Non-prescription Syringe Sales in California: A Qualitative Examination of Practices among 12 Local Health Jurisdictions

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ABSTRACT Legislation permitting non-prescription syringe sales (NPSS) was passed in 2004 in California as a structural intervention designed to expand access to syringes for injection drug users. As of December 2009, 19 of California's 61 local health jurisdictions (LHJs) have approved policies to authorize pharmacies to sell non-prescription syringes. The legislation faces termination in 2010 if current evaluation efforts fail to demonstrate outcomes defined in the legislation. Using qualitative methods, we examined the systems and procedures associated with implementation; identified facilitators and barriers to implementation among 12 LHJs, and documented the role of public health in initiating and sustaining local programs. We identified consistent activities that led to policy implementation among LHJs and discovered several barriers that were associated with failure to implement local programs. Factors leading to NPSS were public health leadership; an inclusive planning process, marketing the program as a public health initiative; learning from others' efforts, successes, and failures; and identifying acceptable syringe disposal options in advance of program implementation. Health departments that were confronted with political and moral arguments lost momentum and ultimately assigned a lower priority to the initiative citing the loss of powerful public health advocates or a lack of human resources. Additional barriers were law enforcement, elected officials, and pharmacy opposition, and failure to resolve syringe disposal options to the satisfaction of important stakeholders. The lessons learned in this study should provide useful guidance for the remaining LHJs in California without NPSS programs.

KEYWORDS Non-prescription syringe sales, IDU, Local health jurisdiction, SB1159, Pharmacy, California

INTRODUCTION

The USA suffers a higher rate of HIV infection among injection drug users (IDU) than other industrialized nations and has fewer prevention programs designed to slow the spread of HIV among this high-risk population.¹ In addition, the political and cultural environment in most of the USA fosters fear of and hostility to harm-reduction approaches, such as syringe exchange programs (SEP) and non-prescription

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syringe sales (NPSS).² The previous long-standing national policy prohibiting the use of federal funds to support syringe exchange activities^{3–6} and a complex web of criminal penalties for the provision of syringes and syringe possession seriously limits local communities' ability to meet the disease prevention and health promotion needs of IDU.^{7,8} NPSS through pharmacies is a harm-reduction approach which complements outreach and education, syringe exchange, and drug treatment access as one component of a comprehensive HIV prevention and control policy.⁹

The effects of state-level policies to ease access to sterile syringes, including pharmacy sales, partial or complete decriminalization of syringe possession or distribution, and syringe exchange programs, have included a reduction of syringe sharing among IDU and are associated with lower rates of HIV infection among IDU.^{10–15} Conversely, in areas with legal restrictions on syringe exchange or NPSS, IDU experience a greater risk for blood-borne infections related to syringe sharing practices.¹⁶ Nearly every state that has enacted syringe exchange or NPSS laws has documented similar successes in reducing syringe sharing among IDU.^{17–24} Furthermore, states with NPSS programs and where comprehensive evaluations are in place, describe very few problems with NPSS.^{25–27}

In 1998, the Centers for Disease Control and Prevention recommended that IDU use a new sterile syringe for each drug injection to reduce transmission of HIV and other blood-borne pathogens.²⁸ Structural- and policy-based interventions continue to show promise in addressing controversial issues especially among hard to reach communities;^{29–31} however, a study of syringe access coverage in California, reported that IDU will continue to face challenges to obtaining sterile syringes where local governments lack the support or political will to dedicate sustainable funding for these types of interventions.³²

BACKGROUND

SB 1159 was enacted in California on January 1, 2005.³³ One mandate of the law is a dual “opt-in” requirement which specifies that until December 31, 2010, counties or cities in the state must ‘opt-in’ by creating a disease prevention demonstration project (DPDP). The DPDP allows counties/cities within local health jurisdictions (LHJs) to authorize pharmacies to sell ten or fewer non-prescription syringes to anyone 18 years of age or older. Syringe purchasers are not required to provide identification or signature in a pharmacy logbook, nor are they required to provide proof of need or disease. The second ‘opt-in’ provision requires pharmacies to register with LHJs as a seller of non-prescription syringes. Pharmacies who participate must provide customers with information on how to access drug treatment, HIV and hepatitis screening, and they must store syringes behind the counter. Pharmacies must also agree to facilitate safe disposal of syringes by doing one of the following: (1) make available for purchase or provide rigid containers designed for syringe and sharps disposal; (2) make available for purchase/provide mail-back containers that meet US Postal Service standards for sharps disposal; or (3) provide for a “take-back” disposal option on-site at the pharmacy.

