and system or program changes and experiences that have taken place over the previous two years.

Variables were selected from the program survey to describe and characterize the program contexts of respondents in the study dataset. Although the participant evaluation study (the dataset analyzed in this study) was conducted from 2000 thru 2005, three program surveys were conducted during this period: in 2000, 2002, and 2004. Because most of the variables of interest were time-dependent, wherever possible, responses from the 2002 program survey are presented here for consideration, because 2002 represents the mid-point year in the participant evaluation study.

D. Scale construction

Likelihood of police encounters

The dependent variable of interest in the main hypothesis – the likelihood of recent police encounters experienced by syringe exchange program participants – includes the two variables presented in Table 1. Approximately one-third of respondents reported police near the program in the past six months ($n = 1,639$), while half of respondents reported being stopped on the street by police in the past year ($n = 2,380$). These two variables were significantly associated, $\chi^2(1, 4267) = 277, p < .001$. Among respondents, 72% ($n = 1,177$) of those who reported observing police near the program in the past six months were also stopped by the police on the street during this period. However, this relationship showed a moderate effect size ($\phi = .26, p < .001$), explaining approximately 7% of the association between the two variables. Overall, slightly more than one-fourth of respondents in the sample had experienced both types of police encounters in the past six months (Table 1). Together, these variables should provide substantial variation when they are combined in a scale.

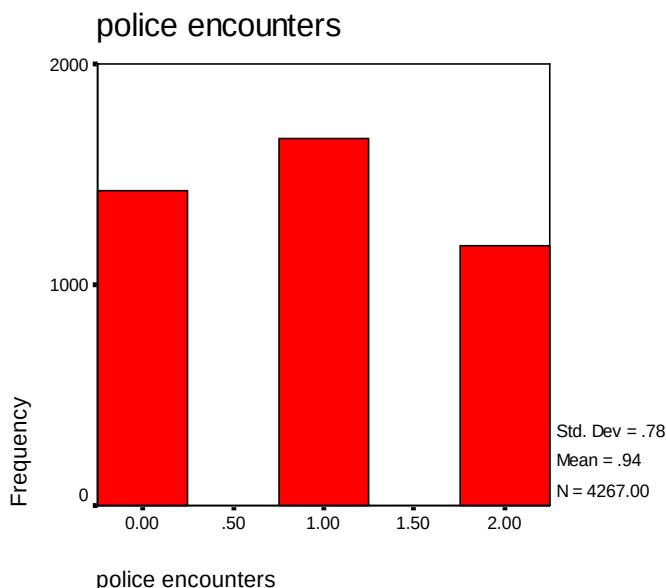
Table 1. Police near program by stopped by police on street, past six months ($n = 4,267$)

		Police near program		Total
		No	Yes	
Stopped by police on the street	No	1,425 (54%)	462 (28%)	1,887 (44%)
	Yes	1,203 (46%)	1,177 (72%)	2,380 (56%)
	Total	2,628 (100%)	1,639 (100%)	4,267 (100%)

The two variables were combined as binary ‘dummy’ variables to create a “police encounters” scale assessing the frequency of police encounters per respondent. Almost all respondents completed both questions ($n = 4,267$), assuring a representative sample for testing the main hypothesis. However, the mean, median, and modal averages for the “police encounters” scale were each 1 out of a possible high score of 2.

Respondents scoring 2 on the scale reported that in the past six months, they had experienced both “police near program” and a “police stop on the street.” Respondents scoring 1 on the scale reported experiencing either, but not both, of these types of encounters, and respondents scoring 0 on the scale reported no experiences with either of the two police encounter types. While one-third ($n = 1,425$) of respondents reported neither of the two encounters with police, a little over one-third ($n = 1,665$) reported only one of the two types of encounters, and a little less than one-third ($n = 1,177$) reported both types of encounters. A histogram displays the distribution of respondents’ reports on the scale (Figure 1). The moderate size of the scale’s standard deviation ($s.d. = .78$) preserves the meaning of the continuous variable, ranging from 0 to 2, as a measure of “police encounters.”

Figure 1. Histogram of “police encounters” scale



Because this scale represents the additive effects of police encounters experienced by injecting drug users from syringe exchange programs, together, “police near the program in the past six months” and “police stopped on the street in the past six months” provide good face validity for the scale measure. Each of the two items assesses a somewhat different aspect of these encounters. While the “police near program” item examines the level of interaction between police and syringe exchange participants specifically, the “police stop on the street” item offers a social-environmental assessment of syringe exchange program participants’ general experiences with the police (Rhodes et al., 2005).

Severity of police encounters

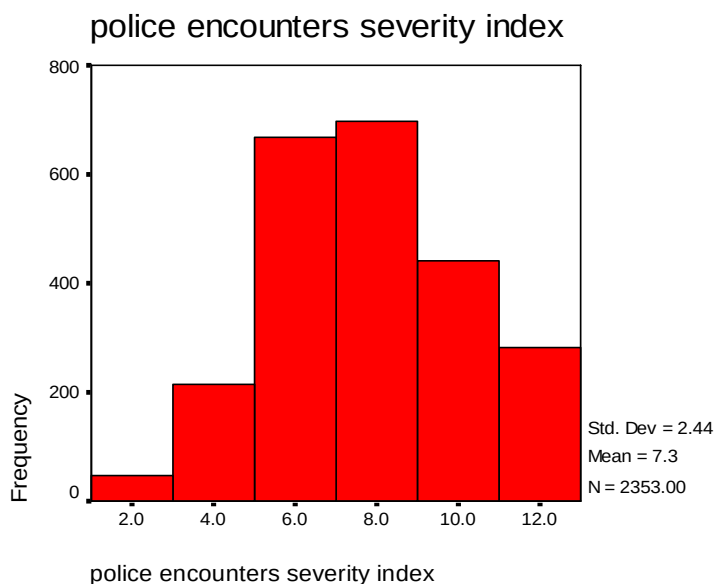
The secondary hypothesis tested predictors for the severity of actions taken by police stopping respondents on the street in the past six months. The scale included one constant, police stop on the street, and eleven variables: police asked questions, police checked identification, police ran warrant check, police searched respondent, police

issued summons, police confiscated syringes, police confiscated program identification, police made respondent break syringes, police verbally abused respondent, police physically abused respondent, and police arrested respondent.

The scale variable constructed from these twelve “police stop” action variables included about half of respondents ($n = 2,353$) in the sample, because only those respondents experiencing a recent police stop were asked the subsequent eleven questions. For this reason, each respondent in this sample necessarily scored, at minimum, 1 out of a possible score of 12. However, the mean, median, and modal averages for respondents in this scale were 7 out of a possible high score of 12. Among respondents, only 25% ($n = 580$) reported experiencing 5 or fewer of the “police stop” actions, while 45% ($n = 1,051$) reported between 6 and 8 of the “police stop” actions, and 31% ($n = 722$) reported between 9 and 12, including 7% ($n = 165$) who experienced all 12 of the “police stop” actions. In effect, the great majority of respondents who were stopped by police experienced many police actions in the course of those stops, reflected in higher scores on the scale. In other words, higher scores on the “police encounters severity” scale indicate a greater number of negative actions experienced by respondents in the course of one or more recent “police stops.”

The histogram displays the distribution of multiple “police stop” actions reported by respondents (Figure 2). The moderate size of the scale’s standard deviation ($s.d. = 2.44$) preserves the meaning of the continuous variable, ranging from 1 to 12, as a measure of the “severity of police encounters.”

Figure 2. Histogram of “police encounters severity index” scale



The scale showed good internal reliability (Cronbach's $\alpha = .76$), although this sub-sample of respondents is unlikely to provide sufficient representation for extrapolation to all injecting drug users participating in syringe exchange programs in the United States. The twelve-item “police stop severity” scale shows excellent face validity, because each item specifically assesses a potential action occurring during the identified “police stop.” Its construct validity is also high, because the scale items directly reflect the theoretical concept of “police stop severity” for this population, including actions such as syringe and program identification confiscation. This scale offers insight into the ‘on the streets’ interaction between police and program participants in the US, capturing a sample of this experience as an example of the practice conflict between policing and syringe exchange programs for injecting drug users.

E. Approach

The analysis presented in this study offers a simplified approach for testing a complex relationship whose origins lie in the conflict and interplay between criminal justice and socio-medical approaches to drug policy in the United States. Based on this policy conflict, police encounters with injecting drug users may interfere with syringe exchange programs' objectives for injecting drug users.

Particular characteristics of injecting drug users may increase the likelihood that they experience this conflict 'on the streets,' and could be described as 'risk factors' for more frequent, and more severe, police encounters in this population. Articulating these risk factors may help to isolate the problem, and provide insight into opportunities for policy improvement, both at the local, program level, and through the broader framework of state- and federal-level drug policy.

IV. RESULTS: UNIVARIATE ANALYSIS

Respondent characteristics

The selected individual-level variables measure characteristics of respondents and domains of their experience which may explain or influence encounters with police. These include the standard demographic measures of gender, age, and race/ethnicity, and social contextual factors assessing recent housing/living situations and income sources. Injecting drug use behaviors are captured by respondent reports of injecting drug use practices and history. For a sub-sample of respondents, reports of receipt of money and/or drugs in recent sex transactions were also available. Finally, respondents' experiences with various types of police encounters were reviewed as aspects of police interactions with individuals participating in syringe exchange programs.

Demographics

Gender may predict police encounters for injecting drug users. Qualitative studies describe the capacity for women who inject drugs to 'pass' as non-users in public spaces (Cooper et al., 2005), whereas male injecting drug users are more 'visible,' and therefore vulnerable to police interactions. Among respondents in this sample, 34% were female, a significantly larger proportion than results from other studies recruiting injecting drug users (Table 2).

In this sample, respondent age was measured as a continuous variable, and ranged from 15 to 77 years old. The sample was most concentrated in the 35 to 50 year-old age group, and showed a mean age of 38 years, and a median age of 39 years; the most frequently reported age was 45 years old.

Injecting drug users in this study sample, recruited from twenty-one syringe exchange programs across the United States, were racially and ethnically diverse, with more than half the sample identifying in racial/ethnic categories other than White, non-Hispanic. Among respondents, 45% identified as White non-Hispanic, 30% as Black non-Hispanic, and 18% as Latino/Hispanic (Table 2).

Table 2. Demographics

	N	%
Gender (n = 4,282)		
Male	2,389	66%
Female	1,443	34%
Race/ethnicity (n = 4,279)		
White, non-Hispanic	1,943	45%
Black/African-American, non-Hispanic	1,279	30%
Latino/Hispanic	790	18%
Other, non-Hispanic	267	6%

Social contexts

Survey respondents were asked to identify their primary living situation – where they lived most – in the past six months. In addition to five main categories, the survey also provided respondents with an open-ended option for some other, unmentioned living situation, “other place.” Almost half of respondents (n = 2,026) reported living in their own place most of the time in the past six months, the most stable living situation

category. However, 24% reported living primarily in someone else's place, 9% in SRO hotels or shelters, and 12% on the streets (Table 3).

Table 3. Primary living situation, past six months (n = 4,267)

	N	%
Own place	2,026	48%
Someone else's place	1,045	24%
SRO hotel, rooming house, shelter	370	9%
Homeless on the streets	511	12%
Jail	158	4%
Other place	157	4%

However, 'primary living situation' does not necessarily reflect a continuous living situation in the past six months, because respondents may have moved between one or more types of living situations during this period. For example, although a respondent may have lived most of the time at someone else's place in the past six months, they may have also spent some of this time in an SRO hotel or a shelter, because the primary living situation was precarious or unstable.

Separately, respondents were asked to identify whether they lived in each of the situational categories provided during the past six months. The variation in respondents' living situations over this period is striking in this sample, and especially in comparison with their reported primary living situations (Table 4). At least a third of respondents experienced a precarious living situation at some point in the past six months: 28% (n =

1,211) reported time spent in jail, 38% (n = 1,622) reported street homelessness, and 33% (n = 1,415) reported living in an SRO hotel or a shelter (Table 4). These patterns indicate significant housing instability in this sample.

Table 4. Any living situation, past six months

	N	%
Own place (n = 4,273)	2,585	61%
Someone else's place (n = 4,270)	2,073	49%
SRO hotel, shelter (n = 4,269)	1,415	33%
Homeless on the streets (n = 4,269)	1,622	38%
Jail (n = 4,272)	1,211	28%
Other place (n = 4,270)	902	21%

An injecting drug user's source of income may have some proxy influence on police encounters. Income sources which are less socially stable, such as part-time/temporary work, entitlements, or illegal sources, may increase the likelihood of police encounters for injecting drug users, because the scarcity of funds forces the individual into public spaces in pursuit of opportunities for acquiring drugs.

In this sample of injecting drug users, many respondents reported multiple income sources in the past six months; income categories were not mutually exclusive (Table 5). However, 47% (n = 1,983) of respondents reported income from a regular job in the past six months, while 46% (n = 1,946) reported income from recent part-time or temporary work. By contrast, 42% (n = 1,773) reported income from possibly illegal sources during

this period, and 37% (n = 1,588) reported income from public entitlements, a sum which is likely insufficient to support habitual drug use.

Table 5. Income sources, past six months

	N	%
Regular job (n = 4,269)	1,983	47%
Part-time/temporary work (n = 4,271)	1,946	46%
Entitlements (n = 4,266)	1,588	37%
Possibly illegal sources (n = 4,259)	1,773	42%

Injecting drug use behaviors and history

Patterns of drug use and related drug use practices may increase injecting drug users' visibility in public spaces. Participation in the syringe exchange program, although intended as a protective factor for risky injecting behaviors, may reflect risk factors experienced by the individual injecting drug user. For example, individuals living on the streets may visit the program more frequently than others, increasing their vulnerability to police encounters with increased visibility in public spaces.

Both the frequency of respondent program visits and the frequency of respondent injecting drug use in the past thirty days were assessed as ordinal variables. Program utilization varied widely in this sample. Although a majority of injecting drug users in the sample, 71% (n = 3,048), reported visiting the program weekly or less, including 16% (n = 686) who reported no visits in the past thirty days, 29% (n = 1,215) of respondents reported frequent visits to the program, more than once per week (Table 6). However, the

reported frequency of injecting drug use was much higher, in comparison with program visit frequency. A majority of respondents, 62% (n = 2,651), reported injecting drugs at least daily, including 51% (n = 2,200) who injected twice or more each day (Table 6).

Despite current use of a syringe exchange program to obtain new, sterile syringes, a significant proportion of respondents engaged in at least one risky injecting event in the past thirty days. Close to two-thirds of this sample reported re-using a syringe before discarding it (Table 6). Two additional direct measures of risky injecting behaviors were also considered: injecting with syringes used by someone else, whether the syringes were either rented/bought or borrowed. Close to one-third of respondents reported injecting with syringes used by someone else in the past thirty days (Table 6).

Table 6. Injecting drug use behaviors

	N	%
Frequency of program visits, past 30 days (n = 4,263)		
None	686	16%
Once/week or less	2,362	55%
2 to 6 times/week	852	20%
Once/day	153	4%
More than once/day	210	5%
Frequency of injecting drug use, past 30 days (n = 4,249)		
Never	325	8%
Once/week or less	481	11%
2 to 6 times/week	792	19%
Once/day	451	11%
2 to 3 times/day	1,377	32%
4 times or more/day	823	19%
Re-use syringe before discarding, past 30 days? (n = 4,117)		
Yes	2,473	60%

Injected with rented/bought used syringes, past 30 days? (n = 3,497)		
Yes, at least once	1,083	31%
Injected with borrowed used syringes, past 30 days? (n = 3,497)		
Yes, at least once	1,230	35%

The age at which individuals initiate injecting drug use offers a perspective on the longevity on injecting drug use experience, which may influence the frequency of police encounters. In this sample, age at first injecting drug use was provided as a continuous variable, with a mean age of 20 years old at first injecting drug use, and a median age of 19 years old. When these data are organized into categories, the proportion of respondents reporting first injecting drug use during childhood or adolescence, before the age of 18, includes 41% of the entire sample (Table 7).

Given the median age in this sample was 39 years old at the time data collection, the reported age category at first injecting drug use indicates at least half of respondents began injecting drugs more than fifteen years before participating in this survey. Such chronicity of injecting drug use is more likely to have tracked itself on this group, physically and in their social circumstances, than for their younger counterparts. In turn, this evidence may increase their vulnerability to police encounters in public spaces, due to the visibility of their drug use status.

