

Expanded Syringe Access

An annotated bibliography of published articles and resource materials related to syringe access programs.

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January 2004

The Expanded Syringe Access bibliography is a resource guide of current literature prepared by the Office of Program Evaluation and Research, AIDS Institute, New York State Department of Health. The bibliography was developed by reviewing major journals of public health, medicine, sociology, psychology and education for articles and publications relating to syringe access and paraphernalia laws. For more information, contact Sharon Winters at skw02@health.state.ny.us.

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ESAP STUDIES

Abrahamson D. Federal law and syringe prescription and dispensing. Health Matrix. 2001;11(1):65-71.

This paper addresses the following two questions: (1) To what extent do federal controlled substances, food and drug, or paraphernalia laws regulate the individual physician's or pharmacist's discretion to provide sterile injection equipment for injection drug users (IDUs)?; and (2) How could federal officials use their legal and political authority to discourage physicians or pharmacists from acting? It concludes that, at present, federal law does not regulate physician prescription or pharmacist dispensing of syringes (pursuant to a valid prescription) to IDUs. Before federal officials could lawfully intervene in this area of medicine, new legislation expressly conferring power on federal authorities to regulate the physician prescription (and pharmacist dispensing) of syringes would need to be enacted. Nonetheless, as physicians in California and Oregon learned in recent years, federal officials might try to intimidate physicians if syringe prescription and dispensing were considered to be at odds with national drug law orthodoxy. The California and Oregon examples, however, also illustrate that when federal officials overstep their authority to control the practice of medicine at the state level, this overreaching can be rebuffed.

Amundsen EJ, Eskild A, Stigum H, et al. Legal access to needles and syringes/needle exchange programmes versus HIV counseling and testing to prevent transmission of HIV among intravenous drug users: A comparative study of Denmark, Norway and Sweden. European Journal of Public Health. 2003;13(3):252-258.

Countries have adopted different strategies to prevent the transmission of HIV among intravenous drug users. Legal access to needles and syringes/needle exchange programmes as part of such a strategy has been heavily debated. HIV counseling and testing has also been part of prevention strategies. The objective of this study was to discuss the effectiveness of legal access to needles and syringes/needle exchange programmes versus HIV counseling and testing among intravenous drug users (IDUs) as part of HIV prevention strategies. Differences in HIV prevention strategies in Denmark, Norway and Sweden among IDUs are described. Outcome variables of effectiveness were HIV incidence rates over time. These were estimated by back calculation methods from 1980 through 1996, using data from the national HIV and AIDS registers. A comparison of HIV prevention strategies in Denmark, Norway and Sweden suggests that a high level of HIV counseling and testing might be more effective than legal access to needles and syringes/needle exchange programmes. Sweden and Norway, with

higher levels of HIV counseling and testing, have had significantly lower incidence rates of HIV among IDUs than Denmark where there was legal access to needles and syringes and a lower level of HIV counseling and testing. In Sweden there was no legal access to drug injection equipment. Promotion and accessibility of HIV counseling and testing among intravenous drug users should be considered in countries where such a strategy is not adopted or has low priority.

Blumenthal WJ, Springer KW, Jones TS, et al. Pharmacy student knowledge, attitudes, and beliefs about selling syringes to injection drug users. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S34-S39.

The objective of this study was to explore pharmacy school education and pharmacy students' knowledge, attitudes, and beliefs about human immunodeficiency virus (HIV) and acquired immunodeficiency syndrome (AIDS), drug use, and syringe sales to injection drug users (IDUs). The authors designed a qualitative study of a convenience sample of pharmacy school students. Two focus groups and nine in-depth interviews were conducted about HIV/AIDS education and counseling, syringe sales to possible IDUs, and related pharmacy school education. Participants consisted of 19 Doctor of Pharmacy students, including 88 students in their third professional year and 11 in their fourth professional year. Most participants believed that they would benefit from more class time on HIV/AIDS topics, including AIDS treatment medications and HIV prevention. Most participants believed that the laws and regulations governing syringe sales in their state were vague, leaving syringe sale decisions to pharmacists' discretion. Nine study participants supported selling syringes to possible IDUs, five opposed it, and five were undecided or ambivalent. Classroom education focused on addiction to prescription drugs, with limited attention to illicit drug use. Pharmacy students have divided opinions about selling syringes to IDUs. To prepare students for helping their patients with drug-use problems, pharmacy schools should increase training about HIV/AIDS and addiction. Policy makers should consider changing laws and regulations of syringe sales to recognize prevention of blood-borne infections as a legitimate medical purpose for selling syringes to IDUs.