As of December 2009, 19 of California's 61 LHJs have approved policies to authorize pharmacies to sell sterile syringes over the counter.³⁴ These 19 LHJs are located in predominately high-density urban cities and counties where over one-half of California's population of 36 million persons live. In a State with 29% cumulative cases of AIDS among male IDU and 32% among female IDU³⁵ and a prevalence of HCV among IDU that is estimated to be greater than 70%,³⁶ NPSS programs are a

practical option for reducing the burden of HIV/AIDS and HCV, complementary of other disease prevention strategies, including outreach, education, and drug treatment.

This study is a supplement to an annual, largely quantitative, LHJ survey conducted by the California Department of Public Health, Office of AIDS (CDPH/OA)²⁰ which documents the status of the legislation among California LHJs. The specific aims of the current study were to explore in depth the facilitators and barriers to NPSS in eight LHJs with approved policies or programs and four that had failed to adopt or implement a policy or program during the period of study. These LHJs represented 63% of the total LHJs on record during the study period as having taken some action toward SB 1159 and they represented LHJs with high, medium, and low prevalence of HIV/AIDS. Based on a review of the distribution of HIV/AIDS cases across California, we classified high prevalence as 200 or more IDU cases of HIV/AIDS infection per 100,000 population; medium as ≥ 50 to < 200 ; and low prevalence as < 50 cases of HIV/AIDS among IDU.

METHODS

Study Group Composition

We purposely constructed a group of 12 LHJs that had implemented NPSS or had passed local policies to allow for the establishment of NPSS. Among this group were: (1) LHJs with and without SEP, (2) LHJs representing geographic and urban and non-urban diversity, (3) LHJs with a history of progressive IDU policy, and (4) LHJs with known resistance to syringe access policies.

The study included the counties of: Alameda, Contra Costa, Fresno, Los Angeles, Marin, Riverside, Sacramento, Santa Cruz, Shasta, Solano, and Yuba, and the City of Los Angeles. Two LHJs that had not approved NPSS were invited to participate but declined due to perceived community or political concerns. LHJs in this study were classified as innovators (i.e., approving NPSS within 1–3 months), early adopters (i.e., approving NPSS within 1 year), late adopters (i.e., approving NPSS after 1 to 2 years), and non-adopters of NPSS. Table 1 describes each of the LHJs in terms of HIV prevention and SEP budget, adoption and classification status, and county voting patterns.

Subjects and Data Collection

Semi-structured qualitative interviews served as the basis for case analyses. We interviewed 12 HIV/AIDS program directors from public health departments and one city AIDS program director. The interview guide culled several questions from the CDPH/OA survey that were reworded to allow for open ended responses.²⁰ The interview explored: (1) procedures needed to pass local legislation; (2) identification of important stakeholders and advisors; (3) impressions of factors that facilitated or inhibited implementation; (4) technical assistance needed for policy or program implementation; (5) human and fiscal resources needed; and (6) program evaluation status.

Human Subjects

An application to the Institutional Review Committee (IRC) of Public Health Foundation Enterprises, Inc. requested expedited review due to the governmental status of study participants. The IRC considered the study exempt from human subjects requirements in accordance with 45 CFR, Part 46.101 (b) (3) (i) of the code of Federal Regulations. Although informed signed consent was waived by the IRC,

TABLE 1 Funding, NPSS status, and political party

County	HIV prevention budget ^a	SEP budget ^a	Adopt SB1159	Implement SB1159	Political party ^b
Alameda	\$827,034	\$230,000	Yes 3/05	Yes <i>Innovator</i>	Demo
Santa Cruz	\$75,975	\$143,247	Yes 3/05	No <i>Non-adopter</i>	Demo
Shasta	\$23,884	\$20,000	No	No <i>Non-adopter</i>	Repub
Los Angeles County	\$6,563,534	\$500,000	Yes 6/05	Yes 2/07 <i>Late adopter</i>	Demo
Los Angeles City	\$411,000	\$500,000	Yes 3/05	Yes 2/07 <i>Late adopter</i>	Demo
Sacramento	\$536,811	\$25,000	No	No <i>Non-adopter</i>	Demo
Riverside	\$796,116	No SEP	No	No <i>Non-adopter</i>	Repub
Solano	\$201,090	>\$20,000	Yes 9/05	Yes <i>Early adopter</i>	Demo
Yuba	\$16,308	No SEP	Yes 3/05	Yes <i>Innovator</i>	Repub
Marin	\$156,011	<\$50,000	Yes 3/05	Yes <i>Innovator</i>	Demo
Contra Costa	\$57,000	\$70,000	Yes 12/04	Yes <i>Innovator</i>	Demo
Fresno	\$329,715	<\$50,000	No	No <i>Non-adopter</i>	Repub

^aBudget total represents fiscal year 2007–2008 for HIV Prevention; 2007 for SEP

^bBased on the most recent presidential election

the investigators provided a study information sheet and requested verbal consent to participate in the study.