Table 7. Age at first injecting drug use, categorical (n = 4,282)

	N	%
≤ 12 years old	721	17%
13 to 17 years old	1,029	24%
18 to 25 years old	1,660	39%
26 to 35 years old	634	15%
≥ 36 years old	238	5%

Sex work transactions

Half of survey respondents completed the two variables querying recent sexual transactions in exchange for money or drugs. Sexual transactions may contribute significantly to police interactions if they reflect public solicitations for sex, and to injecting health risk behaviors as a proxy for risky health behaviors associated with extreme poverty.

The lower response rate to these questions (n = 2,147) threatens their external validity, because only half of the sample chose to answer these questions. These respondents may not be representative of injecting drug users participating in syringe exchange programs in the US. However, because sexual transactions reflect a potentially-influential characteristic for police interactions, a sub-analysis will be conducted to include this variable in the study's main hypotheses.

Given the similar frequency of respondents confirming receipt of either money (n = 483) or drugs (n = 371) in this sub-sample, combining these variables confirms that a similar group of respondents (n = 539) engaged in both risk behaviors in the past thirty

days (Table 8). This combined variable will provide an important measure of risk influencing the study's hypotheses assessing the frequency and severity of police encounters.

Table 8. Sex transactions, past 30 days (n = 2,147)

	N	%
Received money for sex	483	22%
Received drugs for sex	371	17%
Received money and/or drugs for sex	539	25%

Syringe disposal

An important public safety aspect of syringe exchange programs involves their emphasis on the return of used syringes to the program, for safe disposal as medical waste. However, anecdotal evidence suggests that, in an encounter between a police officer and an injecting drug user, the officer may interpret the used syringe as “possession of a controlled substance,” citing drug residue in the syringe as the evidence. Evidently, the safe disposal of used syringes at the program site may be hampered by participants' reluctance to carry used syringes, given the potential for a “drug possession” arrest en route to the program (Burris, 2001).

In this sample, 64% (n = 2,730) reported returning all of their used syringes to the program in the past thirty days, ensuring safe disposal (Table 9). Of concern, among the 36% (n = 1,538) of respondents who did not return all used syringes to the program, 79%

(n = 1,206) reported some potentially hazardous method of disposal, i.e., in trash without breaking off the needle-point, somewhere else, flush down toilet (Table 9). The health implications are even worse for 19% (n = 294) of this ‘non-program disposal’ group, however, who reported giving or selling their used syringes to someone else (Table 9). This method of ‘disposal’ suggests syringe-sharing behaviors which could increase the risk of blood-borne disease transmission to another injecting drug user.

Table 9. Reports of used syringe disposal, past 30 days

	N	%
Brought all used syringes to program (n = 4,268)		
No	1,538	36%
Yes	2,730	64%
If not returned to program, disposed of used syringes how?		
Break point and throw away in trash (n = 1,536)	966	63%
Throw away in trash without breaking (n = 1,535)	413	27%
Throw away somewhere else (n = 1,536)	547	36%
Flush down toilet (n = 1,536)	246	16%
Gave away to someone else (n = 1,535)	203	13%
Sold to someone else (n = 1,535)	91	6%

Police encounters

Police encounters represent the main variable of interest in this study. The survey assesses a number of factors involving police encounters with syringe exchange

participants. Although none of these reflect the theoretic variable of interest in this study – police interference with the health and social benefits of syringe exchange – several of the variables combined can provide a useful proxy measure of the problem.

Among respondents, 38% (n = 1,639) reported police near the syringe exchange program in the past six months (Table 10). Only those respondents reporting a police presence near the syringe exchange program in the past six months were eligible to report whether this presence prevented them from exchanging syringes. More than a third, 39% (n = 634), of these individuals did feel this presence prevented them from using the program, illustrating the significance of police as an obstacle to adequate syringe access for injecting drug users at syringe exchange programs (Table 10).

More than half, 56% (n = 2,382), of respondents reported being stopped by the police on the street in the past six months. In this group, more than half, 55% (n = 1,302), were arrested as a result of the police stop, although the nature of their charges is unavailable in this dataset. Of note, 86% (n = 2,041) of respondents were searched in the course of the police stop, increasing the likelihood that syringes were found on the respondent's person, and potentially discouraging the respondent from carrying syringes in the future. However, 40% (n = 950) reported the police confiscated their syringes during that encounter (Table 10). Police confiscation of syringes from program participants reflects the conflict 'on the streets' between police and syringe exchange programs. Most importantly, this action directly contradicts the intent of syringe exchange programs: to promote sterile syringe use among injecting drug users, and to ensure safe, appropriate disposal of used syringes at the program.

Table 10. Proxy measures for police interference with health/social benefits of syringe exchange

	N	%
Police near program, past 6 mos, (n = 4,267)		
Yes	1,639	38%
Police near program prevented respondent from exchanging syringes (n = 1,639)		
Yes	634	39%
Stopped by police, past 6 mos (n = 4,270)		
Yes	2,382	56%
If stopped by police, past 6 mos...		
Yes - Police asked questions (n = 2,380)	2,272	96%
Yes - Police checked identification (n = 2,379)	2,209	93%
Yes - Police ran warrant check (n = 2,375)	2,194	92%
Yes - Police searched respondent (n = 2,379)	2,041	86%
Yes - Police issued summons (n = 2,368)	786	33%
Yes - Police confiscated syringes (n = 2,376)	950	40%
Yes - Police confiscated program id (n = 2,373)	499	21%
Yes - Police made break syringes (n = 2,373)	573	24%
Yes - Police verbally abused (n = 2,377)	1,440	61%
Yes - Police physically abused (n = 2,378)	743	31%
Yes - Police arrested respondent (n = 2,376)	1,302	55%

Program characteristics

Although not included in this study's analysis, particular characteristics of the programs where respondents in the study data-set were recruited may exert an influence on the experiences of their participants with police. Of note, a program is operating 'legally' if a local jurisdiction has enacted an exemption to state-wide syringe prescription and/or paraphernalia laws 'on the books' to support the establishment of syringe exchange programs. When this type of exemption has not been legislated and such laws remain 'on the books' in that state, a program is actually operating 'illegally.'

Programs operating illegally may be less visible to the police, and so participants may experience fewer police encounters than their counterparts at legal programs.

Program-level data from 2002 was not available for programs E, I, P, Q, and Y, nor was proxy data available for these programs from either 2000 or 2004, because directors had not returned any of these surveys to the evaluators. However, respondents from these programs are included in the study dataset.

Among programs established during the early years of syringe exchange in the United States, before 1993, participants may experience higher levels of police harassment because the program operations and location have been in place for some time, and are more likely to be known to the police. The size and volume of activity at a program may attract police attention to the program, increasing the likelihood for police harassment of participants. These factors are represented by the aggregate number of annual program visits in 2002, and the volume of syringes exchanged at the program in 2002, respectively.

The years during which programs were established are presented in three time periods, approximating periods in the development of syringe exchange programs in the United States. Eight programs were established in the ‘early period’ of development, before 1993, and the remaining eight programs were evenly divided between the two subsequent periods, from 1993 thru 1997, and in 1998 or later (Table 11). However, only four of the sixteen programs reporting were not operating legally in 2002, and there was no observed association between program legal status and the time period when it was established: two were established in the ‘early period,’ one in the ‘middle period,’ and one in the ‘later period’ (Table 11).

Syringe exchange activity across the sixteen programs showed almost equal distribution across three levels of activity. In this survey, a program visit was defined as a unique syringe transaction provided to a program participant; participants may have visited the program multiple times over the year, thus receiving multiple syringe transactions. Five programs reported the highest level, more than 10,000 visits to the program in 2002, and six programs reported the lowest level, less than 5,000 visits that year. Similarly, four programs reported distributing more than half a million syringes in 2002, the highest volume, while six programs reported the smallest distribution volume, less than 250,000 syringes that year.

Table 11. Characteristics of programs where respondents participated*

Program identifier	Number (%) respondents in sample	Time period program established	Legally operating (2002)	Number syringe exchange visits (2002)	Number syringes distributed (2002)
A	366 (9)	≤ 1992	Yes	>10,000	>500,000
B	378 (9)	≤ 1992	No	>10,000	>500,000
C	435 (10)	≤ 1992	Yes	>10,000	>500,000
D	216 (5)	≤ 1992	Yes	>10,000	>500,000
E	294 (7)	---	---	---	---
F	244 (6)	≤ 1992	Yes	5,000-10,000	250,000-500,000
G	259 (6)	≥ 1998	No	5,000-10,000	<250,000
H	177 (4)	≤ 1992	Yes	5,000-10,000	250,000-500,000
I	50 (1)	---	---	---	---
J	141 (3)	1993-1997	Yes	n.a.	250,000-500,000
L	138 (3)	1993-1997	Yes	<5,000	250,000-500,000
M	194 (5)	1993-1997	Yes	<5,000	250,000-500,000
N	246 (6)	≤ 1992	No	<5,000	<250,000
O	218 (5)	≤ 1992	Yes	>10,000	250,000-500,000
P	55 (1)	---	---	---	---
Q	57 (1)	---	---	---	---
R	86 (2)	1993-1997	No	5,000-10,000	<250,000
T	84 (2)	≥ 1998	Yes	<5,000	<250,000
V	257 (6)	≥ 1998	Yes	<5,000	<250,000
W	99 (2)	≥ 1998	Yes	<5,000	<250,000
Y	288 (7)	---	---	---	---

*Program data not available for programs E, I, P, Q, and Y.

Program characteristics may influence the likelihood of encounters with police among participants, because particular program-level variables may attract a police presence to the program site. The local social-environmental context of police activity or directives where each of the programs included here operate was unknown to this researcher, because their geographic location in the US was protected by the original researchers for reasons of confidentiality. However, the program director's reports of

police near the program, program harassment by police, and overall police relations in the past year represent a program-level perspective on relationships with police.

Although data was incomplete for each of the three police variables, substantial differences were evident among program-reported experiences with police. Six out of twelve programs (50%) reported police near the program in 2002, and a somewhat different mix of six out of twelve programs (50%) reported poor relations with the police during that year (Table 12). Program reports of police harassment were abstracted from the 2004 program survey, because there was considerable under-reporting of this variable in the 2002 program survey. However, five out of thirteen programs (38%) reported police harassment as a program problem experienced in 2004. For at least three of these programs (programs F, V, and W), this problem reflects a pattern continued from 2002 (Table 12).

In general, programs reporting police near the program in 2002 also reported only 'Fair' or 'Poor' overall police relations during that year, although these patterns did not necessarily persist, or result in program problems of police harassment in 2004 (Table 12). Notably, four out of the six programs (67%) without police near the program also reported 'Poor' overall police relations in 2002 (Table 12), suggesting program relations with police are not sufficiently measured by the observed proximity of officers to service sites. Programs likely assess overall police relations by a variety of more subjective measures, including the experience of recent or high-profile incidents with police, or insufficient or irregular communications with local police leadership.

Table 12. Program experiences with police at sites where respondents participated*

Program identifier	Police near program (2002)	Overall police relations (2002)	Program problems of police harassment (2004)
A	Yes	Poor	No
C	No	Good	Yes
F	Yes	Fair	Yes
G	---	---	Yes
H	Yes	Good	No
J	---	---	No
L	Yes	Fair	No
M	No	Poor	No
N	No	Poor	No
O	No	Poor	No
R	No	Poor	No
T	No	Good	---
V	Yes	Fair	Yes
W	Yes	Poor	Yes

*Data not available for programs E, I, P, Q, and Y.

At best, these program-level data offer some context for the subsequent analysis of respondent characteristics predicting the police interference variables.

V. RESULTS: BIVARIATE AND MULTIVARIATE ANALYSIS

A. Main Hypothesis

Bivariate testing

The main hypothesis sought to identify predictors for police encounters among injecting drug users participating in syringe exchange programs in the US. The “police encounters” scale was developed from two variables in the original data-set: observed police near the program in the past six months, and stopped on the street by police in the past six months. Given the large sample size, most of the respondent characteristics hypothesized to interact with the “police encounters” scale proved significant in bivariate testing. However, the magnitude or effect size of bivariate associations varied widely. Three characteristics did not show a significant association with the scale in bivariate testing.

Among the demographic characteristics (not presented here), neither race/ethnicity nor age were significantly associated with the “police encounters” scale. Gender displayed only a weak significant relationship with the scale, as did recent income from entitlements or from a part-time/temporary job. However, recent income from a regular/full-time recent income from a possibly illegal source showed a stronger significant association with the “police encounters” scale. Correlations between the “police encounters” scale and respondents’ injecting drug use characteristics were also weak to moderate in significance. Respondents’ reported frequency of program visits in the past thirty days was moderately associated with the “police encounters” scale, (Spearman’s $\rho = .131, p < .01$), as was reported age at first injecting drug use (Spearman’s $\rho = -.091, p < .01$), (Table 13).

Table 13. Correlations between injecting drug use characteristics and the “police encounters” scale (n = 4,267)

Variable	Spearman’s <i>rho</i> value
Frequency of program visits past 30 days	.131**
Frequency of injecting drug use past 30 days	.069**
Age at first injecting drug use	-.091**

** $p < .01$ (one-tailed)

Among the five categories assessing respondents’ housing status in the past six months, a notable pattern emerged in bivariate testing: as the instability of the housing situation increased, so did the magnitude of the relationship with the “police encounters” scale. Respondents living in their own place in the past six months were least likely to experience a police encounter, while respondents living on the streets or in shanties were most likely to experience a police encounter.

Only 25% (n = 639) of respondents who lived in their own place in the past six months ranked highest on the “police encounters” scale, in comparison with 42% (n = 681) of those living on the streets or in shanties, and 46% (n = 415) of those who lived in some other place. Table 14 displays the observed bivariate relationships for each of the five housing status categories, in ascending order of the association’s magnitude and effect size. Among all housing status types, the relationship between respondents living on the streets or in shanties and the “police encounters” scale had the strongest effect size.

Table 14. Chi-square associations and effect size for housing status types in the past six months with the “police encounters” scale

Housing status	(df, N)	χ^2 value	Cramer's V
Lived in own place	(2, 4264)	58***	.116
Lived in SRO/rooming house/shelter	(2, 4262)	137***	.179
Lived in someone else's place	(2, 4262)	148***	.186
Lived in other place	(2, 4263)	222***	.228
Lived in streets or shanties	(2, 4262)	372***	.295

*** $p < .001$

Multivariate testing

Multivariate analysis included each of the characteristics which were significant in bivariate testing in the regression model. Dummy variables were created for the nominal variable, gender, so it could be included in the regression model alongside the other binary and continuous (both ordinal and interval) variables assessing respondent characteristics.

The following variables were added to the model: five categories assessing housing status in the past six months (own place, SRO/rooming house/shelter, someone else's place, streets or shanties, other place), three categories assessing income source in the past six months (part-time/temporary job, entitlements, possibly illegal source), frequency of program visits past 30 days, frequency of injecting drug use past 30 days, age at first injecting drug use, male gender, female gender. The variable measuring receipt of money and/or drugs for sex in the past 30 days was excluded from the main regression analysis because fewer respondents were included, threatening the

generalizability of findings to the larger population of injecting drug users participating in syringe exchange programs in the United States.

Stepwise multiple regression analysis was conducted to identify significant predictors for higher scores on the “police encounters” scale. All significant variables from the bivariate analysis were included in the model. The selected variables combined in the model to explain 14% of the observed variance in scores on the “police encounters” scale, $R^2 = .14$, $F(7, 4201) = 100.00$, $p < .001$.

The relative contribution of each correlation coefficient is shown in Table 15, in decreasing rank order of significance. Although each of these ten variables emerged as significant in the regression model, the top three predictors provided substantially stronger contributions to the model than the others (Table 15).

Most notably, recent unstable living situations – on the streets or in shanties, or in some other place – predicted the greatest likelihood for encounters with police in the past six months in this sample. More than half of the variance in the “police encounters” scale – 9% of the 14% variance accounted for in the model – was explained by whether respondents lived on the streets or in shanties in the past six months (Table 15). The congruence of results for “lived in some other place” with reported street homelessness suggests a problem of collinearity for these two variables. Although “lived in some other place” was posed as a separate living situation category in the survey, it appears to represent a similar level of housing instability to “lived on the streets or in shanties,” explaining an additional 2% variance of the 14% accounted for in the model (Table 15). The real-life living situations represented by these two categories are likely very similar.