Buchanan D, Khoshnood K, Stopka T, et al. Ethical dilemmas created by the criminalization of status behaviors: Case examples from ethnographic field research with injection drug users. Health Education and Behavior. 2002;29(1):30-42.

The criminalization of behaviors such as the ingestion of certain mood-altering drugs creates ethical dilemmas for researchers studying those behaviors. The Syringe Access, Use, and Discard (SAUD) project is designed to uncover microcontextual factors that influence HIV and hepatitis risk behaviors of injection drug users. The article presents seven ethical dilemmas encountered

using ethnographic methods: issues involving syringe replacement at injection locales, risks of participants' arrest, potential disruptions in participants' supply routes, risks of research staff arrest, threats to the protection of confidentiality, issues surrounding informed consent in working with addicts, and the confiscation of potentially incriminating information by police. The article concludes with a discussion of the limitations of traditional ethical frameworks, such as utilitarianism, for resolving these dilemmas and recommends instead improving public health professionals' capacity for practical reasoning (phronesis) through the greater use of case studies in public health curricula.

Buchanan D, Shaw S, Teng W, et al. Neighborhood differences in patterns of syringe access, use, and discard among injection drug users: Implications for HIV outreach and prevention education. Journal of Urban Health. 2003;80(3):438-454.

The article presents results from the Syringe Access, Use, and Discard: context in AIDS Risk research project comparing two neighborhoods by (1) socioeconomic and demographic characteristics; (2) patterns of syringe access, use, and discard; and (3) encounters with a local human immunodeficiency virus/acquired immunodeficiency syndrome (HIV/AIDS) outreach project targeted to injection drug users (IDUs). The results show that IDUs in more economically advantaged neighborhoods were more likely to acquire syringes from a single source (rather than multiple sources), more likely to inject alone in their own residence (rather than public injection locales), and more likely to dispose of syringes in private garbage cans rather than alleys or dumpsters. These results are further associated with the likelihood of encountering street outreach workers, with IDUs in more affluent neighborhoods much less likely to have any such contacts. Based on the different patterns of access, use, and discard evident in each neighborhood, the results indicate that different and more carefully tailored local outreach and prevention strategies are urgently needed.

Buris S (ed.). *Deregulation of Hypodermic Needles and Syringes as a Public Health Measure: A Report on Emerging Policy and Law in the United States*. American Bar Association AIDS Coordinating Committee; Washington, DC. 2001.

The sharing of syringes is a significant threat to public health in the United States. Syringe sharing is directly linked to the spread of HIV and other infectious diseases among injection drug users (IDUs), their sex partners, and their children. In fact, researchers estimate that as many as half of new HIV infections are caused by the sharing of needles and syringes contaminated with HIV – directly due to injection drug use, through sexual contact with drug injectors, or birth to a mother who acquired HIV infection through these means. The sharing of syringes by IDUs is the leading source of HIV infection among women and children and a primary cause of transmission of the hepatitis viruses. Although in the past it was widely believed that drug users shared syringes by choice, as a social ritual it is

now known that syringe sharing is largely a result of a scarcity of syringes. The epidemics of HIV and other blood-borne diseases, and increasing evidence of the role of syringe regulations in the spread of disease, have confronted policymakers with a hard choice between new public health measures and traditional law enforcement strategies.

Burris S, Lurie P, Abrahamson D, et al. Physician prescribing of sterile injection equipment to prevent HIV infection: Time for action. Annals of Internal Medicine. 2000;133(3):218-226.

Injection drug users, their sex partners, and their children are at high risk for acquiring HIV infection and other bloodborne diseases. The risk for disease transmission in the United States is partly the result of restricted access to sterile injection equipment. Physicians and pharmacists can play an important role in providing syringe access by prescribing and dispensing syringes to patients who use injection drugs and cannot or will not enter drug treatment. Prescribing and dispensing injection equipment are ethical, clinically appropriate, and fully consistent with current public health guidelines on disease prevention. An analysis of the laws of the 50 U.S. states, the District of Columbia, and Puerto Rico finds that physicians in nearly all these jurisdictions may legally prescribe sterile injection equipment to prevent disease transmission among drug-using patients and that pharmacists in most states have a clear or reasonable legal basis for filling the prescriptions. Given these medical and legal findings, physicians may wish to take a larger role in improving access to sterile injection equipment by prescribing this equipment for their patients where this practice is legal, and by joining efforts to change the law where it poses a barrier.

Burris S, Strathdee SA, Vernick JS. Syringe access law in the United States: A state of the art assessment of law and policy, November 30, 2002. Center for Law and the Public's Health at Johns Hopkins and Georgetown Universities, Baltimore, MD. Available at: www.publichealthlaw.net.