DATA ANALYSIS

Interviews were transcribed verbatim from digital audio files and entered into text files. Relevant text from within and across each LHJ interview was highlighted and hand coded into preliminary categories. Additional analysis of the text files was facilitated by using a scientific software qualitative analysis program.³⁷ The initial hand-coded categories were verified or discarded, then collapsed and re-coded. Significant quotes were captured and organized within codes until several themes emerged. The themes were further divided into characteristics that facilitated or inhibited local implementation of SB 1159, and were used to form the basis of the results. Two investigators and a research associate independently reviewed the text files and after discussion, reached consensus on the final codes and resulting themes.

RESULTS

Interviews were conducted between January and September 2006; three follow-up interviews were conducted in 2007 with LHJs that failed to implement local programs by the end of 2006. During the study period, of the 12 LHJs interviewed, seven had implemented NPSS; one had adopted SB 1159, but not implemented NPSS, and four failed to adopt SB 1159. Population and other characteristics of these LHJs are shown in Table 2.

The main themes that evolved through analysis of the data identified five factors that were associated with local adoption and implementation of NPSS, and three that impeded NPSS. Syringe disposal emerged as both a facilitator and impediment to adoption and implementation. Public health leadership; an inclusive planning process; marketing the program as a public health initiative; learning from others'

TABLE 2 Characteristics of LHJ innovators, adopters/non-implementers, and non-adopters of NPSS

	Population size	Total cumulative AIDS cases	HIV cases among IDU and MSM/IDU	Legally authorized syringe exchange program	Collaborate with SEP/ advocacy groups
Study period: January–September 2006					
Innovators (adopted and implemented)					
Contra Costa	1,024,319	2,779	67	Yes	No
Alameda	1,457,426	7,451	135	Yes	No
Solano	411,680	1,563	62	No	No
Yuba	70,396	65	0	No	Yes
Marin	248,742	1,623	53	Yes	Yes
Adopters/non-implementers ^a					
Los Angeles County	9,948,081	54,163	948	Yes	No
Los Angeles City	3,819,951	28,893	435	Yes	Yes
Santa Cruz	294,705	615	17	Yes	No
Non-adopters ^b					
Fresno ^c	891,756	1609	40	No	No
Shasta ^d	179,951	179	10	No	Yes
Riverside	5571	5402	69	No	No
Sacramento ^b	1,374,724	3687	186	Yes	Yes
				(City only)	

Source for AIDS/HIV data: California Department of Public Health Office of AIDS, HIV/AIDS Case Registry Section, data as of August 31, 2008

^aLos Angeles County approved a program on February 1, 2007 which then allowed the City of Los Angeles to enroll pharmacies within the City. Santa Cruz implemented a program in March 2010.

^bThe City of Sacramento established a program on August 8, 2006

^cFresno approved a legal SEP on December 16, 2008 for 1 year

^dShasta approved a new SEP on September 19, 2006 for 3 years

efforts, successes, and failures; and identifying acceptable syringe disposal options were facilitating factors (Table 3). Health departments that were confronted with political and moral arguments lost momentum and ultimately assigned a lower priority to the initiative citing the loss of powerful public health advocates or a lack of human resources. Additional barriers were law enforcement, elected official and pharmacy opposition, and failure to resolve syringe disposal options (Table 4).

Follow-up Interviews with LHJs

Interviews with three of the four non-adopters of NPSS conducted at least 1 year after initial data collection revealed common rationales for not adopting or implementing SB 1159. After two years, SB 1159 became a low public health priority, partly because in one LHJ, syringe exchange was subsequently approved; in another, the LHJ was still trying to establish legal syringe exchange, and in the third, the LHJ said, “*There was no use in butting my head up against the wall.*”

DISCUSSION

The dissemination of prevention services targeted to IDU under SB 1159 is severely limited by the local opt-in process which took several months to years; competing