While significant, the strong observed relationship between police encounters and recent income from a possibly illegal source – explaining an additional 2% variance in the model – confirms the implicit association between illegal activity and police encounters. Furthermore, living on the streets may be construed an illegal activity, and for the purposes of this analysis, this perspective explains the high predictive strength of this variable in the model. Each of the lesser predictors in the model – “frequency of program visits,” “male gender,” “lived in someone else’s house or apartment,” and “income from entitlements” – explained no more than 1%, respectively, of respondents’ variance in the “police encounters” scale.

Although the proportion of variance in the “police encounters” scale explained by these three variables remained high in the final model, the association was stronger for the three variables alone, predicting 12% of the variance in the “police encounters” scale, $R^2 = .12$, $F(3, 4205) = 194.76$, $p < .001$. (This analysis is not provided in a table.) As the subsequent four predictors emerged in the larger stepwise regression model, their inclusion weakened the overall strength of the equation, without contributing substantially to the explanation of variance.

Table 15. Stepwise multiple regression for variables predicting higher respondent scores on the “police encounters” scale (n = 4,208)

Antecedent variable	<i>R</i>	<i>aR</i> ²	<i>aR</i> ² change
<i>Step 1</i> Lived on streets or in shanties past 6 months	.29	.09	.09***
<i>Step 2</i> Income from possibly illegal source past 6 months	.33	.11	.02***
<i>Step 3</i> Lived in other place past 6 months	.35	.12	.02***
<i>Step 4</i> Frequency of program visits past 30 days	.36	.13	.01***
<i>Step 5</i> Male gender	.37	.13	.01***
<i>Step 6</i> Lived in someone else’s house/apt past six months	.37	.14	.01***
<i>Step 7</i> Income from entitlements past six months	.38	.14	.00***

*** $p < .001$.

Multivariate analysis also highlights the predictive role of each variable in the development of the ‘best-fit line’ produced by the regression analysis. In Table 16, the relative weight contributed by each predictor is shown, reinforcing the strong contributions provided by the top three predictors. The variable assessing street homelessness produced the greatest coefficient weight on the ‘best-fit line’ ($b = .19, p < .001$), followed by “income from possibly illegal source” ($b = .13, p < .001$) and “lived in other place” ($b = .11, p < .001$), respectively (Table 16).

Table 16. Summary of stepwise regression analysis to identify predictors for higher respondent scores on the “police encounters” scale (n = 4,208)

Predictor	<i>B</i>	<i>SE B</i>	<i>b</i>
(Constant)	.37		
Lived on streets or in shanties past 6 months	.31	.03	.19***
Income from possibly illegal source past 6 months	.20	.02	.13***
Lived in other place past 6 months	.21	.03	.11***
Frequency of visits to SEP past 30 days	.07	.01	.08***
Male gender	.12	.02	.07***
Lived in someone else’s house/apt past 6 months	.12	.02	.08***
Income from entitlements past 6 months	.10	.02	.06***

*** $p < .001$.

When the sex transaction variable was added to the multivariate model, the overall correlation coefficient increased slightly. Almost half of respondents were captured in this sub-sample (n = 2,121), assuring a useful sample size for significance testing, but reducing the generalizability of findings to the broader population of injecting drug users participating in syringe exchange programs in the United States.

The final model explained a somewhat larger proportion, 17%, of the variance in scores on the “police encounters” scale, $R^2 = .17$, $F(7, 2121) = 63.48$, $p < .001$. In addition, different patterns emerged among predictors in this sub-sample, suggesting the differential influence of sex transactions for police interactions. Although recent street homelessness remained the lead predictor, explaining 9% of the model’s variance, “any

sex transaction provided” explained an additional 3% variance, becoming the second lead predictor. Among the lesser predictors in the main model, “male gender” was the only variable which retained considerable strength in this sub-analysis, explaining 1% of the model’s variance, while the predictive value of “frequency of visits to the SEP” was reduced considerably. (Table 17)

Table 17. Stepwise multiple regression for variables predicting higher respondent scores on the “police encounters” scale, including receipt of money and/or drugs for sex in the past thirty days (n = 2,121)

Antecedent variable	<i>R</i>	<i>aR</i> ²	<i>aR</i> ² change
<i>Step 1</i> Lived on streets or in shanties past 6 months	.31	.09	.09****
<i>Step 2</i> Any sex transaction provided past 30 days	.35	.12	.03****
<i>Step 3</i> Income from possibly illegal source past 6 months	.38	.14	.02****
<i>Step 4</i> Lived in other place past 6 months	.40	.16	.02****
<i>Step 5</i> Male gender	.41	.17	.01****
<i>Step 6</i> Lived in someone else’s place past 30 days	.41	.17	.00**
<i>Step 7</i> Frequency of visits to SEP past 30 days	.42	.17	.00**

p* < .01, *p* < .001.

The sex transaction variable also provided substantial weight in the coefficient analysis (*b* = .16, *p* < .001), ranking a close second to the top predictor, recent street

homelessness (Table 18). The remaining predictors retained similar weights to those found in the main analysis of respondent scores on the “police encounters” scale, with the exception of the “male gender” variable, which increased in weight ($b = .10, p < .001$) over “frequency of visits to SEP” ($b = .06, p < .001$) (Table 18).

Table 18. Summary of stepwise regression analysis for predictors of higher respondent scores on the “police encounters” scale, including receipt of money and/or drugs for sex in the past thirty days ($n = 2,121$)

Predictor	<i>B</i>	<i>SE B</i>	<i>b</i>
(Constant)	.40		
Lived on streets or in shanties past 6 months	.27	.04	.17***
Any sex transaction provided past 30 days	.29	.04	.16***
Income from possibly illegal source past 6 months	.19	.03	.12***
Lived other place past 6 months	.23	.04	.12***
Male gender	.17	.03	.10***
Lived in someone else’s place past 6 months	.10	.04	.07**
Frequency of visits to SEP past 30 days	.05	.02	.06**

** $p < .01$, *** $p < .001$.

Future analyses examining the influence of injecting drug users’ characteristics on the “police encounters” scale could be conducted by incorporating the findings from the multivariate model presented here. The disproportionate strength of recent street and “other” homelessness, and of recent illegal income sources could be managed in a forward multiple regression analysis, assigning these leading predictors to initial blocks

in the model to effectively control for their influence on the subsequent, lesser predictors. This approach may help to clarify whether and to what extent characteristics such as gender are confounded by the leading predictors identified here, to expose underlying correlations between ‘fixed’ demographic factors and the ‘shifting’ social factors represented by housing status and income source.

B. Secondary Hypothesis

The secondary hypothesis considered whether particular characteristics of injecting drug users participating in syringe exchange programs in the US predicted the severity of encounters resulting from police stops which they reported experiencing. The analysis examined the predictive significance of specific factors in this sub-sample for their contribution to the dependent variable, the scale derived from any of the possible eleven police actions experienced by respondents during stops on the street in the past six months.

In bivariate testing, all of the selected variables were significantly associated with the “police encounters severity” scale. Stepwise multiple regression analysis was conducted, and every variable was added to the model. Dummy variables were created for the additional nominal variable, race/ethnicity, so it could be included in the regression model alongside the other binary and continuous (both ordinal and interval) variables.

The following variables were included: five categories assessing housing status in the past six months (own place, SRO/rooming house/shelter, someone else’s place, streets or shanties, other place), four categories assessing income source in the past six months

(regular job, part-time/temporary job, entitlements, possibly illegal source), frequency of program visits past 30 days, frequency of injecting drug use past 30 days, age at first injecting drug use, age, male gender, female gender, white race/ethnicity, Black race/ethnicity, Hispanic race/ethnicity, other race/ethnicity. The variable measuring receipt of money and/or drugs for sex in the past 30 days was excluded from the overall secondary regression analysis, because fewer respondents were included.

The selected variables combined to explain 15% of the observed variance in scores on the “police encounters severity” scale, $R^2 = .15$, $F(11, 2318) = 39.25$, $p < .001$. The relative contribution of each correlation coefficient is shown in Table 19, in decreasing rank order of significance. Although each of these eleven variables emerged as significant in the regression model, the strongest predictors ranked among the top four shown in Table 19.

Once again, recent unstable living situations emerged among the strongest predictors in the model, associated with more severe police actions during a recent stop on the street. However, unlike the main model described above, “lived in other place” was the lead predictor for scores on the “police encounters severity index:” 7% of the model’s variance was explained by this variable, followed by 3% of variance predicted by recent street homelessness (Table 19). Respondent age at first injecting drug use emerged as the third leading predictor in this model, explaining 2% of the variance in the “severity index” and suggesting that greater chronicity of injecting drug use may increase the vulnerability of injecting drug users to more severe police encounters, as hypothesized.

While other predictor variables in this analysis either followed the patterns observed in the main analysis or provided relatively weak contributions to the model, Hispanic or Latino race/ethnicity emerged as a different predictor in scores on the “severity of police encounters index.” Although no race/ethnicity category was significantly associated with the “police encounters” scale in bivariate analysis, and was subsequently discounted from the multivariate analysis, these categories were included in the “severity index” multivariate analysis because bivariate testing showed a significant association. In multivariate analysis, this association is clarified as an effect of respondent Hispanic or Latino race/ethnicity on the “severity index,” explaining 1% of this model’s variance, and a striking finding because it differs from the literature and hypothesized relationship for this category.

Although the proportion of variance in the “police encounters severity” scale explained by the four leading variables was almost as high as the final model, the association was significantly stronger when they were considered alone, together explaining 13% of the model’s variance, $R^2 = .13$, $F(4, 2318) = 84.16$, $p < .001$. The subsequent seven predictors emerging in the ‘stepwise’ regression model appear to detract from the overall strength of the equation, without contributing substantially to the explanation of variance.

Table 19. Stepwise multiple regression for variables predicting higher respondent scores on the “police encounters severity index” scale (n = 2,318)

Antecedent variable	<i>R</i>	<i>aR</i> ²	<i>aR</i> ² change
<i>Step 1</i> Lived in other place past 6 months	.26	.07	.07***
<i>Step 2</i> Lived on streets or in shanties past 6 months	.31	.10	.03***
<i>Step 3</i> Age at first injecting drug use	.34	.11	.02***
<i>Step 4</i> Income from possibly illegal source past 6 months	.36	.13	.01***
<i>Step 5</i> Hispanic or Latino race/ethnicity	.37	.14	.01***
<i>Step 6</i> Income from entitlements past 6 months	.38	.14	.01***
<i>Step 7</i> Frequency of visits to SEP past 30 days	.38	.14	.00**
<i>Step 8</i> Male gender	.39	.15	.00**
<i>Step 9</i> Lived in someone else’s house/apt past 6 months	.39	.15	.00**
<i>Step 10</i> Lived in own house/apt past 6 months	.39	.15	.00**
<i>Step 11</i> Other race/ethnicity	.40	.15	.00**

p* < .01, *p* < .001.

Table 20 shows the relative weight contributed by each significant predictor to the model. Here, the strength of recent street homelessness (*b* = .17, *p* < .001) out-weighed the strength of the “lived in other place” variable among respondents (*b* = .15, *p* < .001).

The relative weight of age at first injecting drug use ($b = -.12, p < .001$) was striking: its inverse relationship to the “police encounters severity index” scale, as shown in Table 20, confirms the hypothesis that greater chronicity of injecting drug use increases the social vulnerability of individuals in this population during police encounters. Finally, the relative weight of Hispanic or Latino race/ethnicity was considerably greater ($b = .09, p < .001$) than others among the lesser predictors, while the “other race/ethnicity” variable appeared to exert a protective effect ($b = -.05, p < .01$) for scores on the “police encounters severity index” (Table 20).

Table 20. Summary of stepwise regression analysis to identify predictors for higher respondent scores on the “police encounters severity index” scale (n = 2,318)

Predictor	<i>B</i>	<i>SE B</i>	<i>b</i>
(Constant)	5.94		
Lived in other place past 6 months	.84	.11	.15***
Lived on streets or in shanties past 6 months	.83	.11	.17***
Age at first injecting drug use	-.04	.01	-.12***
Income from possibly illegal source past 6 months	.60	.10	.12***
Hispanic or Latino race/ethnicity	.58	.12	.09***
Income from entitlements past 6 months	.30	.10	.06**
Frequency of visits to SEP past 30 days	.15	.05	.06**
Male gender	.31	.10	.06**
Lived in someone else’s house/apt past 6 months	.32	.10	.06**
Lived in own house/apt past 6 months	.29	.10	.06**
Other race/ethnicity	-.56	.21	-.05**

** $p < .01$, *** $p < .001$.

When the sex transaction variable was added to this multivariate model, the overall correlation coefficient increased slightly. Close to one-quarter of respondents were represented in this sub-sample (n = 1,226), and the final model explained 22% of variance in scores on the “police encounters severity” scale, a substantially greater proportion than the secondary model, $R^2 = .22$, $F(8, 1226) = 44.78$, $p < .001$.

The sex transaction variable contributed the greatest weight in the coefficient analysis ($b = .19, p < .001$), although followed closely by both precarious living situations ($b = .17, p < .001$) respectively, similar to the first regression model (Table 21). Similar to the influence of sex transactions in the main hypothesis, male gender exerted considerable weight on the ‘best-fit’ line ($b = .15, p < .001$). Here, this pattern suggests that male injecting drug users who recently engaged in sex transactions were more likely to experience a high number of police actions during a recent police stop than their female counterparts. While the weight provided by the chronicity of injecting drug use ($b = -.12, p < .001$) followed a similar pattern to the earlier models, the continued strength of Hispanic or Latino race/ethnicity ($b = .11, p < .001$) for weighting scores on the “police encounters severity” scale confirmed the significance of this race/ethnicity variable in the secondary model.

Table 21. Summary of stepwise regression analysis for predictors of higher respondent scores on the “police encounters severity index” scale, including receipt of money and/or drugs for sex in the past thirty days (n = 1,226)

Predictor	<i>B</i>	<i>SE B</i>	<i>b</i>
(Constant)	6.16		
Lived in other place past 6 months	.90	.15	.17***
Lived on streets or in shanties past 6 months	.85	.14	.17***
Any sex transactions provided past 30 days	1.01	.15	.19***
Male gender	.79	.14	.15***
Age at first injecting drug use	-.04	.01	-.12***
Hispanic or Latino race/ethnicity	.69	.16	.11***
Income from entitlements past 6 months	.48	.13	.09***
Income from possibly illegal source past 6 months	.45	.13	.09**

** $p < .01$, *** $p < .001$.

Similar to the main model, findings from the secondary model could be incorporated into future analyses to control for the influence of the leading predictors identified here on the subsequent, lesser predictors. In the secondary model presented here, characteristics assessing gender, race/ethnicity, and age at injecting drug use initiation predict some proportion of the variance in respondents’ scores on the “police encounters severity index” scale. This finding suggests the possibility of close underlying correlations between these ‘fixed’ demographic factors and the ‘shifting’ social factors captured by housing state and income source. By assigning the leading predictors from the secondary analysis to initial blocks in a forward regression analysis, and adding the

lesser predictors to the model in subsequent blocks, the possible confounding effects of the former factors on the latter could be managed. This approach may illuminate the potentially greater influence of ‘fixed’ factors on the likelihood of respondents’ experiencing more severe actions during a police stop.

C. Exploratory Analysis

Homelessness

The finding that recent unstable living situations provided strong contributions to both police encounters and the severity of police actions during a stop on the street is worthy of additional bivariate testing, to understand how these injecting drug users may differ from their more stably housed counterparts. While the definition of “living in other place” was open to respondents’ interpretation, evidently it did not fit any of the alternate housing status variables provided: own house/apartment, someone else’s house/apartment, rooming house/SRO/shelter, or streets/shanties. Bivariate testing confirms a strong significant association between respondents who reported living in some other place and those who reported living on the streets or in shanties, $\chi^2 (1, 4268) = 490, p < .001$, and a moderate effect size, ($\phi = .34, p < .001$).

Age at first injecting drug use, although a stronger predictor for the severity of police stops than for police encounters in general, may reflect a significant characteristic of the homeless population in this sample. There was a small significant correlation, in the expected direction, between age at first injecting drug use and living on the streets or in shanties in the past six months, (Spearman’s $\rho = -.081, p < .001$), although the relationship was stronger for respondents who reported living in some other place during

this period, (Spearman's $\rho = -.108, p < .001$). Furthermore, the correlation between greater chronicity of injecting drug use and other precarious living situations – in a rooming house/SRO/shelter, (Spearman's $\rho = -.076, p < .01$), or in someone else's house/apartment, (Spearman's $\rho = -.069, p < .01$) – closely mirrored the pattern for respondents who were street homeless. Earlier age of initiation to injecting drug use was significantly associated with precarious living situations among respondents in this sample.

