

Pharmacy Syringe Purchase Test of Nonprescription Syringe Sales in San Francisco and Los Angeles in 2010

Alexandra Lutnick, Erin Cooper, Chaka Dodson,
Ricky Bluthenthal, and Alex H. Kral

ABSTRACT *The two main legal sources of clean needles for illicit injection drug users (IDUs) in California are syringe exchange programs (SEPs) and nonprescription syringe sales (NPSS) at pharmacies. In 2004, California became one of the last states to allow NPSS. To evaluate the implementation of NPSS and the California Disease Prevention Demonstration Project (DPDP), we conducted syringe purchase tests in San Francisco (SF) and Los Angeles (LA) between March and July of 2010. Large differences in implementation were observed in the two cities. In LA, less than one-quarter of the enrolled pharmacies sold syringes to our research assistant (RA), and none sold a single syringe. The rate of successful purchase in LA is the lowest reported in any syringe purchase test. In both sites, there was notable variation among the gauge size available, and price and quantity of syringes required for a purchase. None of the DPDP pharmacies in LA or SF provided the requisite health information. The findings suggest that more outreach needs to be conducted with pharmacists and pharmacy staff. The pharmacies' failure to disseminate the educational materials may result in missed opportunities to provide needed harm reduction information to IDUs. The varied prices and required quantities may serve as a barrier to syringe access among IDUs. Future research needs to examine reasons why pharmacies do not provide the mandated information, whether the omission of disposal options is indicative of pharmacies' reluctance to serve as disposal sites, and if the dual opt-in approach of NPSS/DPDP is a barrier to pharmacy enrollment.*

KEYWORDS *Nonprescription syringe sales, IDU, SB1159, California, Pharmacy, Policy*

INTRODUCTION

Injection drug use is the main route of transmission for hepatitis C virus (HCV) infection and the second leading cause of HIV transmission in California.¹ In an effort to prevent the spread of HIV and HCV among injection drug users (IDUs), it is recommended that IDUs have access to sterile needles and syringes.²⁻⁴ The two main legal sources of clean needles for illicit IDUs in California are syringe exchange

Lutnick and Kral are with the Urban Health Program, RTI International, San Francisco, CA, USA; Cooper and Dodson are with the Urban Community Research Center, California State University Dominguez Hills, Carson, CA, USA; Bluthenthal is with the Department of Preventive Medicine, Institute for Prevention Research, Keck School of Medicine, University of Southern California, Los Angeles, CA, USA.

Correspondence: Alexandra Lutnick, Urban Health Program, RTI International, San Francisco, CA, USA. (E-mail: alutnick@rti.org)

programs (SEPs) and nonprescription syringe sales (NPSS) at pharmacies. SEPs were permitted in 2000. Nonprescription pharmacy syringe sales were permitted in 2004 provided local health jurisdictions (either cities or counties) authorize the sales. Details on these policy changes have been published elsewhere.^{5,6}

The effectiveness of these policy changes relies heavily on local government adoption and pharmacy enrollment. Research on NPSS in California has found that local adoption has been modest.^{6,7} Yet many positive outcomes and attributes are associated with NPSS. Increased options for syringe access, inclusive of pharmacy access of syringes, has been shown to lower injection-related risk behaviors among IDUs.⁸⁻¹³ In a longitudinal study of IDUs, those who injected more frequently were more likely to report accessing NPSS.¹⁴ Chain pharmacies seem more inclined to sell syringes,^{10,15,16} and pharmacists who view drug use as a public health issue are more likely to support NPSS.^{17,18}

California was one of the last US states to allow NPSS. Approved September 20, 2004, Senate Bill 1159 (SB1159) authorizes licensed pharmacies to sell or furnish up to 10 hypodermic needles or syringes to a person 18 years of age or older without a prescription. A number of conditions need to be met before pharmacies can engage in NPSS. First, local health jurisdictions have to adopt a local county or city policy. Pharmacies then have to register with the local health department in the Disease Prevention Demonstration Project (DPDP). The local health department is required to maintain a list of registered pharmacies and provide those pharmacies with the verbal or written health information that they are to disseminate to NPSS customers. This information includes accessing drug treatment, accessing HIV/HCV testing, and how to safely dispose of sharps waste.^{6,7,19} Another stipulation of NPSS is that participating pharmacies have to provide at least one of the following: on-site safe disposal program, mail-back sharps containers, or personal sharps disposal containers.