TABLE 3 Factors that facilitate local implementation

Domain	Illustrative quotations
Public health leadership All of the AIDS program directors underscored the importance of the health director as a visible and active department leader to get both the policy adopted and the program implemented. Similarly, LHJs that both adopted and implemented a program cited a responsive and enlightened county Board of Supervisors as a critical factor in their ability to approve NPSS	<p>You have to have top administration on board for quick decision making</p> <p>The Board was interested in having it happen</p> <p>Health officer made a valiant effort</p> <p>Health officer signed letter of invitation to pharmacies</p> <p>Getting a resolution from county council was done in record time...they were very enthusiastic</p> <p>We sent a one-page survey to pharmacies regarding their knowledge of the legislation and their interest in participating</p> <p>We knew how the Board would respond based on their stance on needle exchange</p> <p>We went 'behind the scenes' to find out what each Board member thought</p> <p>Even though the Board shut us down, we would not do anything different</p> <p>We provided workshops at Board meetings</p> <p>We put some feelers out; talked a lot about the bill</p> <p>Health officer started a pilot project for hepatitis C testing first</p> <p>Board has always been very supportive of different mechanisms of reducing HIV attributed to IDU</p> <p>AIDS program has a long and good working relationship with health officer</p> <p>Health department has the moral and legal obligation to say what the public health problem is</p> <p>Previous health officer was supportive and he approached chief of police with DA, gave a 'dog and pony show'</p> <p>Health officer went to one meeting and said 'we're going to do it'</p> <p>Board of Supervisors have been very supportive of needle exchange; they are acutely aware of high rate of HIV transmission among IDU and have always been trying to stem the tide of transmission</p> <p>Health officer was very clear: 'it's a public health issue'</p>

<p>Inclusive planning process</p> <p>Innovators and early and late adopters engaged in a collaborative process between the health department and important stakeholders in their respective LHJs.</p> <p>This process was almost always exclusively driven by the AIDS program director under the leadership of the health director. These processes frequently included environmental health, the local waste management company, and pharmacies. Some LHJs met with the local sheriff and District Attorney. Two LHJs provided briefings on SB 1159 at law enforcement "roll calls." Five LHJs included the local SEP or the local CPG as advisors to the process</p>	<p>We liaison with the sheriff and AOD programs</p> <p>Had extensive conversations with pharmacies; went to visit them</p> <p>Sat down with SEP, Drug Policy Alliance, and with pharmacies</p> <p>City and county need to work together</p> <p>Spoke with DA, no major opposition, county council, no problem</p> <p>We invited pharmacies from neighboring counties; there are benefits of doing it together</p> <p>Bring law enforcement to the table</p> <p>Invited our legal counsel</p> <p>Used the local media to promote SB1159</p> <p>We do not use our advisory group, but that does not mean we do not talk to people</p> <p>Talked about it at the local CPG meeting</p> <p>Convened a task force well before the law was to go into effect: chair of the pharmacy board, medical society, police and fire department, DA, environmental health, waste management, education and substance abuse treatment programs and local activists</p> <p>Brought anyone who would have a stake in it</p> <p>We anticipated all their questions: we had 'every duck and cluck in a row'</p>
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TABLE 3 (continued)

Domain	Illustrative quotations
Marketing the program as a public health initiative Social marketing within an LHJ characterized SB 1159 as a public health measure designed to reduce new HIV and HCV infections and the costs associated with morbidity. A few of the innovators indicated that they got SB 1159 in “under the radar,” [of prospective opponents] admitting that “no one had time to protest.” Most LHJs relied on the CDPH/OA for technical assistance; a few invited key staff from the OA to testify on behalf of SB 1159 at their local hearings	One way or another, we have to deal with the issue We put together a presentation for the health and human services board Launched the program to coincide with World AIDS Day Health director downplayed the fact that IDU would benefit If you prevent one infection, you affect the overall health of the community Reduction in HIV and hepatitis C and IDU-related diseases We are environmentally conscious Legitimize something that people understand We are not soft on crime; we are reality based—our job is to prevent diseases Taxpayers benefit so they do not have to pay for infections—we appeal to sense of financial savings It is important for every venue possible to reduce HIV transmission It is for people who do not feel like waiting around for a needle exchange van We used science Not relevant to argue whether this is good or bad People are at risk because of bad public health decisions We use outreach and prevention staff to pass the word It is a public health issue; you know how many people have hepatitis C? We are selling it as prevention, drug users are already using