Although the observed relationship between income from a possibly illegal source and the constructed measures of police actions was not surprising, it is possible respondents earning an illegal income also reported other characteristics that emerged as significant predictors. In bivariate analysis, illegal income source was moderately associated with living on the streets or in shanties in the past six months, $\chi^2(1, 4256) = 196, p < .001$, and showed a small effect size, ($\phi = .21, p < .001$), although it was only weakly associated with living in some other place, $\chi^2(1, 4257) = 77, p < .001$. Age at first injecting drug use showed a small significant correlation in the expected direction with income from a possibly illegal source, (Spearman's $\rho = -.077, p < .001$). In effect, although income from an illegal source emerged as a strong predictor for both the frequency and severity of police encounters, respondents reporting this characteristic did not generally reflect the other predictive characteristics for these interactions.

Race/ethnicity

Hispanic or Latino race/ethnicity emerged as a strong predictor for the severity of police actions during street stops. This finding is particularly striking because Black race/ethnicity was not the strongest predictor in this demographic category, although it is

commonly cited as the racial/ethnic ‘risk factor’ for police interactions in the literature. Other characteristics of the Hispanic/Latino group in this sample may have increased their vulnerability for the frequency and severity of police encounters. Although respondents in all four racial/ethnic groups reported initiation to injecting drug use around the same age (a median average of 18 or 19 years old), Hispanic/Latino respondents tended to be younger, with a mean and median average age of 38 years, than Black respondents, who displayed a mean and median average age of 45 years, $F(3, 4269) = 237.47, p < .001$.

Among respondents, 39% ($n = 302$) of Hispanic/Latinos reported living on the streets or in shanties in the past six months, in comparison with 27% ($n = 344$) of Blacks and 44% ($n = 843$) of Whites, $\chi^2(3, 4266) = 107, p < .001$, and this association showed a moderate effect size (Cramer’s $V = .16, p < .001$). Living in some other place was also more frequently reported by Hispanic/Latinos than Blacks – 24% ($n = 188$) versus 16% ($n = 201$) - although 22% ($n = 435$) of Whites also reported this living situation in the past six months, $\chi^2(3, 4267) = 37, p < .001$, although this association showed a smaller effect size, (Cramer’s $V = .10, p < .001$) than recent street homelessness. Notably, although White respondents predominated over other racial/ethnic groups in these two unstable living situations, this group did not emerge as a significant predictor for police encounters in either of the regression models, despite the significance of these living situations for increased police interactions.

Fewer Hispanic/Latino respondents – 32% ($n = 247$) – reported income from a possibly illegal source than the other racial/ethnic groups, $\chi^2(3, 4256) = 72, p < .001$. By comparison, 47% ($n = 916$) of White respondents and 38% ($n = 482$) of Black

respondents reported possibly illegal income, and overall, this association showed a moderate effect size, (Cramer's $V = .13$, $p < .001$). Correlation testing using the 'dummy' variables for each racial/ethnic group showed that Hispanic/Latino respondents reporting income from a possibly illegal source tended to be younger, (Spearman's $\rho = -.032$, $p < .05$). Their White counterparts displayed a similar, even stronger directional pattern with age, (Spearman's $\rho = -.271$, $p < .001$), while their Black counterparts were likely to be older, (Spearman's $\rho = .373$, $p < .001$).

Overall, among respondents of color, Hispanic/Latinos appeared to be more vulnerable than Blacks to the scope of police interactions assessed by the second regression model. This finding is likely related to their recent housing situations, and possibly to other contextual or environmental factors not accounted for in this study. Unfortunately, it is not possible to hypothesize a comparative protective status on the basis of race/ethnicity for respondents captured in the "Other" category in this variable, because numerous racial/ethnic groups were merged in this category, including an amorphous group from the original dataset entitled "Asian, Pacific Islander, Native American, or Alaskan native" which constituted half the respondents in the category.

Gender

When "recent sex transactions" was added to each of the two models, the predictive contribution of male gender increased slightly in both the main and the secondary regression analyses. Not surprisingly, there was a moderate significant association between recent sex transactions and scores on the "police encounters" scale, $\chi^2(2, 2147) = 116$, $p < .001$, with a moderate effect size (Cramer's $V = .23$, $p < .001$). Close to half of respondents reporting any recent sex transactions showed the greatest

likelihood of police encounters, having observed police near the program in the past six months and also been stopped by police on the streets during this period. This proportion is considerably greater than for respondents who did not report any recent sex transactions, among whom only one-quarter of respondents showed the greatest likelihood of police encounters. It is unclear whether injecting drug users recently engaged in sex work were concentrated in particular programs represented in this dataset, and if these programs were more likely to have police visibly stationed nearby.

The bivariate association between gender and any recent sex transaction was moderate, $\chi^2(1, 2147) = 112, p < .001$, with a moderate effect size, ($\phi = .23, p < .001$), and a gendered pattern: 38% of female respondents reported providing a recent sex transaction, in comparison with only 17% of male respondents. However, the bivariate association between gender and scores on the “police encounters” scale, the first dependent variable, was much weaker, $\chi^2(2, 4267) = 35, p < .001$, and showed a weak effect size, (Cramer’s $V = .09, p < .001$). In this analysis, the gender pattern was reversed, and less divergent: 29% of male respondents reported both types of police encounters, in comparison with 24% of female respondents. Given these bivariate relationships, the regression models suggest that when sex work is treated as a separate, additional variable in the analysis, the vulnerability of male injecting drug users to policing encounters is further highlighted.

VI. LIMITATIONS

This study was limited by a number of factors. Limitations occurred in three domains: with the dataset itself, with the data selected for analysis, and with the management of selected data.

Dataset

The use of a secondary dataset for examining the proposed hypotheses significantly limited this study's ability to consider the variables of interest directly. The original dataset was collected as a cross-sectional survey evaluating the reported experiences of participants at syringe exchange programs in the United States (US), both with the programs themselves, and with various social and health indicators of relevance to injecting drug use. The original researchers were pursuing different research questions from those considered in this study, and this factor shaped the relative availability of variables for examining the research question at hand.

The secondary data used in this analysis was gathered using ACASI technology for survey administration. Because this technology affords the respondent considerable privacy, it is also possible for respondents to undermine the reliability of their responses using this tool. As the ACASI session progresses, respondents may identify opportunities to bypass sections of the survey with false responses (e.g., "No" resulting in a skip-pattern to bypass subsequent "Yes" response-specific questions), to expedite the survey process. While there is no way to determine the frequency at which respondents may have adopted this approach, the larger sample size should erase any aberrant effects of such data.

In addition, the Evaluation Study was conducted at program sites across the country, among which local approaches to syringe access, to syringe exchange programs, and to policing may vary substantially. State-wide and local legislative policies governing syringe access and possession are based in different local histories, policing activities are locally-directed, and program management and operating procedures, at the micro-level, are program-specific.

In order to protect the identities of the program sites involved, state locations are not available from the original researchers. Neither is a measure of local policing activities around each program site available for the period when data collection occurred, because this variable was not assessed by the original researchers. Each of these factors represents structural aspects of the law and its enforcement which may influence syringe exchange program operations, and may significantly impact the theoretic variable of interest – police harassment of program participants – in this study.

Furthermore, the theoretic variable of interest in this study was not a primary focus of the original Evaluation Study. The construction of the “police encounters frequency” scale and the “police encounters severity” scale were necessary to develop proxy measures for assessing the quantity and quality of interactions between police and program participants.

Because data were collected for the Evaluation Survey over a five-year period, temporal differences are present within each variable, because respondents at different program sites completed the survey during different years. For example, respondents at one program site may have completed the survey in 2001, while others did not participate

until 2004. However, more than 75% of respondents had completed the survey by the end of 2002 (Table 22).

Table 22. Respondents completing participant evaluation survey, 2000-2004 (n = 4,282)

Year survey was completed	N	%
2000	912	21
2001	1,380	32
2002	1,064	25
2003	504	12
2004	422	10
Total	4,282	100

The participant evaluation survey was originally intended as a representative evaluation of the individual-level characteristics reported by US syringe exchange program participants. Elimination of respondent data from three of the twenty-four programs may have under-mined the original randomization of program sites from which respondents were recruited. However, these sites were eliminated because fewer than 50 respondents were included from each program, suggesting the possibility that program participants were not well-represented from that particular syringe exchange program. Nonetheless, without the certainty of randomized recruitment sites, this dataset may not provide a probabilistic representation of all injecting drug users at US syringe exchange programs, the study's unit of analysis.

Data

Decision-making in the use of the existing data from the participant evaluation data-set may have limited the study's findings. The original dataset included 359 variables assessing respondent characteristics. Among these, only 51 variables were included in the analyses examining the study's hypothesis. Decisions to select these 51 variables were made with consideration to the relevance of particular characteristics for the hypothesis in question, and for the literature assessing the relationship between policing practices and injecting drug users. However, it is possible that failure to control for other available variables in the development of the analyses may have significantly altered the study's findings.

In addition, the problem of low response rates in particular variables may have prevented the observation of a significant association in a number of analyses involving such variables. For example, if a greater proportion of respondents had completed the survey questions assessing current methadone maintenance treatment program participation, this variable would have been included as a characteristic of interest in the analysis. In effect, the problem of low response rates in particular variables may have created a Type II error in the results.

However, this problem occurred among very few of the variables selected for analysis. Furthermore, when a selected variable showed a lower-than-optimal response rate in the sample, but may exert a significant influence on the dependent variable, i.e., sex transactions for money or drugs, a sub-analysis was conducted.

Data management

In the course of data management, a number of decisions were made which could have affected the development of the analyses and the subsequent results. The variable “police presence near the program in 2002” was included in the “police encounters frequency” scale constructed as the main study variable in the hypothesis. However, if a higher proportion of respondents from one program recruitment site had experienced recent street homelessness, an artificially inflated relationship could be created between homelessness and the variable assessing “police encounters.” This problem was managed with the development of the “police encounters severity” scale, providing an additional measure for assessing the characteristics of respondents experiencing police interactions. The relative reliability and validity of each of the two scales constructed has been discussed earlier in the methodology section.

In order to manage the available data from the existing participant evaluation dataset for analysis, a number of variable re-codes were necessary. These included the re-coding of 37 transgendered respondents for collapse into the female gender category, and of 269 respondents reporting in the Caribbean and Asian/Pacific Islander/Native American/Alaskan native racial/ethnic categories for collapse into the “Other” race/ethnicity category. These data were collapsed because of the relatively low number of respondents in each of the re-coded categories, and are unlikely to have significantly altered the final results, because they were proportionately quite small within each of these variables. Furthermore, in the case of the race/ethnicity variable’s “Other” category, the original categories already represented broad, amorphous combinations of

respondents, preventing distinction between respondents with heritages from culturally-specific regions of the world.

VII. DISCUSSION

A. Findings

In this analysis, street homelessness, illegal income, and sex work were leading predictors for frequent police encounters among injecting drug users participating in US syringe exchange programs, including police observed near the syringe exchange program. Injecting drug users reporting these factors were also more likely to report police encounters escalating to verbal and even physical violence. These results reflect the literature on interactions between police and injecting drug users, and extend previous findings to the broader population of injecting drug users participating in syringe exchange programs in the United States.

Particular characteristics of respondents appear to operate as ‘risk factors’ predicting the likelihood for and severity of police encounters experienced by injecting drug users in US syringe exchange programs: recent street homelessness (or living in some other place), recent income from a possibly illegal source, greater frequency of program visits, younger age of initiation to injecting drug use, male gender, and Hispanic race/ethnicity.

Contextual factors, such as housing status and income source, reflect the relative social stability of an individual. For injecting drug users participating in syringe exchange programs, these factors are centrally relevant to the health and social welfare of a population already struggling with problems of drug use. As housing status deteriorates or living situation worsens, the likelihood of police encounters may increase, because the injecting drug user is forced further into public spaces, where ‘visibility’ translates into vulnerability. Using drugs in public space becomes necessary, causing riskier injecting

practices to increase, such as hurried injecting, syringe re-use, and syringe-sharing (Maher & Dixon, 1999).

Recent street homelessness was the strongest predictor for both the likelihood and the severity of recent police interactions reported by respondents in this sample. Homelessness itself is not a new issue for law enforcement. In a 1965 article in *The Prison Journal*, the authors reviewing the problem of police interactions with ‘skid row men’ observed this population experiences frequent, short-term incarceration for marginally-criminal behaviors, and are predominantly alcohol-dependent (Blumberg et al., 1965). However, the problem of injecting drug use among the homeless has not been articulated in the law enforcement literature.

The problem of homelessness became increasingly apparent in cities across the United States in the 1980s and 1990s. Since the late 1980s, a ‘homeless’ person has been variably defined in federal law as “an individual who lacks a fixed, regular, and adequate night-time residence or a person who resides in a shelter, welfare hotel, transitional program or place not ordinarily used for sleeping accommodations, such as streets,...[or] has no place to go, no resources to obtain housing...” (“Homeless law and legal definition,” n.d.).

As the visibility of the homelessness problem became evident, the role and right to public space became a prominent issue in urban social policy development. Conservatives decried the “liberal social attitudes” that enabled vagrancy and its antisocial attributes – panhandling, public inebriation – to become commonplace in US cities (MacDonald, 1994), reflecting the dominant neoliberal values of individual responsibility and normative social standards. Although solutions proposed by law

enforcement and advocates for the homeless at times reflected a convergent vision (Melekian, 1990), more frequently, they clashed (LA Community Action Network, 2003; National Coalition for the Homeless & National Law Center on Homelessness & Poverty, 2006).

Advocates cite the selective enforcement of more neutral laws, such as loitering and stop-and-question actions, as policing methods disproportionately impacting the homeless and criminalizing their presence in public spaces (NCH & NLCHP, 2006). This analysis describes similar policing actions experienced by homeless injecting drug users in cities throughout the country, demonstrating these methods are indeed widespread. In this sample, homelessness in public space is even more powerful than any drug use characteristic for predicting more frequent and more severe police interactions.

Protracted and chronic homelessness is associated with a history of injecting drug use, including initiation to injecting at a younger age (Leal et al., 1999; North et al., 1998). Estimably, only a small proportion of injecting drug users use syringe exchange programs, in the areas of the United States where they are operating. Because these programs also provide social services and related supports (Des Jarlais et al., 2009), injecting drug users making regular program visits are likely to have considerable social needs. Homelessness may be more prevalent among injecting drug users using syringe exchange programs (Des Jarlais et al., 2007).

Among the other significant predictors for police interactions in this analysis, some were intuitively rational, such as recent income from a possibly illegal source and a higher frequency of recent program visits; each of these characteristics increase the

visibility of injecting drug users to police. Injecting drug users making frequent program visits may be experiencing greater social problems, such as homelessness and poverty.

Income source represents another contextual factor of central relevance to the social stability of an injecting drug user. Individuals participating in syringe exchange programs are likely to be habitual drug users, given the modality of use, and habitual drug use requires money for acquiring the drugs. Income, from some source, is necessary to fund the drug use. Moreover, among young injecting drug users, current homelessness is associated with obtaining income from illegal sources (Coady et al., 2007).

Although recent income from entitlements predicted police encounters in this sample, this may be an artifact of under-reporting. The levels of income support provided by entitlements are not sufficient for funding or supporting drug dependence.

Respondents confirming recent income from entitlements may have under-reported recent income from possibly illegal activities, and particularly where drugs were involved. Such under-reports may have caused this group to appear as a predictor for police encounters, although other social factors may have produced this relationship.

Age is an important demographic factor to examine for its role in injecting drug users' vulnerability to police encounters. Older injecting drug users may be more noticeable in public spaces simply because they are likely to have been injecting drugs for more years than their younger counterparts, and this longevity of drug use has tracked itself physically on the older user. Although respondent age was not a predictor for either of the police encounter types examined in the analysis, respondents who reported initiating injecting drug use at a younger age were likely to experience more severe treatment by police officers during street stops.

Male gender was a significant predictor for police interactions in all analyses, and its relative weight increased slightly in both sub-analyses including respondents reporting on 'recent sex transactions.' Another study identifies the heightened vulnerability for policing interactions of homeless male injecting drug users over their female counterparts (Marshall et al., 2008). However, female injecting drug users may be more likely to become involved in sex work, as a means of survival and for supporting their drug use, and prevailing social norms support this transition.