The main focus of this paper is the body of law that regulates syringe sale, purchase, possession and disposal in the context of injection drug use in the United States, the District of Columbia, the Virgin Islands and Puerto Rico. This body of law includes: drug paraphernalia laws; syringe prescription laws and regulations; pharmacy regulations and miscellaneous syringe laws; needle exchange laws and regulations, and drug possession laws. The authors identified prior studies on syringe access law and its enforcement in the legal and public health literature. They updated and re-analyzed laws collected for earlier studies by one of the authors (Burris). The authors also systematically searched for bioethical commentary and public opinion data on syringe access issues. To place these findings in context, this review includes a description of the emergence of syringe access as a public health practice and object of policy debate. The review also summarizes and critically assesses the public health research on the health effects of syringe access rules and the collateral effects of policies enhancing

syringe access for IDUs. The discussion in these areas does not, however, constitute a systematic literature review.

Burris S, Vernick JS, Ditzler A, et al. The legality of selling or giving syringes to injection drug users. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S13-S18.

Laws limiting access to sterile syringes impede the public health goal that injection drug users (IDUs) use a new sterile syringe for every injection to reduce blood-borne disease transmission. The authors sought to determine the legality of selling or giving syringes to IDUs to prevent disease. They used standard legal research methods to identify and analyze laws and regulations influencing the distribution of syringes in the 50 states, the District of Columbia, Puerto Rico, and the Virgin Islands. A total of 51 jurisdictions had drug paraphernalia laws; 14 had syringe prescription laws or regulations; 11 required purchasers to show identification; 13 had legislation authorizing syringe exchange programs (SEPs). Since the beginning of the human immunodeficiency virus epidemic, 11 states have fully or partially deregulated syringe sales. Nonprescription retail syringe sales to IDUs for disease prevention purposes are clearly legal in 20 states, and have a reasonable claim to legality in 22 more. Sales to IDUs with a prescription are clearly illegal in only 3 jurisdictions. SEPs can operate legally in at least 21 states. Syringe access laws in most states may reasonably be interpreted to allow pharmacists to sell syringes to IDUs to prevent disease. In practice, however, unclear laws and pharmacist uncertainty as to their interpretation may constitute continuing barriers to syringe access for IDUs. A comprehensive public policy of ensuring syringe access for IDUs requires eliminating legal barriers to the sale, possession, and disposal of syringes, and educating pharmacists and law enforcement officials about the legality and public health importance of sterile syringe access.

Burris S, Welsh J, Ng M, et al. State syringe and drug possession laws potentially influencing safe syringe disposal by injection drug users. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S94-S98.

The objective of this study was to review state laws and judicial decisions for potential barriers to proper syringe disposal by injection drug users (IDUs). Using standard legal research methods, this study reviewed drug paraphernalia, syringe prescription, drug possession, and syringe exchange laws and relevant case decisions in 59 jurisdictions. Drug paraphernalia laws prohibit all possession of syringes by IDUs in 31 jurisdictions. Syringe prescription laws prohibit possession in 7 jurisdictions. In 53 jurisdictions, IDUs may be subject to prosecution for the possession of drug residue in used syringes. Only two states (HI, RI) have no legal barriers to safe syringe disposal by IDUs. Sixteen jurisdictions that have tried to expand syringe access for IDUs by authorizing SEPs or by deregulating pharmacy sale of syringes continue to have criminal law provisions that could pose barriers to proper disposal. IDUs are a significant

source of syringes disposed of outside the health care system. Involving IDUs in safe community sharps disposal programs is an important public health goal, but may be frustrated by legal barriers. Although this study looked only at law on the books, and not law as actually applied, ethnographic and survey research indicates that criminal laws do influence the syringe possession behavior of IDUs. The findings of this study suggest that syringe and drug possession laws could deter IDUs from participating in safe syringe disposal programs.

Caranci PF, Farmanian R, Goldman D, et al. Eureka – implementing safe community needle disposal in Rhode Island. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S109-S110.

In 1999 concerns about worker needle-stick injuries and plant operation interruptions at the state landfill and materials recovery facility (MRF) led to the development of Rhode Island's statewide residential needle disposal program, Eureka Sharps Disposal System ("Eureka"; called "SharpSmart" from 1999 to 2001). Rhode Island Resource Recovery Corporation (RIRRC) staff, who run the landfill and MRF, had observed an apparent substantial increase in the number of loose needles in residential trash and recyclable materials.

Centers for Disease Control and Prevention. Access to sterile syringes, June 2000. Available at: www.cdc.gov/idu/facts/aed_idu_acc.pdf.