<p>Learning from other LHJ efforts, successes, and failures</p> <p>LHJs were not constrained by SB 1159 in developing their policy or programmatic response. The innovators developed policy language, pharmacy enrollment procedures and training, and educational program materials prior to or within 3 months of the law going into effect. Many other LHJs subsequently adapted these materials, often using them as leverage with their respective Boards of Supervisors and local communities</p>	<p>We stepped out on a limb to be the first county to approve SB 1159 before any guidance</p> <p>No need to re-invent the wheel; program materials are readily available</p> <p>It is our role to be on the forefront</p> <p>It is easier to make things happen at the City level</p> <p>The Office of AIDS and their dedicated website was incredible</p> <p>If (a Central Valley county) the IDU capital of the country cannot get it passed, then we are all in trouble</p> <p>Do one or the other: needle exchange or pharmacy sales, do not complicate it</p> <p>We have been collecting materials from (several counties were named)</p> <p>We read the APH journal cover to cover and looked at how it was done in New York and Seattle</p> <p>We got materials from other counties</p> <p>The health department created a 'get out of jail free' card</p> <p>We have a syringe disposal implementation plan in place</p> <p>County provides sharps containers to drug stores</p> <p>We would sell sharps containers purchased with one-time funding (from the Office of AIDS)</p> <p>Syringes can be thrown in the trash (note: a law was subsequently passed in California that prohibits this practice)</p> <p>We ordered 20 mailbox type syringe disposal kiosks that will be placed at recycling sites</p> <p>One pharmacy keeps a 'mega sharps container' on site</p> <p>Waste management accepts containerized syringes and offers free sharps disposal</p> <p>The county is discussing a 'flexible' syringe disposal policy</p> <p>Users can turn them in to SEP</p> <p>We want to provide fit packs</p> <p>Environmental health took lead on sharps containers and how to get those; they provide sharps to pharmacies and also collect them as well as collect them from the SEP</p> <p>We assess tipping fees from dump sites to pay for the sharps</p>
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TABLE 4 Factors that inhibit local implementation

Domain	Illustrative quotations
Loss of momentum; no or low priority for the health department In each case, non-adopter/non-implementer LHJs confided that competing public health priorities often pulled them in different directions, notably emergency preparedness, bioterrorism or other non-HIV-related program goals. In three LHJs, attrition of powerful advocates (e.g., health director/health officer) posed additional barriers to adoption or implementation. Some LHJs indicated that HIV among IDUs was negligible, while simultaneously admitting that their LHJ had a high prevalence of HCV among IDU	Health officer was concerned about political issue Pharmacies were morally against it; a couple did not want 'those types' of clients One community member said, "should I buy a gun?" We were aware that the Board was not open to progressive kinds of harm reduction for substance users Two new supervisors were not comfortable with the idea Pharmacy sales are off the books, it just will never happen again It is not a priority now, more because of limited time and resources we need to use as wisely as we can No one wanted to push it forward City councils can agree to go forward, but generally they will not go against the Board Hard when you have a 'lame duck' administrator; he is careful about the decisions he makes, he does not want to leave a mess for the next person Everything seems like it gets started and a bureaucratic ball gets dropped and other priorities take precedence The health officer was a powerful advocate; then she retired I can prioritize HIV but I cannot compete with bioterrorism Always being pulled away from it because of bioterrorism

<p>Law enforcement and community opposition</p>	<p>Various law enforcement agencies played a decisive role in several non-adopter/non-implementer LHJ deliberations; particularly a letter from the California Narcotics Officers Association that forcefully expressed its opposition. All the LHJs mentioned this letter. Local district attorneys, sheriffs, and police departments underscored their longstanding concerns about syringe exchange and considered pharmacy sales as ‘condoning drug use.’ Conversely, when the local sheriff or district attorney was supportive, LHJs were able to adopt local policies and programs. In two of the non-adopter/non-implementer LHJs, a small number of vocal opponents, usually citing anecdotal information, or illustrating fear-based scenarios, seemingly swayed Boards from approving local policies</p>	<p>The sheriff and DA are vocally opposed to any kind of syringe exchange program</p> <p>The sheriff and DA are elected and their decisions affect their re-election</p> <p>Law enforcement is vocally opposed</p> <p>We are surrounded by politics</p> <p>See, it is a bad thing to take away our ability to bust users (quoting a local sheriff)</p> <p>How will we know which syringes are legal? Are you going to put bar codes on them? (quoting law enforcement)</p> <p>Law enforcement is likely to ‘blow up’</p> <p>Law enforcement agents arrest people there (at a SEP)</p> <p>Barrier was the DA, he would not support anything that would bring more needles into town</p> <p>It is very discouraging since harm reduction was viewed as supporting ‘bad behavior’</p> <p>Public commentary from one person swayed the whole board; science played no role</p> <p>If you do not have private business support, it is going to be a tough time</p> <p>If you give needles, you create drug use</p> <p>Only flack was from law enforcement—DA made us change our original brochure. He wanted it to say if you were caught with a syringe you could be liable for prosecution</p> <p>Not decided about syringe disposal—not there yet</p> <p>We do not deal with disposal</p> <p>Pharmacy will tell you the best way to dispose of them</p> <p>Pharmacies want to do just what the law requires them to do</p> <p>It is up to client to dispose</p> <p>Most people go to the SEP for syringe disposal</p> <p>Do not know if needles are being thrown in streets, but we have heard nothing from Environmental Health</p> <p>Countywide, there is no one place to take syringes</p>
<p>Failure to resolve syringe disposal options in advance</p>	<p>Notwithstanding any other issue, the challenges associates with syringe disposal stymied all of the non-adopter/non-implementer LHJs. Even though one of the large chain pharmacies in California agreed to accept used syringes in approved sharps containers, giving hope to these LHJs for a simple solution, pharmacy policy varied since the corporate office deferred to individual store managers to decide on syringe disposal policies. Two additional large chain pharmacies and most of the independent pharmacies refused to accept used syringes, frequently citing liability issues</p>	