When 'recent sex transactions' were included alongside the other selected respondent characteristics, the relative vulnerability of males to police interactions was highlighted. The emergence of this pattern suggests a particular relationship between gender and policing in the context of sex work. Male sex workers appear more likely to encounter police on the streets, in comparison with female sex workers, and these encounters are likely to involve more police actions, of greater severity, than those experienced by female sex workers. Other literature indicates women who inject drugs are able to 'pass' in public spaces and thus avoid police encounters, unlike their male counterparts (Cooper et al., 2005). Participation in the sex work economy may also follow this gendered pattern, and because male sex workers are likely to be engaging in homosexual transactions, their vulnerability to police encounters may be further heightened.

The significance of Hispanic race/ethnicity as a predictive characteristic of injecting drug users for the severity of reported police interactions suggests a finding in need of further research. The emergence of Hispanic race/ethnicity as a risk for increased police encounters in this population may signify a shift in the demographic characteristics

of injecting drug users in the United States. Where race/ethnicity is examined in the literature, findings report the increased marginalization of African-American injecting drug users, even within drug-using networks, and their heightened vulnerability for police encounters (Bourgois et al., 1997; Mosher, 2001). However, these studies capture trends from the 1990s, and the results of this analysis indicate patterns have changed.

The Hispanic population in the United States increased considerably during the 1990s (Passel & Suro, 2005), and new or younger injecting drug users are far less likely to be African-American (Armstrong, 2007; Broz & Ouellet, 2008). In this sample, Hispanic respondents tended to be younger – on average, by five years – than African-Americans. Thus, although both groups reported initiating injecting drug use around the same age, Hispanic respondents were likely to have been injecting drugs for less time overall than African-American respondents. The greater vulnerability of Hispanic respondents to police encounters described by this analysis may reflect the lower relative experience among this group for managing police encounters. In addition, police attention to individuals of Hispanic race/ethnicity may have increased and expanded as US demographics have undergone a recent shift. The reasons for this finding are not easily understood, and would benefit from further research to confirm and articulate the underpinnings contributing to these patterns among injecting drug users in the US.

Overall, the findings from this study suggest several directions for future research. Quantitative analyses should explore further the particular interaction of law enforcement with racial and ethnic sub-groups and homeless populations of those injecting drug users participating in US syringe exchange programs. Study designs developed from this research question could measure the actual frequency of law enforcement encounters

experienced by respondents, to quantify the extent of this problem. Moreover, such targeted methodologies would test the validity of findings from this study, and could provide a more direct approach for assessing the level and content of law enforcement interactions experienced by the population of interest. Whether and which patterns emerge could focus and directly inform program initiatives to resolve the policy conflict experienced by syringe exchange programs and local law enforcement.

B. Policy contexts

Law enforcement

US drug policy has shaped the public safety framework within which law enforcement actors operate, and this framework often conflicts with the tolerant approach espoused by health and social service providers. In effect, the tolerant approach emphasizes ‘strengths-based’ approaches to problems of drug use, reinforcing individual and community capacity for self-management and improvement. By contrast, law enforcement approaches these problems from a ‘deficit’ perspective, enacting punitive controls to restrain individual behaviors and impose community norms and standards.

In practice, police operate under a number of external and internal constraints. The legal environment prescribed by the ‘law on the books’ represents an obvious external constraint (Burris et al., 2001). However, the influence of the political environment is less concrete, being dependent largely on the motivations of current leadership and individual positions of power (Blankenship & Smoyer, 2004). The internal constraints of police departments themselves translate to become the ‘law on the streets,’ and include the organizational culture of the department, its perceived mission, and its

organizational structure – each of which rely heavily on the hierarchy of the organization for support and success (Blankenship & Smoyer, 2004).

The findings from this study demonstrated the significant conflict ‘on the streets’ between approaches advocating restraint from injecting drug use with those advocating tolerance and care for the problem. The tension between policy approaches for injecting drug users using these programs was isolated in this analysis around the problem of homelessness in this population.

A brief review of the law enforcement literature was conducted to examine work ‘on the streets,’ to understand whether and how such policing interactions are reported in criminal justice and policing studies. Do particular characteristics of the suspect influence the response of police to situations, and are other variables involved? How does the officer’s approach inform the response?

Policing practices associated with street homelessness may provide an explanatory factor for the police interactions experienced by injecting drug users in this sample. Law enforcement is challenged to respond to two, distinct problem formulations for homelessness – homelessness as a social problem, and homelessness as a social menace (Melekian, 1990). In a comparison of the ‘criminality’ between homeless and domiciled inmates in a Colorado jail, individuals in the former group were more likely to be arrested for nuisance offenses, and to have prior arrests for the use of drugs or alcohol (DeLisi, 2000). In a random sample of homeless male arrestees in a large Southwestern city, public intoxication was the most common reason for arrest (Snow et al., 1989).

The likelihood that any intoxicated citizen will be arrested by beat officers is twentyfold greater than for the general population, while there is no difference in this

group's likelihood for arrest by community oriented police (Novak et al., 2002). Police use of force may be more likely when the suspect has perceived impaired judgment due to drug intoxication, in comparison with alcohol intoxication or mental illness (Kaminski et al., 2004). Temporal-spatial variables, such as night-time hours and neighborhood location, may increase the likelihood for deadly force to be used against a suspect impaired by drugs (Crawford & Burns, 2008).

Police responses are motivated in part by their own perceptions of the system in which they work, and the role they must play in order to succeed in this environment (Aaronson et al., 1981). Officers may engage in unlawful stop-and-search tactics with particular individuals because they believe the courts will accept a 'probable cause' argument for the action, and because their superiors demand productivity, in the form of arrests (Goldschmidt & Anonymous, 2008).

Ultimately, system expectations shape officers' response to citizens, and officers' perceptions guide the substance of the response. Officer perceptions increase the likelihood that the drug-intoxicated citizen will experience arrest, and even deadly force, in a police encounter. When an individual's visible association with illicit drug use is heightened – for example, by use of a syringe exchange program, or possession of a syringe, or public intoxication with drugs – studies in the law enforcement literature suggest these individuals will experience more frequent and more severe police encounters.

Surveillance of public space

As urban renewal and community improvement efforts expanded in US cities over the 1980s and 1990s, the introduction of a law enforcement approach focused on

‘quality of life’ crimes offered a complementary strategy. Greater public surveillance was sanctioned as a policing tactic, to improve the quality of life in public spaces, such as commercial districts and parks (Beckett & Herbert, 2008). Covert surveillance was increasingly used to identify ‘crime hot-spots’ for targeted crackdowns, and usually focused on street-level drug markets. However, this approach has also imposed neighborhood-level social controls (Coleman, 2005), often generating fearful and angry responses among local citizens to police in these communities (Cooper et al., 2005).

Sociologists have described the impact of expanded public surveillance practices as a problem of spatial justice, given continuing urban inequalities among neighborhoods (Coleman, 2005). Expanding public surveillance may be viewed as a product of neoliberal values, protecting and promoting a ‘work ethic’ by expanding social controls in favor of local economies, and using these controls to punish behaviors and individuals perceived as comparatively disorderly (Beckett & Herbert, 2008). The ‘zero tolerance’ label provides a simple, though ill-defined, symbol of this approach, justifiable because it resonates with urban renewal concerns for public safety and local economic growth and stabilization (Newburn & Jones, 2007).

Law enforcement collaboration with human services

The findings of this analysis do suggest the need for coordinated policy improvements to address the socio-medical problem of injecting drug use in the US. Cooperative initiatives are needed to synergize police actions with the health and social service goals of syringe exchange programs, and to address problems of street homelessness. Although models of effective collaboration are relatively absent from the

literature (Kleinig, 1993), local program initiatives have been attempted, with varying degrees of success, in a number of cities throughout the country.

On the surface, law enforcement collaborations with social service programs to address and reduce street homelessness involve a straightforward proposition. In the course of policing work, officers interacting with street homeless individuals can partner with social services programs to offer immediate, direct connections to shelter and supportive services. Since the 1990s, in a number of US cities, police departments have developed specialized homeless outreach units to provide these services, usually in partnership with other local public or private entities (NCH & NLCHP, 2006; Fort Lauderdale Police Department, 2000). Such collaborations can result in reduced arrests and increased shelter placements (NCH & NLCHP, 2006), improving both safety and social outcomes for the community.

However, injecting drug use among street homeless individuals introduces an additional layer of complexity for such collaborations. In the literature documenting innovative law enforcement-social service collaborations, problems of drug use among street homeless individuals are usually resolved with referrals to drug treatment programs (FLPD, 2000). While engagement in long-term drug treatment represents an ideal solution for this group, the problem of continued drug use, or treatment refusal, is not addressed. Health and social services, including syringe exchange for homeless injecting drug users, represent an immediate, intermediate response to the socio-medical problem of continued drug use. But drug possession and use represent illicit behaviors, and the social service agencies collaborating with law enforcement to reduce street homelessness have not addressed this drug policy conflict.

To some extent, over the past twenty years in a number of US cities, syringe exchange programs and their allies have conducted education sessions with local police officers, to explain the purpose and goals of the programs. This approach emphasizes the public health function of syringe exchange for injecting drug users, however, and law enforcement may perceive this information as irrelevant to their work. More recently, syringe exchange advocates have promoted an occupational safety approach for educating police officers about the programs, because accidental needlesticks represent the fundamental concern of law enforcement in encounters with injecting drug users (Davis & Beletsky, 2009). Preliminarily, this approach has met with some success, improving police receptiveness to the programs because, most importantly, they ensure safe syringe disposal (Davis & Beletsky, 2009).

Syringe deregulation

In many states, syringe possession remains a misdemeanor crime under state-wide paraphernalia laws. In the late 1980s, Oregon and Wisconsin became the only two states where syringes were completely deregulated; syringes are not mentioned in state-level drug paraphernalia laws in these states (Burris, 2001). During the 1990s, seven states enacted revisions to syringe prescription laws to allow purchase and possession of up to ten unused syringes, and paraphernalia laws were revised to reflect this exemption (Burris, 2001).

In most of these states, however, prescription law revisions allowing possession of ten or fewer syringes have not substantially altered police interactions with injecting drug users (Taussig et al., 2000; Case et al., 1998), and may be insufficient for achieving this outcome. At best, prescription law reform offers only partial syringe deregulation.

Partial deregulation produces the expectation that police will understand divergent statutory regulations governing individual syringe possession under paraphernalia law. This approach may be experienced as confusing and contradictory, for both officers and injecting drug users, because allowable syringe possession is circumscribed and limited by quantity, rather than universalized. Such incomplete policy change may actually jeopardize both the intended health impact of sterile syringe access for injecting drug users, and the liability of officers who are expected to comprehend apparently divergent statutes governing syringe possession.

Without complete syringe deregulation, syringe exchange programs operating as emergency public health measures and syringe prescription exemptions will be thwarted by the continued over-arching strength of paraphernalia laws. Syringe deregulation via decriminalization, through modification of the drug paraphernalia laws, has been supported by the American Medical Association since 1997, as a public health measure (Burris, 2001).

C. Policy implications

To overcome or eliminate the conflict in drug policy represented by the findings of this analysis, change may be necessary at multiple levels. Legislative change may accomplish syringe deregulation at the structural level, removing the problem of paraphernalia laws as a barrier to syringe access for injecting drug users. Despite such change, however, this group would remain associated ‘on the streets’ with illicit drug use, a criminalized behavior. A cultural shift may be necessary, at the contextual level, to revise the common perception of injecting drug users – from deviants engaged in

criminal behaviors, to citizens struggling with the health and social problems of addiction. Changing the dominant cultural perception of injecting drug users can help law enforcement to shift its approach as well, to view encounters with the group as opportunities to resolve health and social problems. This shift, however, may develop effectively only from work initiated at the local, grass-roots level, ultimately generating a groundswell for shifting cultural perceptions through broader political and social change.

Many providers in the social work profession work to enhance the well-being of poor, vulnerable, and stigmatized populations in our society. In this role, human service providers supply the natural leadership for engaging the law enforcement profession in collaboration. At the local level, syringe exchange programs can work – together, and in coalition with other human service providers – to reach out to police, to articulate a rationale for police response to injecting drug use as a social problem, rather than a criminal activity.

Addressing the occupational safety concerns may help to promote closer working relationships between law enforcement and syringe exchange programs in particular. Syringe exchange programs can share strategies, policies, and protocols with local law enforcement for preventing needlestick injury, and link this approach to interactions with injecting drug users. Such collaboration could effectively reorient the content of encounters between police officers ‘on the street’ and street homeless individuals who inject drugs. Armed with the protection of focused needlestick prevention protocols, officers can approach encounters as ‘helpers’ facilitating engagement in human services for this vulnerable group.

This reorientation would be facilitated at the broader level by state-level syringe deregulation. In their current status, syringes remain tools of ‘criminal activity,’ and shape officers’ perceptions of and behaviors towards injecting drug users in this regard. If syringe exchange programs can partner with other human service providers to build momentum for decriminalizing syringes, the groundswell for a cultural shift would be initiated. Just as police in a number of US cities have become attuned to homelessness as a social problem, rather than a social menace, complete syringe deregulation could support a framework for attuning police to injecting drug use as a socio-medical problem.

D. Conclusion

By capitalizing on the greater frequency of police encounters with street homeless injecting drug users to promote improved health and social service access, the severity of these encounters could be reduced substantially, and even eliminated. Such change envisions a paradigm shift in drug policy, away from criminal justice and restraint and towards a tolerant, socio-medical approach. Certainly, the practical development of this synergy is not wholly achievable overnight. However, recent developments may signal the beginnings of a policy shift.

Since the 1990s, drug abuse and dependence have become more widely acknowledged in the US as aspects of a ‘chronic relapsing disorder’ recognized as addiction, a chronic behavioral health problem (SAMHSA, n.d.). Most recently, the Obama White House has called for an end to the ‘war on drugs’ rhetoric (Fields, 2009) and committed to rescinding the federal funding ban on syringe exchange programs in the country, more than twenty years after its enactment (Grim, 2009). As drug policies and

practical care and treatment responses cycle back towards a tolerant approach, the stage may be set for complete syringe deregulation in many states where syringe exchange programs are well-established. In fact, it is becoming possible to believe that in some respects, a tolerant approach to drug policy in the US is rising over the recent history of policing and restraint. Such change would have wide-reaching health and social impacts for some of the country's most vulnerable citizens.

APPENDIX (A)

Time Started:
 Time Ended:
 Interviewer Initials:

Today's Date:

/__ __/

SYRINGE EXCHANGE STUDY QUESTIONNAIRE

We would like to construct an identification code for you that will allow us to work with the data but that will ensure that no one knows the name of the person who provides it. To construct the ID, we are going to use letters from your mother=s name. The first two letters of the ID will be the first 2 letters of your mother=s first name when she was born. What are those letters? **(ENTER THE 2 LETTERS)** The next part of the ID will be the first 3 letters of your mother=s last name when she was born. What are those letters? **(ENTER THE 3 LETTERS)**

What are the initials of your first, middle, and last name?

What is your date of birth? **(ENTER 2 DIGITS FOR THE MONTH, 2 DIGITS FOR THE DAY, AND 2 DIGITS FOR THE YEAR)**

__ __ / __ __ /

May I see your syringe exchange ID card?

- 1 Respondent displays card
- 9 Respondent does not display card

(ENTER THE SYRINGE EXCHANGE PROGRAM CODE FROM THE RESPONDENT=S CARD)

I. INTRODUCTION

Q101. This interview is part of a study of the needle exchange program. Some people may be interviewed more than once, which is okay. Have you been interviewed for this study before?

- | | | |
|---|-----------------------|-------------------|
| 1 | | Yes |
| 2 | (SKIP to Q102) | No |
| 7 | (SKIP to Q102) | Don=t Know |
| 8 | (SKIP to Q102) | Refused to Answer |

Q102. What was the month and year of the first time you used any needle exchange?
(FIRST, ENTER THE MONTH USING 2 DIGITS; NEXT, ENTER THE YEAR USING 2 DIGITS)

___ ___ /

- 9797 Don=t Know
9898 Refused to Answer

Q103. In the past 30 days, about how often have you used this exchange? **(USE F CARD)**

- | | |
|---|-----------------------|
| 1 | Not at all |
| 2 | Once a week or less |
| 3 | 2 to 6 times per week |
| 4 | Once a day |
| 5 | 2 or 3 times a day |
| 6 | 4 or more times a day |
| 7 | Don=t Know |
| 8 | Refused to Answer |

INTRO-104.