Aside from asking IDUs about syringe purchase experiences, there are two other ways of assessing pharmacists' sales of syringes to IDUs—asking pharmacists about sales and conducting “syringe purchase” tests. In California, pharmacy surveys have indicated varied levels of interest in NPSS as well as varied levels of participation in counties that have authorized NPSS.^{20,21} However, to our knowledge, no syringe purchase testing has been conducted in California. Syringe purchase tests have been used with trained, nondrug using research assistants (RAs) in a variety of settings (urban and rural) and regions of the country. A review of other syringe purchase tests reveals that rates of successful purchase by city have ranged from 33 % to 75 %.^{15,22-25} Understanding whether pharmacists will sell syringes to adults is key to determining the effectiveness of this policy.

In this paper, we examine the implementation of NPSS/DPDP in two California cities (San Francisco (SF) and Los Angeles (LA)) through single buy attempts at pharmacies. Although other studies have assessed the implementation of this policy from the perspective of pharmacists and the self-reports of IDUs about syringe acquisition practices, this is the first study in California to report about systematically going to pharmacies and attempting to purchase syringes to assess the effectiveness of SB1159 from the perspective of a prospective consumer.

METHODS

To assess the attitudes and practices of pharmacists and pharmacy staff in SF and LA when conducting NPSS and to estimate the average retail price of syringes, RAs

attempted to purchase a single syringe at pharmacies in SF and LA. Licensed pharmacies in SF and LA were identified from a list obtained from the California Board of Pharmacy. Pharmacies were restricted to retail pharmacies, thus excluding those not open to the general public. All retail pharmacies in SF ($n=118$) were included in the sample. During the project, it was discovered that eight did not meet inclusion criteria (they had either closed or were not open to the general public). Our final sample in SF was 110 pharmacies. LA had 299 pharmacies that met inclusion criteria. As resources were limited, the sample was restricted by randomly selecting 150 pharmacies using the randomization function in SPSS (SPSS Inc., Chicago, IL). The study was conducted in SF between March and June of 2010 and in LA between June and July of 2010. Syringe purchases were attempted on both weekdays and weekends between the hours of 9 am and 6 pm.

The study was approved as exempt from human subject research by the Institutional Review Boards at RTI International and California State University Dominguez Hills. The RAs hired for this study dressed in apparel to look as if they might be IDUs. In both locations, the RAs were women and when conducting the syringe purchase, were instructed to wear long pants, a long sleeve shirt, sunglasses, and act as if they were in a hurry. The long pants and shirt were to conceal any possible injection stigmata. For protection during fieldwork, the RAs were instructed to carry identification, along with the contact information of their respective project directors. The protocol stated that the RAs were to approach the pharmacy counter and ask to purchase a single 28-gauge, 100-unit syringe, a commonly used syringe type among IDUs in SF and LA. Instances where a 28-gauge syringe was not available, it was acceptable to purchase a 26- or 27-gauge syringe. If told that the pharmacy only sold syringes in packs of 10, the RA was allowed to purchase a pack of 10. If informed that the pharmacy sold syringes in packs larger than 10 syringes, the RA would ask the cost and decline the purchase. If asked, the RA would provide photo identification, name, date of birth, and sign a log. If someone inquired about the reason for her purchase, the RA was only allowed to say that it was for personal reasons. If a sale was refused, the RA would casually inquire about the reason why, but would not try to convince them to sell her a syringe.

After the purchase attempt, the RA would leave the pharmacy and record the information about the encounter on a debriefing form. This form captured the pharmacy identification number, date, and time of attempted purchase, who the RA interacted with at the pharmacy (pharmacist, pharmacy staff, or not sure), information about the purchase attempt (whether successful, cost of syringe, if any extra materials or information were provided without having asked for them, and reasons for refusal), and a brief qualitative summary about the attempt.

Study Measures

Simple frequencies were used to describe the findings from the syringe purchase study. In each city, pharmacies were designated as to whether they were enrolled in the local DPDP and if they actually sold syringes without a prescription. The frequency of providing the requisite health information about drug treatment, HIV and HCV testing, needle exchange, and syringe disposal was also assessed for DPDP and non-DPDP enrolled pharmacies. Any additional requirements for purchase were recorded. An average of syringe costs was calculated for single syringe and 10-pack purchases. Field notes from each syringe purchase attempt were reviewed by the project director and categorized as a positive, negative, or neutral experience.

RESULTS

Two-hundred sixty pharmacies were visited (110 in SF and 150 in LA). In our sample, 30 % of pharmacies were enrolled in DPDP: 59 % in SF ($n=65$) and 9 % in LA ($n=14$). However, 35 % of the pharmacies were willing to sell syringes (67 % in SF and 12 % in LA), which reveals that some pharmacies are selling syringes without being enrolled in the DPDP. Of the non-DPDP pharmacies that sold syringes, 78 % are chains. Sixty-four percent of the pharmacies that were willing to sell syringes to the RA had 26- to 28-gauge syringes available (64 % in SF and 67 % in LA). Since our study protocol restricted syringe purchases to 26- to 28-gauge, the following results are based on the successful purchase of a syringe that fit the specified gauge range.