health department priorities (e.g., emergency preparedness); the pace by which LHJs prioritize IDU issues (e.g., no perceived epidemic of HIV among IDU); and a historically limited public health department infrastructure. For example, in all cases, the HIV/AIDS directors subsumed the responsibility for policy and program development as part of an already burgeoning workload and dwindling human and fiscal resources. Most said that dedicated staff time was needed to contact, train, enroll, and follow-up with pharmacies to develop and distribute educational materials and to evaluate the program. Only one county (that failed to adopt SB 1159) hired dedicated staff with one-time funding from the CDPH Office of AIDS. One director said, *"It's just me; I have no staff to call pharmacies or even develop a database of local pharmacies."* In response to the amount of time and resources needed, another director said, *"It takes too much time because I haven't done anything."*

We anticipated that the presence of a SEP would facilitate *early* adoption of NPSS 1159; however, in five LHJs this was not the case. Not surprisingly, in three of the non-adopter LHJs, the Republican political party dominated the most recent presidential election (Table 1). In two of these LHJs, there is no SEP; in one, the SEP was not legally sanctioned.

LHJs engaged in coalition building, collaborative planning, and behind-the-scenes work to promote SB 1159 and to avoid the known debate that follows IDU issues in many communities. We were surprised that these coalitions largely ignored the groups with direct access to IDU: SEP, alcohol and other drug programs and drug policy, and other advocacy groups and organizations. One director expressed fear that SEP would be considered adversarial and detrimental to the planning process.

Identifying syringe disposal options emerged as a factor that both contributed to local approval of NPSS and created a barrier to NPSS. LHJs with county-wide biohazard waste policies in place, on-going relationships with pharmacy boards, or that created new syringe disposal programs, had little difficulty with policy adoption and program implementation. LHJs that had not approved NPSS during the period of study were still considering how they would address syringe disposal.

Three specific case examples demonstrate that the amount of effort an LHJ exerted was not associated with approval of NPSS. In Shasta County for example, the LHJ created a comprehensive implementation and evaluation plan, established syringe disposal sites at recycling centers and elsewhere, identified dedicated staff, brought additional requested information to the Board of Supervisors, and provided newspaper accounts from citizens who asked why SB 1159 was not approved. A joint proposal to allow pharmacy syringe sales and implement a SEP was voted down by the Board 3–2 due to concern by Board members that syringe sales would flood the community with unsafely discarded needles. However, the "door was left open" to resubmit a proposal for the SEP only, which was ultimately approved 4–1 as a 3-year demonstration project from September 2006–September 2009.

In Santa Cruz County, the LHJ was successful in adopting a local policy. However, the policy distinguished the unincorporated areas as approved to implement SB 1159 and the incorporated areas as not approved. The chief of public health, who was considered a "tireless advocate," retired, thus the momentum was lost and other priorities took precedent. However, in early 2010, a program was implemented that will cover both the unincorporated and the incorporated areas of the LHJ. Santa Cruz has a SEP that has been legally sanctioned for over 10 years.

In Riverside County, the LHJ polled the current Board members to determine their level of support, and conducted meetings on this and other harm-reduction issues with community-based organizations and with the sheriff and district attorney, who were both vocally opposed. In 2004, a new Board member (a pharmacist) was elected who introduced his opposition to the initiative without speaking to the health officer and before it could be presented to the full Board. During a Board of Supervisors' meeting, one member said, "*I don't want my wife standing next to a drug user in a drug store.*" They were "blind-sided" and "had the rug pulled out from them" according to the LHJ representative. The health officer had made several efforts to implement a SEP; however, the Board remains resistant to progressive harm-reduction ideas. Riverside does not have a known SEP.