The needles and syringes that you use to inject drugs are called by different names in different areas of the country. On the East Coast, they are referred to as works; in the Midwest, they are called rigs; and on the West Coast, they are known as points. In this interview, we will use the term Aworks@ to refer to needles and syringes.

Q104. In the past 30 days, have you brought all your used works to the exchange?

- | | | |
|---|-----------------------|-----|
| 1 | (SKIP to Q105) | Yes |
|---|-----------------------|-----|

- | | | |
|---|-----------------------|-------------------|
| 2 | | No |
| 7 | (SKIP to Q105) | Don=t Know |
| 8 | (SKIP to Q105) | Refused to Answer |

Q104.1 We would like to know what you did with the works that you did not exchange. Did you break the points and throw them in the trash?

- | | |
|---|-------------------|
| 1 | Yes |
| 2 | No |
| 7 | Don=t Know |
| 8 | Refused to Answer |

Q104.2 Did you throw them in the trash without breaking the points (with or without putting the cap back on)?

- | | |
|---|-------------------|
| 1 | Yes |
| 2 | No |
| 7 | Don=t Know |
| 8 | Refused to Answer |

Q104.3 Did you throw them away someplace other than in the trash?

- | | |
|---|-------------------|
| 1 | Yes |
| 2 | No |
| 7 | Don=t Know |
| 8 | Refused to Answer |

Q104.4. Did you flush them down the toilet?

- | | |
|---|-------------------|
| 1 | Yes |
| 2 | No |
| 7 | Don=t Know |
| 8 | Refused to Answer |

Q104.5 Did you give them away to someone else?

- | | |
|---|-------------------|
| 1 | Yes |
| 2 | No |
| 7 | Don=t Know |
| 8 | Refused to Answer |

Q104.6 Did you sell them to someone else?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q105. In the past 30 days, how many different works have you used per week?

- 97 Don't Know
- 98 Refused to Answer

Q106. What percentage of those works came from this exchange? **(USE P CARD)**

- 1 None of them
- 2 Up to about one-third of them
- 3 More than one-third but less than two-thirds of them
- 4 More than two-thirds but not quite all of them
- 5 **(SKIP to Q107)** All of them
- 7 **(SKIP to Q107)** Don't Know
- 8 **(SKIP to Q107)** Refused to Answer

106.1 Now we have some questions about the other places you have gotten works in the past 30 days. In the past 30 days, have you obtained works from a drug dealer?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q106.2 Have you obtained them from a friend or family member who is not a sex partner?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q106.3 Have you obtained them from a sex partner?

- 1 Yes

- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q106.4 Did you buy them on the street?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q107. In the past 30 days, how many times, on average, did you use your works before throwing them away or exchanging them?

— —

- 97 Don=t Know
- 98 Refused to Answer

Q108.1 In addition to yourself, on average, for how many other people

— —

- 97 Don=t Know
- 98 Refused to Answer

Q108.2 On average, how many syringes do you get for other people?

— — —

- 97 Don't Know
- 98 Refused to answer

Q108.3 Who else do you usually exchange for?

		Yes	No	Don't Know
Refuse				
1	Male sexual partner/spouse	1	2	7
8				
2	Female sexual partner/spouse	1	2	7
8				

3	Injecting partner	1	2	7
8				
4	Male friend (other than	1	2	7
8	injecting partner)			
5	Female friend (other than	1	2	7
8	injecting partner)			
6	Family member	1	2	7
8				
7	Other	1	2	7
8				

Q109. In the past 30 days, have you sold anyone clean works that you got from the exchange?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q110. In the past 30 days, have you bartered or traded new works that you got from the exchange for something else?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q111. In the past 30 days, have you given anyone clean works that you got from the exchange?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q112. We would like to know how you feel about certain aspects of the exchange. Do you like the clean, free needles?

- 1 Yes
- 2 No

- 7 Don=t Know
- 8 Refused to Answer

Q112.1. Do you like the location?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

112.2. Do you like the staff?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q112.3. Do you like the hours of operation of the exchange?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q112.4. Do you like the referrals to other services?

- 1 Yes
- 2 No
- 5 This exchange does not provide referrals to other services
- 7 Don=t Know
- 8 Refused to Answer

Q112.5. Do you like the atmosphere of the exchange?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

112.6. Do you like the user groups?

- 1 Yes
- 2 No
- 5 This exchange does not have user groups

- 7 Don=t Know
- 8 Refused to Answer

112.7. Do you like the other on-site services?

- 1 Yes
- 2 No
- 5 This exchange does not provide other on-site services
- 7 Don=t Know
- 8 Refused to Answer

Q112.8 What do you like most about the exchange? **(READ RESPONSES 01-09)**

- 01 Clean, free needles
- 02 Location
- 03 Staff
- 04 Hours of operation
- 05 Referrals to other services
- 06 Free information on HIV and AIDS
- 07 Safe atmosphere
- 08 User groups
- 09 Other on-site services
- 97 Don=t Know
- 98 Refused to Answer

Q113. We would like to know what would make the exchange better for you. Would the exchange be better if there was no limit on the number of works you could get per visit?

- 1 Yes
- 2 No
- 5 This exchange does not limit the number of works per visit
- 7 Don=t Know
- 8 Refused to Answer

Q113.1. Would it be better if it was open more or different hours?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q113.2. Would it be better if it was in a more convenient location?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q113.3. Would the exchange be better if it offered more services?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q113.4. Would it be better if you could spend more time with the staff?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q113.5. Would it be better if the exchange was indoors?

- 1 Yes
- 2 No
- 5 That question does not apply to this exchange
- 7 Don=t Know
- 8 Refused to Answer

Intro-114 There are many reasons people use a needle exchange. Which of the following reasons are true for you?

Q114 Do you use the needle exchange to avoid infection?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to answer

Q114.1 Do you use it to save money?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q114.2 Do you use it because it is easier to get needles at an exchange than on the streets?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q114.3 Do you use the exchange because new needles are sharper?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q114.4 Do you use it to obtain other services besides exchanging works?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q114.5 Do you use it because the exchange offers a safe, nonjudgmental environment?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

INTRO-115. Needle exchanges provide a wide variety of services. We would like to which of the following services you have received from the syringe exchange.

Q115. Have you ever received, either through a referral or on-site, legal advice or legal services from the exchange?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.1. Have you ever received help with housing?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.2. Have you ever received help in getting entitlements or benefits such as Supplemental Security Income or food stamps?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.3. Has anyone from this exchange, either through a referral or on-site, ever helped you with HIV testing or information about AIDS?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.4. Has anyone ever helped you with a detox or drug treatment referral?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.5. Has anyone ever helped you with food?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.6. Has anyone from this exchange, either through a referral or on-site, ever helped you with family planning or birth control?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.7. Has anyone ever helped you with medical care?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.8. Has anyone ever helped you with mental health care, counseling, or therapy?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.9. Has anyone from this exchange, either through a referral or on-site, ever helped you with job training?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.10. Has anyone ever helped you with information about drugs in your area?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.11. Has anyone from this exchange ever given you condoms?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.12. Has anyone ever counseled you on sexual risk behaviors?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q115.13. Has anyone from this exchange ever helped you with any other type of service?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

INTRO-116. We would like to know how you feel about the staff at the syringe exchange. After each of the following statements, please tell us whether you strongly disagree, disagree, agree, or strongly agree with it. **(USE AGREEMENT SCALE)**

Q116. The syringe exchange staff make me feel comfortable.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree
- 7 Don't Know
- 8 Refused to Answer

Q116.1. I don't always feel I can trust the staff.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree
- 7 Don't Know
- 8 Refused to Answer

Q116.2. The syringe exchange staff are very friendly to me.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree
- 7 Don't Know
- 8 Refused to Answer

Q116.3. The syringe exchange staff always treat me with respect.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

- 7 Don=t Know
- 8 Refused to Answer

Q116.4. The staff are not always available to help me out.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree
- 7 Don=t Know
- 8 Refused to Answer

Q116.5. I always feel that I can count on the syringe exchange staff.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree
- 7 Don=t Know
- 8 Refused to Answer

II. DEMOGRAPHICS

Now we=d like to ask you some questions about yourself.

Q201. What is your sex or gender?

- 1 Male
- 2 Female
- 3 Transgender

Q202. What is your race or ethnicity? **(READ RESPONSES)**

- 1 White and not Hispanic
- 2 African American or black, and not Hispanic
- 3 Hispanic or Latino
- 4 Caribbean
- 5 Asian, Pacific Islander, Native American, or Alaskan native
- 6 Other
- 7 Don't Know
- 8 Refused to Answer

Q203. What is your current marital status? **(READ RESPONSES)**

- 1 Married
- 2 Widowed
- 3 Divorced or separated
- 4 Living with a partner
- 5 Never married and single
- 7 Don't Know
- 8 Refused to Answer

Q204. What is your age? **(ENTER 2 DIGITS)**

- 97 Don't Know
- 98 Refused to Answer

Q205. The next questions are about where you lived during the past 6 months. At any time during the past 6 months, did you live in your own house or apartment?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q206.1. Did you live in someone else's house or apartment?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q206.2. Did you live in a hotel, rooming house, shelter, or welfare boarding home?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q206.3. At any time during the past 6 months, did you live on the streets or in a shanty?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q206.4. At any time during the past 6 months, did you live in jail?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q206.5. At any time during the past 6 months, did you live in some other place that has not been mentioned?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

- Q206.6 During the past 6 months, where did you live most of the time?
- 1 In your own house or apartment
 - 2 In someone else's house or apartment
 - 3 In a hotel, rooming house, shelter, or welfare boarding home
 - 4 On the streets or in a shanty
 - 5 In jail
 - 6 Some other place that has not been mentioned
 - 7 Don=t Know
 - 8 Refused to Answer
- Q207. The next questions are about the sources of your income over the past 6 months. During the past 6 months, did you receive money from temporary or part-time work?
- 1 Yes
 - 2 No
 - 7 Don=t Know
 - 8 Refused to Answer
- Q207.1. During the past 6 months, did you receive money from a regular job or from being self-employed?
- 1 Yes
 - 2 No
 - 7 Don=t Know
 - 8 Refused to Answer
- Q207.2. During the past 6 months, did you receive welfare, Supplemental Security Income, disability, unemployment, or other benefits?
- 1 Yes
 - 2 No
 - 7 Don=t Know
 - 8 Refused to Answer
- Q207.3. During the past 6 months, did you receive money from illegal or possibly illegal sources?
- 1 Yes
 - 2 No
 - 7 Don=t Know
 - 8 Refused to Answer

Q208. The next few questions ask about your recent experiences with public assistance. Have you received welfare, including TANF, Medicaid and/or Food Stamps in the past year?

- | | | |
|---|-----------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q209) | No |
| 7 | (Skip to Q209) | Don't Know |
| 8 | (Skip to Q209) | Refused to Answer |

Q208.1 Has your local welfare agency tried to find out if you use drugs?

- | | | |
|---|-------------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q208.5) | No |
| 7 | (Skip to Q208.5) | Don't Know |
| 8 | (Skip to Q208.5) | Refused to Answer |

Q208.2 What has the local welfare agency done to try to find out if you are using drugs or have used drugs in the past?

	Yes	No	Don't know	
Refused				
Asked me for a urine or blood sample at a medical or employment assessment	1	2	7	8
Had me fill out a questionnaire about my drug use	1	2	7	8
A person asked me questions about my drug use	1	2	7	8
I signed a form so that they could look in my Medicaid records	1	2	7	8
I had to give a urine or blood sample at a job site	1	2	7	8

Q208.3 Did the welfare agency determine that you were a drug user?

- | | | |
|---|-------------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q208.5) | No |
| 7 | (Skip to Q208.5) | Don't Know |
| 8 | (Skip to Q208.5) | Refused to Answer |

Q208.4 What happened after the welfare agency determined that you were a drug user?

Yes No

1	No negative action taken	1	2
2	Case not opened	1	2
3	Required to attend drug treatment	1	2
4	Benefits reduced	1	2
5	Welfare case closed	1	2
6	Report made to child welfare	1	2
7	Report made to probation or parole officer	1	2
8	Other	1	2
17	Don't know		
18	Refused to answer		

Q208.5 How many times has your public assistance case been closed over the past year?

—

- 97 Don't know
- 98 Refused to answer

Q209. What is the last grade of school that you completed? **(READ RESPONSES 1-6)**

- 1 Not beyond the 8th grade
- 2 Some high school
- 3 High school graduate or equivalency course
- 4 Some college or technical school, no degree
- 5 College graduate
- 6 Graduate work--that is, college education beyond a four-year degree
- 7 Don't Know
- 8 Refused to Answer

Q210. Have you ever been in prison or jail overnight?

- 1 Yes
- 2 **(Skip to Q211)** No
- 7 **(Skip to Q211)** Don't Know
- 8 **(Skip to Q211)** Refused to Answer

Q210.1. Have you ever injected drugs while in prison or jail?

- | | | |
|---|-----------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q211) | No |
| 7 | (Skip to Q211) | Don=t Know |
| 8 | (Skip to Q211) | Refused to Answer |

Q210.2. Have you ever injected drugs with used works while in prison or jail?

- | | |
|---|-------------------|
| 1 | Yes |
| 2 | No |
| 7 | Don=t Know |
| 8 | Refused to Answer |

Q211. In the last 6 months, have you been stopped on the street by the police or a detective?

- | | | |
|---|------------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q213) | No |
| 7 | (Skip to Q213) | Don=t Know |
| 8 | (Skip to Q213) | Refused to Answer |

Q212. What did the police do at that time? **(Read all. Circle all that apply.)**

- | | Yes | No |
|----------------------------|-----|----|
| 1 Asked Questions | 1 | 2 |
| 2 Checked ID | 1 | 2 |
| 3 Ran a Warrant Check | 1 | 2 |
| 4 Searched | 1 | 2 |
| 5 Issued summons | 1 | 2 |
| 6 Confiscated Syringes | 1 | 2 |
| 7 Confiscated card | 1 | 2 |
| 8 Made me break points | 1 | 2 |
| 9 Verbal Abuse | 1 | 2 |
| 10 Physical Abuse | 1 | 2 |
| 11 Arrested | 1 | 2 |
| 12 They didn=t do anything | 1 | 2 |
| 17 Don=t Know | | |
| 18 Refused to answer | | |

Q213. In the last 6 months, have you noticed a police presence near the exchange?

- 1 Yes
 2 **(Skip to INTRO 301)**No
 7 **(Skip to INTRO 301)**Don=t Know
 8 **(Skip to INTRO 301)**Refused to Answer

Q214. Did their presence ever prevent you from exchanging syringes?

- 1 Yes
 2 **(Skip to INTRO 301)**No
 7 **(Skip to INTRO 301)**Don=t Know
 8 **(Skip to INTRO 301)**Refused to Answer

Q215. So where did you go to get syringes?

		Yes	No	Don=t Know	Refused
1	Went back to the exchange later	1	2	7	8
2	Went to another exchange	1	2	7	8
3	Got a clean syringe from someone else	1	2	7	8
4	Did not use that day	1	2	7	8
5	Used an old one of mine	1	2	7	8
6	Bought a syringe on the street	1	2	7	8
7	Rented a syringe from someone	1	2	7	8
8	Borrowed a syringe from someone	1	2	7	8
9	Used one from the street	1	2	7	8
10	Other	1	2	7	8

III. DRUG USE

INTRO 301. The next questions apply to your use of different drugs. It's important that we obtain accurate information, so if you cannot remember an answer or are uncomfortable answering, you can choose not to answer that question. I also want to remind you that syringes and needles are going to be referred to as works.

Q301. How old were you when you first injected or skin-popped any drug?