Extra requirements for purchase, dispensing health information and providing disposal options offered, who conducted the transaction, and the average cost of syringes varied by county (Table 1). Overall, 14 % of DPDP pharmacies only sold syringes in packs of 10 (7 % in SF and 100 % in LA), as did 47 % on non-DPDP pharmacies (67 % in SF and 33 % in LA). Of the DPDP pharmacies, 2 % required identification and/or a justification for the purchase (0 % in SF and 33 % in LA), and 5 % had the RA sign a log (0 % in SF and 67 % in LA). In both cities, none of the DPDP pharmacies dispensed the required health information, and only 9 % of the DPDP pharmacies provided disposal options (10 % in SF and 0 % in LA). In 18 % of the DPDP purchases, the pharmacist conducted the transaction (15 % in SF and 67 % in LA). None of the DPDP pharmacies in LA sold a single syringe. The average cost of a single syringe at DPDP pharmacies in SF was \$0.50 (range \$0.30–\$0.50). Among non-DPDP pharmacies, the average cost of a single syringe in SF was

TABLE 1 Characteristics of successful syringe purchase encounters for San Francisco and Los Angeles

	San Francisco ($N=110$)		Los Angeles ($N=150$)	
	DPDP ^a ($n=65$; % n/N)	Non-DPDP ($n=45$; % n/N)	DPDP ($n=14$; % n/N)	Non-DPDP ($n=136$; n/N)
Successful purchase	63 % (41/65)	13 % (6/45)	21 % (3/14)	7 % (9/136)
Extra requirements				
10-pack purchase	7 % (3/41)	67 % (4/6)	100 % (3/3)	33 % (3/9)
Identification	0 %	0 % (0/6)	33 % (1/3)	33 % (3/9)
Justify purchase	0 %	17 % (1/6)	33 % (1/3)	56 % (5/9)
Sign a log	0 %	17 % (1/6)	67 % (2/3)	56 % (5/9)
Asked diabetic questions	0 %	17 % (1/6)	33 % (1/3)	33 % (3/9)
Dispensed health materials				
Written health information	0 %	0 %	0 %	22 % (2/9)
Biohazard container	10 % (4/41)	0 %	0 %	0 %
Who sold syringe(s)				
Pharmacist	15 % (6/41)	0 %	67 %	33 % (3/9)
Average cost of syringe(s)				
Single syringe	\$0.50	\$0.25	Not applicable	\$0.81
10-pack	\$3.99	\$4.80	\$3.86	\$3.93

^aDPDP designates those pharmacies that have adopted NPSS and are registered with the health department

\$0.25 (range \$free–\$0.50) and \$0.81 in LA (range \$0.69–\$1.00). The average cost of a 10-pack among DPDP pharmacies was \$3.99 in SF (range \$2.89–\$5.09) and in LA was \$3.86 (range \$3.79–\$3.99). Among non-DPDP pharmacies, the SF average cost for a 10-pack was \$4.80 (range \$2.89–\$9.58), and LA's average cost was \$3.93 (range \$3.39–\$5.00).

The majority of the syringe purchase attempts in both locations were uneventful, yet both had their share of positive and negative encounters. At a DPDP enrolled pharmacy in LA, the RA reported that:

The pharmacist was extremely polite. He did not ask for proof of medical need for syringe. He offered to sell me [chain name] brand syringes one dollar cheaper. The gauge size was outside of required protocol size (29 gauge). He said he could sell me a pack of 10. I paid and he told me to have a nice evening.

In SF, the RA noted a similar encounter where the pharmacy staff person was helpful:

I asked the staff person if I could buy a syringe and he replied that they don't sell single syringes, but that the [name of chain] does. He said he could sell me a pack of 10, and then he bent over backwards to make sure I got the gauge and length that I needed. He offered me a biohazard container and told me that I could bring it back and they would take care of it free of charge. He was very pleasant!

In some of the DPDP pharmacies in SF, the RA noted that she felt she was viewed negatively. She described one such encounter in the following way:

I asked the staff person to buy a syringe, and as soon as I did this, it was as if a cold wind blew over her. She became extremely curt, and her body language was so extremely distanced all of a sudden that she made every effort to not have any physical contact with me (such as not handing me the syringe, but instead putting it on the counter). She also slit her eyes a few times out of (what I interpreted to be) disgust.

At an enrolled pharmacy in LA that did not sell the RA a syringe, the notes about the encounter stated that:

The pharmacy staff person at the counter did not speak to me. I asked to buy a syringe and she just looked at me. The pharmacist in the back told me that they do not have syringes. I asked if she would sell the syringe to me if I had a prescription, and she told me she did not have any syringes ... The pharmacist seemed scared and was anxious to get me out of the pharmacy.