Limitations

The 12 case studies described represent 63% of LHJs that have initiated some type of action on SB 1159 since 2005; however, the data contained herein do not represent all of the LHJs with approved policies and programs or those planning programs in California. Although there is a strong link between what we documented as LHJ facilitative activities and program implementation, and barriers and non-implementation, these activities may not represent all the factors that facilitate or impede progress on SB 1159. We constructed our group of LHJs purposefully and two LHJs refused to participate; thus selection bias could influence the results we obtained. The findings may also suffer from recall bias, since the interviews were conducted between 12 and 18 months after the law was passed. Nevertheless, the findings of this study provide a lesson for policy makers and advocates alike who may wish to explore the power of structural interventions to address the needs of IDU in California.

CONCLUSIONS

The lessons learned through this study should provide useful guidance for the remaining LHJs in California without NPSS. The most important factors appear to be early and visible leadership by the public health department; collaborative planning with community, policymaking stakeholders, and pharmacies; addressing law enforcement agencies' concerns; learning from other LHJ efforts, successes, and failures; and finding creative solutions to syringe disposal. We recommend that LHJs engage in systematic evaluation to demonstrate the utility of their programs to policy makers. The future success of this life-saving effort rests almost entirely on successful implementation of the law by counties and cities throughout California.

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REFERENCES

1. Joint United Nations Programme on HIV/AIDS (UNAIDS). *Report on Global AIDS Epidemic*. Geneva: UNAIDS; 2006.
2. Burris S, Lurie P, Ng M. Harm reduction in the health care system: the legality of prescribing and dispensing syringes to drug users. *Health Matrix Clevel*. 2001; 11(1): 5–64.
3. Des Jarlais DC, McKnight C, Milliken J. Public funding of US syringe exchange programs. *J Urban Health*. 2004; 81(1): 118–121.
4. Bluthenthal RN. Syringe exchange as a social movement: a case study of harm reduction in Oakland, California. *Subst Use Misuse*. 1998; 33(5): 1147–1171.
5. Rich JD, Wolf FA, Macalino G. Strategies to improve access to sterile syringes for injection drug users. *AIDS Read*. 2002; 12(12): 527–535.
6. Vlahov D, Junge B. The role of needle exchange programs in HIV prevention. *Public Health Rep*. 1998; 113(Suppl 1): 75–80.
7. Burris S, Vernick JS, Ditzler A, Strathdee S. The legality of selling or giving syringes to injection drug users. *J Am Pharm Assoc (Wash)*. 2002; 42(Suppl 2): S13–S18.
8. Burris S, Welsh J, Ng M, Li M, Ditzler A. State syringe and drug possession laws potentially influencing safe syringe disposal by injection drug users. *J Am Pharm Assoc (Wash)*. 2002; 42(Suppl 2): S94–S98.
9. Centers for Disease Control and Prevention (CDC). Syringe exchange programs—United States, 2005. *MMWR Morb Mortal Wkly*. 2007; 56(44): 1164–1167.
10. Kral AH, Anderson R, Flynn NM, Bluthenthal RN. Injection risk behaviors among clients of syringe exchange programs with different syringe dispensation policies. *J Acquir Immune Defic Syndr*. 2004; 37(2): 1307–1312.
11. Groseclose SL, Weinstein T, Jones ST, Valleroy LA, Fehrs LJ, Kassler WJ. Impact of increased legal access to needles and syringes on practices of injecting-drug users and police officers—Connecticut, 1992–1993. *J Acquir Immune Defic Syndr*. 1995; 10(1): 82–89.
12. Holtgrave DR, Pinkerton SD, Jones TS, Lurie P, Vlahov D. Cost and cost-effectiveness of increasing access to sterile syringe and needles as an HIV prevention intervention in the United States. *J Acquir Immune Defic Syndr*. 1998; 18(Suppl 1): S133–S138.
13. Bluthenthal RN, Kral AH, Gee L, et al. Trends in HIV seroprevalence and risk among gay and bisexual men who inject drugs in San Francisco, 1988 to 2000. *J Acquir Immune Defic Syndr*. 2001; 28(3): 264–269.
14. Hahn JA, Page-Shafer K, Lum PJ, Ochoa K, Moss AR. Hepatitis C virus infection and needle exchange use among young injection drug users in San Francisco. *Hepatology*. 2001; 34(1): 180–187.
15. Fuller CM, Absalon J, Ompad DC, et al. A comparison of HIV seropositive and seronegative young adult heroin- and cocaine-using men who have sex with men in New York City, 2000–2003. *J Urban Health*. 2005; 82(Suppl 1): i51–i61.
16. Neaigus A, Mingfang Z, Gyarmathy A, Cisek L, Friedman SR, Baxter RC. Greater drug injecting risk for HIV, HBV, and HCV infection in a city where syringe exchange and pharmacy syringe distribution are illegal. *J Urban Health*. 2008; 85(3): 309–322.
17. Cotton-Oldenburg NU, Carr P, Deboer JM, Collision EK, Novotny G. Impact of pharmacy-based syringe access on injection practices among injection drug users in Minnesota, 1998 to 1999. *J Acquir Immune Defic Syndr*. 2001; 27(2): 183–192.
18. Fisher DG, Fenaughty AM, Cagle HH, Wells RS. Needle exchange and injection drug use frequency: a randomized clinical trial. *J Acquir Immune Defic Syndr*. 2003; 33(2): 199–205.
19. Gibson DR, Brand R, Anderson K, Kahn JG, Perales D, Guydish J. Two- to sixfold decreased odds of HIV risk behavior associated with use of syringe exchange. *J Acquir Immune Defic Syndr*. 2002; 31(2): 237–242.