- 97 Don't Know
- 98 Refused to Answer

Q302. In the past 30 days, about how often did you inject drugs? **(USE F CARD)**

- 1 **(Skip to Q304)** Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q303. In the past 30 days, how much of the time did you clean the injection site with an alcohol pad before you shot up? **(USE P CARD)**

- 1 Never
- 2 Hardly ever or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don't Know
- 8 Refused to Answer

Q304. In the past 30 days, about how often have you injected heroin ALONE into a vein? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q304.1. In the past 30 days, about how often have you injected cocaine ALONE into a vein? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q304.2. In the past 30 days, about how often have you injected a speedball--that is, injected cocaine and heroin together into a vein? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q304.3. In the past 30 days, about how often have you injected amphetamines (that is, speed or crank) into a vein or muscle? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day

- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q304.4. In the past 30 days, about how often have you injected any other drugs?
(USE F CARD)

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305. The next questions ask about your NONINJECTING use of drugs over the past 30 days. In the past 30 days, about how often have you sniffed or snorted heroin--not injected it? (USE F CARD)

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305.1. In the past 30 days, about how often have you chased the dragon or smoked heroin? (USE F CARD)

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305.2. In the past 30 days, about how often have you sniffed or snorted cocaine--not injected it? (USE F CARD)

- 1 Never
- 2 Once a week or less

- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305.3. In the past 30 days, about how often have you sniffed or snorted speedball--not injected it? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305.4. In the past 30 days, about how often have you freebased or smoked cocaine or crack? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305.5. In the past 30 days, about how often have you smoked ice (that is, smokable methamphetamine)? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305.6. In the past 30 days, about how often have you used nonprescription methadone, but not injecting it? **(USE F CARD)**

- 1 Never

- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q305.7. In the past 30 days, about how often have you used marijuana or hash?
(USE F CARD)

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q306. Sometimes people use a syringe to divide up drugs into other syringes. In the past 30 days, have you used a syringe in that way?

- 1 Never
- 2 Hardly ever or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don=t Know
- 8 Refused to Answer

Q306.1 In the past 30 days, when you used a syringe to divide up drugs, how much of the time was it a syringe that someone else had already used?
(USE P CARD)

- 1 Never
- 2 Hardly ever or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don=t Know
- 8 Refused to Answer

Q307. In the past 30 days, how much of the time did you shoot up with works that you RENTED or BOUGHT and that you think had already been used by someone else, including your partner? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don=t Know
 - 8 Refused to Answer

Q308. In the past 30 days, how much of the time did you shoot up with works that you borrowed and that you think had already been used by someone else, including your partner? **(USE P CARD)**

- 1 Never
- 2 Hardly ever or less than one-third of the time
- 3 More than one third of the time but not more than two thirds of the time
- 4 More than two thirds of the time but not quite always
- 5 Always
- 7 Don't know
- 8 Refused to answer

[If both Q307 and Q308 = 1 (never), skip to Q310]

Q309. We would like to know where you have obtained used works in the past 30 days. In the past 30 days, have you shot up with used works that you got from a sexual partner?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q309.1 In the past 30 days, have you shot up with used works that you got from a friend?

- 1 Yes
- 2 No
- 7 Don=t Know

8 Refused to Answer

Q309.2 In the past 30 days, have you shot up with used works that you got from a drug dealer?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q309.3 In the past 30 days, have you shot up with used works that you got from someone in a shooting gallery?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q309.4 In the past 30 days, have you shot up with used works that you got from someone you did not know?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q309.5 In the past 30 days, have you shot up with abandoned works that you had found somewhere?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q309.6 In the past 30 days, have you shot up with used works that you got from a relative or family member?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q309.7 In the past 30 days, have you shot up with your own works that you had already lent to someone else?

- 1 Yes

- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q309.8 In the past 30 days, from how many different people, in total, have you gotten used works?

— —

- 97 Don=t Know
- 98 Refused to Answer

Q309.9 In the past 30 days, when you injected with used works, how much of the time did you clean them first with bleach? **(USE P CARD)**

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don=t Know
- 8 Refused to Answer

Q310. In the past 30 days, about how often did you rent or sell to someone else, including your partner, works that you had already used? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q311. In the past 30 days, about how often did you give or lend to someone else, including your partner, works that you had already used? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

[If both Q310 and Q311 = 1, skip to Q312.]

Q311.1 The next questions ask about the people to whom you gave, lent, rented, or sold used works in the past 30 days. In the past 30 days, did you ever give, lend, rent, or sell used works to a sexual partner?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.2 In the past 30 days, did you ever give, lend, rent, or sell used works to a friend?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.3 In the past 30 days, did you ever give, lend, rent, or sell used works to a drug dealer?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.4 In the past 30 days, did you ever give, lend, rent, or sell used works to someone in a shooting gallery?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.5 In the past 30 days, did you ever give, lend, rent, or sell used works to someone on the street?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.6 In the past 30 days, did you ever give, lend, rent, or sell used works to someone you did not know?

- 1 Yes

- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.7 In the past 30 days, did you ever give, lend, rent, or sell used works to a relative or family member?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.8 In the past 30 days, did you ever give, lend, rent, or sell used works to someone else not mentioned here?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q311.9 In the past 30 days, to how many different people, in total, did you give, lend, rent, or sell used works?

— —

- 97 Don=t Know
- 98 Refused to Answer

Q312. During the past 30 days when you shot up, about how often did you go to a place where people who do not know one another well go to shoot drugs? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 About 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q313. The next questions are about your drug use in the 30 days before you began using the exchange. In the 30 days before you began using the exchange, about how often did you inject drugs? **(USE F CARD)**

- 1 **(Skip to Q320)** Never

- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q313.1 In the 30 days before you began using the exchange, how much of the time did you clean the injection site with an alcohol pad before you shot up? **(USE F CARD)**

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time, but not more than two-thirds of the time
- 4 More than two-thirds of the time, but not quite always
- 5 Always
- 7 Don=t Know
- 8 Refused to Answer

Q314. The next questions ask about your injection of different drugs during the 30 days before you began using the exchange. In the 30 days before you began using the exchange, about how often did you skin-pop ANY drug? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q314.1. In the 30 days before you began using the exchange, about how often did you inject heroin ALONE into a vein? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q314.2. In the 30 days before you began using the exchange, about how often did you inject cocaine ALONE into a vein? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q314.3. In the 30 days before you began using the exchange, about how often did you inject a speedball--that is, inject cocaine and heroin together into a vein? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q314.4. In the 30 days before you began using the exchange, about how often did you inject amphetamines (that is, speed or crank) into a vein or muscle? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q314.5. In the 30 days before you began using the exchange, about how often did you inject other drugs? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day

- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q315. Sometimes people use a syringe to divide up drugs into other syringes. In the 30 days before you began using the exchange, did you use a syringe in that way?

- 1 Yes
- 2 **(Skip to Q316)** No
- 7 **(Skip to Q316)** Don=t Know
- 8 **(Skip to Q316)** Refused to Answer

Q315.1 In the 30 days before you began using the exchange, when you used a syringe to divide up drugs, how much of the time was it a syringe that someone else had already used? **(USE P CARD)**

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time, but not more than two-thirds of the time
- 4 More than two-thirds of the time, but not quite always
- 5 Always
- 7 Don=t Know
- 8 Refused to Answer

Q316. In the 30 days before you began using the exchange, how much of the time did you shoot up with works that you had rented or bought and that you thought had been used by someone else, including your partner? **(USE P CARD)**

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don=t Know
- 8 Refused to Answer

Q317. In the 30 days before you began using the exchange, how much of the time did you shoot up with works that you had borrowed and that you

think had already been used by someone else, including your partner?
(USE P CARD)

- the time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time, but not more than two-thirds of
 - 4 More than two-thirds of the time, but not quite always
 - 5 Always
 - 7 Don't Know
 - 8 Refused to Answer

[If both Q316 and Q317 = 1, SKIP to Q318]

Q317.1 We would like to know where you obtained used works in the 30 days before you began using the exchange. In the 30 days before you began using the exchange, did you shoot up with used works that you got from a sexual partner?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q317.2 In the 30 days before you began using the exchange, did you shoot up with used works that you got from a friend?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q317.3 In the 30 days before you began using the exchange, did you shoot up with used works that you got from a dealer?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q317.4 In the 30 days before you began using the exchange, did you shoot up with used works that you got from someone in a shooting gallery?

- 1 Yes
- 2 No

- 7 Don=t Know
- 8 Refused to Answer

Q317.5 In the 30 days before you began using the exchange, did you shoot up with used works that you got from someone you did not know?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q317.6 In the 30 days before you began using the exchange, did you shoot up with abandoned works that you found somewhere?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q317.7 In the 30 days before you began using the exchange, did you shoot up with used works that you got from a relative or family member?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q317.8 In the 30 days before you began using the exchange, did you shoot up with your own works that you had already lent to someone else?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q317.9 In the 30 days before you began using the exchange, from how many different people, in total, did you get used works?

.

— —

- 97 Don't Know
98 Refused to Answer

Q317.10 In the 30 days before you began using the exchange, when you injected with used works, how much of the time did you clean them first with bleach? **(USE P CARD)**

- the time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time, but not more than two-thirds of the time
 - 4 More than two-thirds of the time, but not quite always
 - 5 Always
 - 7 Don't Know
 - 8 Refused to Answer

Q318. In the 30 days before you began using the exchange, about how often did you rent or sell to someone else, including your partner, works that you had already used? **(USE P CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q319. In the 30 days before you started using the exchange, about how often did you give or lend to someone else (including your partner) works that you had already used? **(USE P CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

[If both Q318 and Q319 = 1, SKIP to Q320.]

Q319.1 The next questions ask about the people to whom you gave, lent, rented or sold used works in the 30 days before you began using the exchange. In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to a sexual partner?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.2 In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to a friend?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.3 In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to a dealer?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.4 In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to someone in a shooting gallery?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.5 In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to someone on the street?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.6 In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to someone you did not know?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.7 In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to a relative or family member?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.8 In the 30 days before you began using the exchange, did you ever give, lend, rent, or sell used works to someone else not mentioned here?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q319.9 In the 30 days before you began using the exchange, to how many different people, in total, did you give, lend, rent, or sell used works?

— —

- 97 Don=t Know
- 98 Refused to Answer

Q320. In the 30 days before you began using the exchange, about how often did you go to a shooting gallery or another place where people who don't know one another well go to shoot drugs? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week

- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

IV. SEXUAL BEHAVIOR

The next questions are about your sexual activities during the past 30 days. All of your answers will remain confidential. The questions apply to all vaginal, anal, and oral intercourse that you=ve had in the past 30 days.

Q400. In the past 30 days, have you had sexual intercourse with anyone?

- | | | |
|---|------------------------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to INTRO-501 page 36) | No |
| 7 | (Skip to INTRO-501 page 36) | Don=t Know |
| 8 | (Skip to INTRO-501 page 36) | Refused to Answer |

Q401. In the past 30 days, have you had sexual intercourse with a partner of the opposite sex?

- | | | |
|---|------------------------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to INTRO-408 page 32) | No |
| 7 | (Skip to INTRO-408 page 32) | Don=t Know |
| 8 | (Skip to INTRO-408 page 32) | Refused to Answer |

Q402. The next series of questions concerns only your sexual partners of the opposite sex. First, we would like to know about your PRIMARY or MOST IMPORTANT sexual partners of the opposite sex. A primary or most important sexual partner is someone with whom you regularly have sexual relations. Of the opposite-sex partners you have had in the past 30 days, how many would you classify as primary or most important sexual partners?

_____ **[If 0, SKIP to INTRO- 403)**

- | | | |
|---|----------------------------|-------------------|
| 7 | (Skip to INTRO-403) | Don=t Know |
| 8 | (Skip to INTRO-403) | Refused to Answer |

Q402.1 In the past 30 days, about how often have you had sexual intercourse, either vaginal, anal, or oral, with your primary or most important partner or partners of the opposite sex? **(USE F CARD)**

- | | |
|---|---------------------|
| 1 | Never |
| 2 | Once a week or less |

- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q402.2 How much of the time did you use a condom with that partner or partners?
(USE P CARD)

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don't Know
 - 8 Refused to Answer

Q403. Next, we would like to know about your OCCASIONAL or CASUAL sexual partners of the opposite sex. An occasional or casual sexual partner is someone with whom you have sexual relations but who is not a primary partner or a paid partner. Of the opposite-sex partners you have had in the past 30 days, how many would you classify as occasional or casual sexual partners?

___ [If 0, skip to Q404]

- 97 (Skip to Q404) Don't Know
- 98 (Skip to Q404) Refused to Answer

Q403.1 In the past 30 days, about how often did you have sexual intercourse, either vaginal, anal, or oral, with your occasional or casual partner or partners? (USE F CARD)

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q403.2 How much of the time did you use a condom with that partner or partners?
(USE P CARD)

- | | | |
|------|---|---|
| time | 1 | Never |
| | 2 | Hardly ever, or less than one-third of the time |
| | 3 | More than one-third of the time but not more than two-thirds of the |
| | 4 | More than two-thirds of the time but not quite always |
| | 5 | Always |
| | 7 | Don=t Know |
| | 8 | Refused to Answer |

Q404. In the past 30 days, have you paid money to someone of the opposite sex to have sexual intercourse with you?

- | | | |
|---|----------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q405) | No |
| 7 | (Skip to Q405) | Don=t Know |
| 8 | (Skip to Q405) | Refused to Answer |

Q404.1 In the past 30 days, about how often would you say that you paid money to someone of the opposite sex to have sexual intercourse with you?
(USE F CARD)

- | | |
|---|-----------------------|
| 1 | Never |
| 2 | Once a week or less |
| 3 | 2 to 6 times per week |
| 4 | Once a day |
| 5 | 2 or 3 times a day |
| 6 | 4 or more times a day |
| 7 | Don=t Know |
| 8 | Refused to Answer |

Q404.2 In the past 30 days, to how many different partners of the opposite sex have you paid money so that they would have sexual intercourse with you?

— —

- 97 Don't Know
98 Refused to Answer

Q404.3 How much of the time did you use a condom with those partners? **(USE P CARD)**

- time
- 1 Never
2 Hardly ever, or less than one-third of the time
3 More than one-third of the time but not more than two-thirds of the time
4 More than two-thirds of the time but not quite always
5 Always
7 Don't Know
8 Refused to Answer

Q405. In the past 30 days, has someone of the opposite sex paid YOU money to have sexual intercourse with them?

- 1 Yes
2 **(Skip to Q406)** No
7 **(Skip to Q406)** Don't Know
8 **(Skip to Q406)** Refused to Answer

Q405.1 In the past 30 days, about how often would you say that someone of the opposite sex paid you money to have sexual intercourse with them? **(USE F CARD)**

- 1 Never
2 Once a week or less
3 2 to 6 times per week
4 Once a day
5 2 or 3 times a day
6 4 or more times a day
7 Don't Know
8 Refused to Answer

Q405.2 In the past 30 days, how many different partners of the opposite sex paid you money to have sexual intercourse with them?

— —

- 97 Don't Know
- 98 Refused to Answer

Q405.3 How much of the time did you use a condom with those partners? **(USE P CARD)**

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don't Know
- 8 Refused to Answer

Q406. In the past 30 days, have you given drugs to someone of the opposite sex so that you could have sexual intercourse with them?

- 1 Yes
- 2 **(Skip to Q407)** No
- 7 **(Skip to Q407)** Don't Know
- 8 **(Skip to Q407)** Refused to Answer

Q406.1 In the past 30 days, about how often would you say that you gave drugs to someone of the opposite sex so that you could have sexual intercourse with them? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q406.2 In the past 30 days, to how many different partners of the opposite sex did you give drugs so that you could have sexual intercourse with them?

— —

- 97 Don=t Know
- 98 Refused to Answer

Q406.3 How much of the time did you use a condom with those partners? **(USE P CARD)**

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don=t Know
- 8 Refused to Answer

Q407. In the past 30 days, have you received drugs from a partner of the opposite sex as payment for sexual intercourse?

- 1 Yes
- 2 **(Skip to INTRO-408)** No
- 7 **(Skip to INTRO-408)** Don=t Know
- 8 **(Skip to INTRO-408)** Refused to Answer

Q407.1 In the past 30 days, about how often would you say that you have received drugs from a partner of the opposite sex as payment for sexual intercourse? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q407.2 In the past 30 days, from how many different partners of the opposite sex have you received drugs as payment for sexual intercourse?

— —

- 97 Don=t Know
98 Refused to Answer

Q407.3 How much of the time did you use a condom with those partners? **(USE P CARD)**

- time
- 1 Never
2 Hardly ever, or less than one-third of the time
3 More than one-third of the time but not more than two-thirds of the time
4 More than two-thirds of the time but not quite always
5 Always
7 Don=t Know
9 Refused to Answer

INTRO-408. The next series of questions is about your sexual activities during the past 30 days but only with partners OF THE SAME SEX. Again, all of your answers will be treated with the strictest confidence. Each of the questions relates to sexual intercourse, either anal, vaginal, or oral, that you have had in the past 30 days.

Q408. In the past 30 days, have you had sexual intercourse, either anal, vaginal, or oral, with a partner of the same sex?