DISCUSSION

This study offers the first look at the implementation of the DPDPs at the level of the consumer. Similar to Cooper's findings from interviewing pharmacists in LA and SF,²¹ we observed large differences in implementation in the two cities. In LA, fewer pharmacies were enrolled in DPDP, less than one-quarter of the DPDP pharmacies sold syringes to our RA, and none of them sold a single syringe. The rate of successful purchase in LA is the lowest reported in any syringe purchase test.^{15,22–25}

Cooper et al.²⁰ suggested that these differences may be attributed to SF's earlier adoption of DPDP. At the time of Cooper's study, SF had been enrolled for 2 years and LA was in its first year. However, it has now been 3 years since LA started DPDP and these differences persist. It is possible that the different political and social climates of the two cities are contributing to the discrepancies observed in this study. As pharmacists who view drug use as a public health issue are more likely to support NPSS,^{17,18} increased educational efforts directed at pharmacists in LA may result in increased DPDP participation.

In both sites, there was notable variation among the gauge size available, and price and quantity of syringes required for a purchase. A significant number of the DPDP pharmacies did not have syringes available for purchase that were within the gauge range specified in our protocol. Although IDUs may settle for a different gauge of syringe, this finding suggests a need to conduct outreach to pharmacies to ensure they are stocking the types of syringes that IDUs prefer to use. There were no instances among DPDP pharmacies in LA where a single syringe was sold. The varied prices and required quantities of syringes may serve as a barrier to syringe access among IDUs. In light of Riley et al.'s recent findings that unsuccessful attempts to purchase syringes at a pharmacy may increase the odds of both injecting with a used syringe and giving away a used syringe,²⁶ our findings are troubling. More education needs to be conducted with pharmacists and pharmacy staff about the preferred syringe sizes of IDUs as well as how to interact with IDUs in a nonjudgmental manner. It is also important that agencies that interact with IDUs provide equivalent education to their clients to make the syringe purchase as simple and positive an experience as possible.

We observed that other requirements for purchase of syringes were more common at DPDP pharmacies in LA. Two-thirds of the DPDP pharmacies required the RA to sign a log, and one-third either required photo identification and/or a justification for the purchase. Except for cases where there is reason to believe that the customer is under the age of 18, photo identification or reasons for the purchase are not required. This is another substantial barrier for IDUs to overcome in order to be able to access syringes. As some will most likely not have identification with them, or not feel comfortable showing it in connection with a syringe purchase, it is plausible that they will opt to not purchase a sterile syringe from pharmacies that require identification or signing of logs.

None of the DPDP pharmacies in LA or SF provided the requisite health information, and only 10 % of the pharmacies in SF offered disposal options. As one of the intents of SB1159 is to disseminate health information and disposal options in conjunction with NPSS, this finding illustrates another key issue related to implementation. Future research needs to examine reasons why pharmacies do not provide the mandated information and whether the omission of disposal options is indicative of pharmacies' reluctance to serve as disposal sites.

LIMITATIONS

Several limitations of this study are worth noting. We employed different RAs in each city, and even though all the RAs are women, those in Los Angeles are African American and the ones in San Francisco are White. Although other recent syringe purchase tests did not find racial²²⁻²⁴ or gender^{22,23} differences in successful purchase attempts, we did not set out to measure these differences so we cannot be sure how much this influenced the large differences we found between SF and LA.

CONCLUSION

Although SB1159 is a positive contribution to increase access to sterile syringes, it is imperative to examine how the policy change is being implemented at all levels. Based on the findings from this study, there is a clear disconnect between pharmacists' self-reports about their syringe sale practices²⁰ and the consumer experience. If pharmacies are not selling syringes when customers request them, the policy has not resulted in the anticipated outcome. If IDUs perceive that they are being viewed negatively during a syringe purchase encounter, they may no longer use pharmacies as a source for sterile syringes. The pharmacies' inconsistencies in disseminating the educational materials may result in missed opportunities to provide needed harm reduction information to IDUs. Similarly, since non-DPDP pharmacies are selling syringes, IDU customers are not receiving the health departments' educational materials.

Our findings suggest that more outreach needs to be conducted with pharmacists and pharmacy staff. This could include outreach by the health department, continuing education requirements that focus on providing NPSS and working with IDUs as customers, and policy statements from the California Board of Pharmacy and the California Pharmacists Association. To facilitate the syringe purchase experience, agencies will also want to reach out to IDUs to ensure they are aware of NPSS, know which pharmacies they can purchase syringes from, and provide education about how to ask for syringes.

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