20. Stopka TJ, Garfein RS, Ross A, Truax SR. Increasing syringe access and HIV prevention in California: findings from a survey of local health jurisdiction key personnel. *J Urban Health*. 2007; 84(1): 116–125.
21. Singer M, Baer H, Scott G, Horowitz S, Weinstein B. Pharmacy access to syringes among injection drug users: follow-up findings from Hartford, Connecticut. *Public Health Rep*. 1998; 113(Suppl 1): 81–89.
22. Compton WM, Horton JC, Cottler LB, et al. A multistate trial of pharmacy syringe purchase. *J Urban Health*. 2004; 81: 661–670.
23. Heimer R, Clair S, Teng W, et al. Effects of increasing syringe availability on syringe-exchange use and HIV risk: Connecticut, 1990–2001. *J Urban Health*. 2002; 79(4): 556–570.
24. Raboud JM, Boily MC, Rajeswaran J, O'Shaughnessy MV, Schechter MT. The impact of needle-exchange programs on the spread of HIV among injection drug users: a simulation study. *J Urban Health*. 2003; 80(2): 302–320.
25. Valleroy LA, Weinstein B, Jones TS, Groseclose SL, Rolfs RT, Kassler WJ. Impact of increased legal access to needles and syringes on community pharmacies' needle and syringe sales—Connecticut, 1992–1993. *J Acquir Immune Defic Syndr Human Retrovirol*. 1995; 10(1): 73–81.
26. Fuller CM, Ahern J, Vadnai L, et al. Impact of increased syringe access: preliminary findings on injection drug user syringe source, disposal, and pharmacy sales in Harlem, New York. *J Am Pharm Assoc*. 2002; 42(Suppl 2): S77–S82.
27. Fuller CM, Galea S, Caceres W, Blaney S, Sisco S, Vlahov D. Multilevel community-based intervention to increase access to sterile syringes among injection drug users through pharmacy sales in New York City. *Am J Public Health*. 2007; 97(1): 117–124.
28. CDC. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. *MMWR Recomm Rep*. 1998; 47(RR-19): 1–39.
29. Wilson AR, Kahn JG. Prevention HIV in injection drug users: choosing the best mix of interventions for the population. *J Urban Health*. 2003; 80(3): 465–481.
30. Shriver MD, Everett C, Morin SF. Structural interventions to encourage primary prevention among people living with HIV. *AIDS*. 2000; 14(Suppl 1): S57–S62.
31. Wohlfeiler D. Structural and environmental HIV prevention for gay and bisexual men. *AIDS*. 2000; 14(Suppl 1): S52–S56.
32. Bluthenthal RN, Heinzerling KG, Anderson R, Flynn NM, Kral AH. Approval of syringe exchange programs in California: results from a local approach to HIV prevention. *Am J Public Health*. 2008; 98(2): 278–283.
33. Legislative Counsel. State of California. Official California Legislative Information. Accessed on May 15, 2008. Available at: <http://www.leginfo.ca.gov>.
34. California Syringe Access SB1159 Resource Library. Accessed on November 10, 2008. Available at: <http://www.syringeaccess.com>.
35. California Department of Health Services Office of AIDS. Cumulative AIDS case data through September 30, 2008. Accessed on November 3, 2008. Available at: <http://www.dhs.ca.gov/>.
36. California Hepatitis Alliance (CalHEP). Accessed on November 3, 2008. Available at <http://www.calhep.org>.
37. *Atlas.ti* [computer program]. Version 6.0.23. Berlin: Scientific Software Development; 1993–2009