- | | | |
|---|-------------------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q415 page 35) | No |
| 7 | (Skip to Q415 page 35) | Don=t Know |
| 8 | (Skip to Q415 page 35) | Refused to Answer |

Q409. First, we would like to know about your PRIMARY or MOST IMPORTANT sexual partners of the same sex. A primary or most important sexual partner is someone with whom you regularly have sexual relations. Of the same-sex partners you have had in the past 30 days, how many would you classify as primary or most important sexual partners?

___ **(If 0, SKIP to Q410)**

- | | | |
|---|-----------------------|-------------------|
| 7 | (Skip to Q410) | Don=t Know |
| 8 | (Skip to Q410) | Refused to Answer |

Q409.1 In the past 30 days, about how often did you have sexual intercourse, anal, vaginal, or oral, with your primary or most important partner or partners of the same sex? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q409.2 How much of the time did you use a condom, dental dam, or other latex barrier with that partner or partners? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don't Know
 - 8 Refused to Answer

Q410. Next, we would like to know about your OCCASIONAL or CASUAL sexual partners of the same sex. An occasional or casual sexual partner is someone with whom you have sexual relations but who is not a primary or a paid partner. Of the same-sex partners you have had in the past 30 days, how many would you classify as occasional or casual sexual partners?

. ____ (If 0, skip to Q411)

- 97 Don't Know
- 98 Refused to Answer

Q410.1 In the past 30 days, about how often have you had sexual intercourse, anal, vaginal, or oral, with your occasional or casual partner or partners of the same sex? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day

- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q410.2 How much of the time did you use a condom, dental dam, or other latex barrier with that partner or partners? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don=t Know
 - 8 Refused to Answer

Q411. In the past 30 days, have you paid money to someone of the same sex to have sexual intercourse with you?

- 1 Yes
- 2 **(Skip to Q412)** No
- 7 **(Skip to Q412)** Don=t Know
- 8 **(Skip to Q412)** Refused to Answer

Q411.1 In the past 30 days, about how often would you say that you paid money to someone of the same sex to have sexual intercourse with you? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q411.2 In the past 30 days, to how many different partners of the same sex have you paid money so that they would have sexual intercourse with you?

97 Don=t Know

98 Refused to Answer

Q411.3 How much of the time did you use a condom, dental dam, or other latex barrier with those partners? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don=t Know
 - 8 Refused to Answer

Q412. In the past 30 days, has someone of the same sex paid YOU money to have sexual intercourse with them?

- 1 Yes
- 2 **(Skip to Q413)** No
- 7 **(Skip to Q413)** Don=t Know
- 8 **(Skip to Q413)** Refused to Answer

Q412.1 In the past 30 days, about how often would you say that someone of the same sex paid you money to have sexual intercourse with them? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don=t Know
- 8 Refused to Answer

Q412.2 In the past 30 days, how many different partners of the same sex paid you money to have sexual intercourse with them?

.

— —

- 97 Don=t Know
- 98 Refused to Answer

Q412.3 How much of the time did you use a condom, dental dam, or other latex barrier with those partners? **(USE P CARD)**

time

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don't Know
- 8 Refused to Answer

Q413. In the past 30 days, have you given drugs to someone of the same sex so that you could have sexual intercourse with them?

- 1 Yes
- 2 **(Skip to Q414)** No
- 7 **(Skip to Q414)** Don't Know
- 8 **(Skip to Q414)** Refused to Answer

Q413.1. In the past 30 days, about how often would you say that you gave drugs to someone of the same sex so that you could have sexual intercourse with them? **(USE F CARD)**

- 1 Never
- 2 Once a week or less
- 3 2 to 6 times per week
- 4 Once a day
- 5 2 or 3 times a day
- 6 4 or more times a day
- 7 Don't Know
- 8 Refused to Answer

Q413.2 In the past 30 days, to how many different partners of the same sex did you give drugs so that you could have sexual intercourse with them?

— —

- 97 Don't Know
- 98 Refused to Answer

Q413.3 How much of the time did you use a condom, dental dam, or other latex barrier with those partners? **(USE P CARD)**

time

1	Never
2	Hardly ever, or less than one-third of the time
3	More than one-third of the time but not more than two-thirds of the time
4	More than two-thirds of the time but not quite always
5	Always
7	Don=t Know
8	Refused to Answer

Q414. In the past 30 days, have you received drugs from someone of the same sex as payment for sexual intercourse?

1		Yes
2	(Skip to Q415)	No
7	(Skip to Q415)	Don=t Know
8	(Skip to Q415)	Refused to Answer

Q414.1 In the past 30 days, about how often would you say that you received drugs from someone of the same sex as payment for sexual intercourse? **(USE F CARD)**

1	Never
2	Once a week or less
3	2 to 6 times per week
4	Once a day
5	2 or 3 times a day
6	4 or more times a day
7	Don=t Know
8	Refused to Answer

Q414.2 In the past 30 days, from how many different partners of the same sex have you received drugs as payment for sexual intercourse?

. — —

- 97 Don=t Know
- 98 Refused to Answer

Q414.3 How much of the time did you use a condom, dental dam, or other latex barrier with those partners? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don=t Know
 - 8 Refused to Answer

Q415. In the past 30 days, how many of your sexual partners, both same and opposite sex, have been injecting drug users?

- 97 Don=t Know
- 98 Refused to Answer

V. DRUG USER CONCERNS

The next questions are about your HIV status. I want to remind you that all of your answers will remain anonymous. However, you are under no obligation to answer and can choose not to reply to a question if you feel uncomfortable revealing certain information.

Q501. Have you ever been tested for HIV, the virus that causes AIDS?

- | | | |
|---|-----------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q505) | No |
| 7 | (Skip to Q505) | Don't Know |
| 8 | (Skip to Q505) | Refused to Answer |

Q501.1 What was the month and year of the last time you were tested? **(FIRST, ENTER THE MONTH USING 2 DIGITS; NEXT, ENTER THE YEAR USING 2 DIGITS)**

___ ___ / ___ ___

9797 Don't Know
9898 Refused to Answer

Q501.2 Do you know the results?

- | | | |
|---|-----------------------|-------------------|
| 1 | | Yes |
| 2 | (Skip to Q505) | No |
| 7 | (Skip to Q505) | Don't Know |
| 8 | (Skip to Q505) | Refused to Answer |

Q501.3 What were the results?

- | | | |
|---|-----------------------|-------------------|
| 1 | (Skip to Q505) | Negative |
| 2 | | Positive |
| 3 | (Skip to Q505) | Indeterminate |
| 7 | (Skip to Q505) | Don't Know |
| 8 | (Skip to Q505) | Refused to Answer |

Q502. Have you ever taken any anti-HIV (or anti-viral) medication?

- | | |
|---|-----|
| 1 | Yes |
|---|-----|

- 2 **(Skip to Q505)** No
- 7 **(Skip to Q505)** Don=t Know
- 8 **(Skip to Q505)** Refused to Answer

Q502.1 Are you currently taking any anti-HIV (or anti-viral) medication?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q503 We would like to know more about the anti-HIV medication you have taken. Have you ever taken protease inhibitors?

- 1 Yes
- 2 **(Skip to Q504)** No
- 7 **(Skip to Q504)** Don=t Know
- 8 **(Skip to Q504)** Refused to Answer

Q503.1 Are you currently taking protease inhibitors?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q504 People with HIV sometimes take more than one anti-HIV medication a day (doctors may call this >combination therapy=). Have you ever taken more than one anti-HIV medication a day?

- 1 Yes
- 2 **(Skip to Q505)** No
- 7 **(Skip to Q505)** Don=t Know
- 8 **(Skip to Q505)** Refused to Answer

Q504.1 Are you currently taking more than one anti-HIV medication a day?

- 1 Yes
- 2 **(Skip to Q505)** No
- 7 **(Skip to Q505)** Don=t Know
- 8 **(Skip to Q505)** Refused to Answer

Q504.2 How many different anti-HIV medications are you supposed to take a day?

97 Don't Know

98 Refused

Q505. The next questions ask about your physical and mental health. During the past 30 days, how much of the time did you feel hopeless about the future? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don't Know
 - 8 Refused to Answer

Q505.1. During the past 30 days, how much of the time did you worry too much about things? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always
 - 7 Don't Know
 - 8 Refused to Answer

Q505.2. During the past 30 days, how much of the time did you feel blue, depressed, or lose interest in things you usually care about? **(USE P CARD)**

- time
- 1 Never
 - 2 Hardly ever, or less than one-third of the time
 - 3 More than one-third of the time but not more than two-thirds of the time
 - 4 More than two-thirds of the time but not quite always
 - 5 Always

- 7 Don't Know
- 8 Refused to Answer

Q505.3. During the past 30 days, how much of the time did you feel so low you thought of committing suicide? **(USE P CARD)**

- 1 Never
- 2 Hardly ever, or less than one-third of the time
- 3 More than one-third of the time but not more than two-thirds of the time
- 4 More than two-thirds of the time but not quite always
- 5 Always
- 7 Don't Know
- 8 Refused to Answer

Q506. Has a doctor or health care worker ever diagnosed you as having syphilis?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q506.1 gonorrhea? Has a doctor or health care worker ever diagnosed you as having

- 1 **(Males Skip to Q506.3)** Yes
- 2 **(Males Skip to Q506.3)** No
- 7 **(Males Skip to Q506.3)** Don't Know
- 8 **(Males Skip to Q506.3)** Refused to Answer

Q506.2 **(Women only)** Has a doctor or health care worker ever diagnosed you as having pelvic inflammatory disease, or PID?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q506.3. abscess? Has a doctor or health care worker ever diagnosed you as having an

- 1 Yes
- 2 No

- 7 Don't Know
- 8 Refused to Answer

Q506.4. Has a doctor or health care worker ever diagnosed you as having endocarditis?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q506.5. Has a doctor or health care worker ever diagnosed you as having hepatitis?

- 1 Yes
- 2 No
- 7 Don't Know
- 8 Refused to Answer

Q507. Have you heard about the Hepatitis C virus?

- 1 Yes
- 2 **(Skip to Q508)** No
- 7 **(Skip to Q508)** Don't Know
- 8 **(Skip to Q508)** Refused to Answer

Q507.1 Where did you hear about Hepatitis C? (Circle all that apply)

- | | | Yes | No |
|----|------------------------------|-----|-----|
| 1 | Other drug users | 1 | 2 |
| 2 | Friend/family member | | 1 2 |
| 3 | Streets | 1 | 2 |
| 4 | Pamphlet | 1 | 2 |
| 5 | Newspaper | 1 | 2 |
| 6 | TV | 1 | 2 |
| 7 | Flyer/poster | 1 | 2 |
| 8 | Hospital | 1 | 2 |
| 9 | Doctor | 1 | 2 |
| 10 | Walk-in clinic | 1 | 2 |
| 11 | Syringe exchange | 1 | 2 |
| 12 | Methadone program | 1 | 2 |
| 13 | Other drug treatment program | | 1 2 |
| 14 | Jail | 1 | 2 |
| 17 | Don't know | | |

18 Refused

Q507.2 Have you ever been tested for Hepatitis C?

1 Yes
 2 **(Skip to Q508)** No
 7 **(Skip to Q508)** Don't Know
 8 **(Skip to Q508)** Refused to Answer

Q507.3 Did you get the results of you Hepatitis C test?

1 Yes
 2 **(Skip to Q508)** No
 7 **(Skip to Q508)** Don't Know
 8 **(Skip to Q508)** Refused to Answer

Q507.4 Have you ever been told that you have Hepatitis C?

1 Yes
 2 **(Skip to Q508)** No
 7 **(Skip to Q508)** Don't Know
 8 **(Skip to Q508)** Refused to Answer

Q507.5 Have you ever been treated for Hepatitis C?

1 Yes
 2 No
 7 Don't Know
 8 Refused to Answer

Q508 Have you ever been tested for Hepatitis B?

1 Yes
 2 No
 7 Don't Know
 8 Refused to Answer

Q508.1 Have you ever been vaccinated for Hepatitis B?

1 Yes
 2 No

- 7 Don=t Know
- 8 Refused to Answer

Q509. Have you ever been in drug treatment?

- 1 Yes
- 2 **(Skip to Q510)** No
- 7 **(Skip to Q510)** Don=t Know
- 8 **(Skip to Q510)** Refused to Answer

Q509.1 We would like to know what kind of drug treatment you received. Did you receive treatment from Alcoholics or Narcotics Anonymous?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q509.2. Did you receive treatment through a methadone maintenance program, or MMTP?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q509.3. Did you receive treatment through a drug-free outpatient program?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q509.4. Did you receive acupuncture treatment?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q509.5. Did you receive treatment in a therapeutic community or in a residential treatment program?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q509.6 Did you receive treatment in a detox program?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q509.7 Did you receive some other type of treatment that has not been mentioned?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q510. Are you in treatment now?

- 1 Yes
- 2 **(Skip to Q511)** No
- 7 **(Skip to Q511)** Don=t Know
- 8 **(Skip to Q511)** Refused to Answer

Q510.1 We would like to know what kind of treatment you are receiving. Are you receiving treatment through Alcoholics or Narcotics Anonymous?

- 1 Yes
- 2 No
- 7 Don=t Know
- 8 Refused to Answer

Q510.2 Are you being treated in a methadone maintenance program, or MMTP?

- 1 Yes
- 2 **(Skip to Q510.5)** No

- 7 **(Skip to Q510.5)** Don't Know
 8 **(Skip to Q510.5)** Refused to Answer

Q510.3 How many years and months have you been in treatment? **(FIRST, ENTER THE NUMBER OF YEARS; IF IT IS LESS THAN 1 YEAR, ENTER 0; NEXT, ENTER THE NUMBER OF MONTHS)**

___ ___ YRS ___ ___ MOS

- 9797 Don't Know
 9898 Refused to Answer

Q510.4 What is your current dose of methadone?

_____ MILLIGRAMS

- 997 Don't Know
 998 Refused to Answer

Q510.5 Are you being treated in a drug-free outpatient program?

- 1 Yes
 2 No
 7 Don't Know
 8 Refused to Answer

Q510.6 Are you being treated with acupuncture?

- 1 Yes
 2 No
 7 Don't Know
 8 Refused to Answer

Q510.7. Are you receiving another kind of treatment that has not been mentioned?

- 1 Yes
 2 No
 7 Don't Know
 8 Refused to Answer

Q511. If you were offered a drug treatment slot that was available tomorrow, would you take it?

- 1 Yes
- 2 No
- 3 Maybe or depends
- 7 Don't Know
- 8 Refused to Answer

VI. Stigma

The following series of statements express feelings and beliefs about the experiences and perceptions of people who have used illegal drugs. After each statement is read, please indicate whether you strongly agree, agree, disagree, or strongly disagree with the statement.

Q601. Most people would willingly accept a drug user as a close friend.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q602. Most people believe that a person who has been a drug user is just as intelligent as the average person.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q603. Most people believe that a drug user is just as trustworthy as the average citizen

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q604 Most people would accept a recovered drug user as a teacher of young children in a public school.

- 1 Strongly Agree
- 2 Agree
- 3 Disagree
- 4 Strongly Disagree

Q605. Most people feel that using drugs is a sign of personal failure

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q606. Most people would not hire a drug user to take care of their children, even if he or she had been in recovery for some time.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly Disagree

Q607 Most people think less of a person who has been a drug user.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q608. Most people will hire a drug user if he or she is qualified for the job.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q609. Most employers will pass over the application of a drug user in favor of another applicant.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly Disagree

Q610. Most people in my community would treat a drug user just as they would treat anyone.

- 1 Strongly agree
- 2 Agree
- 3 Disagree

- 4 Strongly disagree

Q611. Most young women would be reluctant to date a man who has used drugs.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly Disagree

Q612. Once they know a person was a drug user, most people will take his or her opinions less seriously.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q613. In order to get a job, a drug user will have to hide his or her history.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q614. There is no reason for a person to hide the fact that he or she was a drug user at one time.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q615. If you have been treated for addiction, the best thing to do is to keep it a secret.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q616. If I had a close relative who had been treated for an addiction, I would advise him or her not to tell anyone about it.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly disagree

Q617. I rarely feel the need to hide the fact that I have been in drug treatment.

- 1 Strongly agree
- 2 Agree
- 3 Disagree
- 4 Strongly Disagree

VII. INTERVIEWER SECTION

Q701. Interviewer's initials _____

Q702. Did you give \$15.00?

- 1 Yes
- 9 No

Q702.1 If not, why not?

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