Since 1981 688,200 cases of AIDS have been reported to the Centers for Disease Control and Prevention (CDC). Between 650,000 and 900,000 Americans are now living with HIV and about 40,000 new infections occur every year. Between 1 and 1.25 million Americans are chronically infected with hepatitis B; nearly 3 million Americans are chronically infected with hepatitis C. Injection drug use accounts for about one-third of all AIDS cases and one-half of hepatitis C cases. Injection drug users (IDUs) become infected and transmit the viruses to others through sharing contaminated syringes and other drug injection equipment and through high-risk sexual behaviors. Women who become infected with HIV through sharing needles or having sex with an infected IDU can also transmit the virus to their babies before or during birth or through breastfeeding. To effectively reduce the transmission of HIV and other blood-borne infections, programs must consider a comprehensive approach to working with IDUs. Such an approach includes a range of pragmatic strategies that address both drug use and sexual risk behaviors. One of the most important of these strategies is ensuring that IDUs who cannot or will not stop injecting drugs have access to sterile syringes. The U.S. Public Health Service and several institutions and governmental bodies have recommended use of sterile syringes as an important risk reduction strategy. In supporting this position, the Institute of Medicine of the National Academy of Sciences has said: "For injection drug users who cannot or will not stop injecting drugs, the once-only use of sterile needles and syringes remains the safest, most effective approach for limiting HIV transmission."

Centers for Disease Control and Prevention. Impact of new legislation on needle and syringe purchase and possession – Connecticut, 1992. Morbidity and Mortality Weekly Report. 1993;42(8):145-148.

Human immunodeficiency virus (HIV) and other bloodborne pathogens are transmitted among injecting-drug users (IDUs) through the reuse and sharing of contaminated needles and syringes (NSs) (1). Of the 689 acquired immunodeficiency syndrome (AIDS) cases reported in Connecticut in 1992, 413 (60%) were associated with injecting-drug use. To help reduce IDUs' use of contaminated NSs, Connecticut enacted laws effective July 1, 1992, that allow the purchase without a prescription of up to 10 NSs at one time in pharmacies and the possession of up to 10 clean NSs. Before this date, purchase and possession of NSs without a prescription had been illegal in Connecticut. This report presents preliminary information from the first 5 months of an ongoing evaluation to determine whether the new laws affected pharmacy-based NS sales, IDUs' reported knowledge of the laws and places to obtain NSs, and law enforcement officers' risk for needlestick injuries.

Centers for Disease Control and Prevention. Physician prescription of sterile syringes to injection drug users, January 2002. Available at: www.cdc.gov/idu/facts/Physician.htm.

Injection drug users (IDUs) who continue to inject can substantially reduce their risk of acquiring or transmitting HIV, hepatitis B and C, and other blood-borne infections if they use sterile syringes. Physician prescription of syringes is one way to improve IDUs' access to sterile injection equipment. It also can help IDUs obtain medical services and substance abuse treatment.

Centers for Disease Control and Prevention. Policy efforts to increase IDU's access to sterile syringes, January 2002. Available at: www.cdc.gov/idu/facts/aed_idu_pol.htm.

Injection drug use is linked to almost one-third of all AIDS cases and one-half of hepatitis C cases. Injection drug users (IDUs) become infected and transmit the viruses to others through sharing contaminated syringes and other drug injection equipment and through high-risk sexual behaviors. Women who become infected with HIV through sharing needles or having sex with an infected IDU can also transmit the virus to their babies before or during birth or through breastfeeding. To effectively reduce the transmission of HIV and other blood-borne infections, programs must consider a comprehensive approach to working with IDUs. Such an approach incorporates a range of pragmatic strategies that address both drug use and sexual risk behaviors. One of the most important of these strategies is ensuring that IDUs who cannot or will not stop injecting drugs have access to sterile syringes. This strategy supports the "one-time-only use of sterile syringes" recommendation of several institutions and governmental bodies, including the U.S. Public Health Service. IDUs share syringes and injection equipment for

multiple reasons, but primarily because of legal and regulatory barriers limiting access to sterile syringes and laws making possession of syringes a crime.

Coffin PO, Ahern J, Dorris S, et al. More pharmacists in high-risk neighborhoods of New York City support selling syringes to injection drug users. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S62-S67.

The objective of this study was to document changes in pharmacists' opinions and practices from the time of passage to implementation of a law permitting selling syringes without a prescription (the Expanded Syringe Access Demonstration Program [ESAP]). The authors designed two cross-sectional randomized telephone surveys. These surveys were conducted with pharmacists from high-risk neighborhoods of New York City. The authors completed 130 surveys at baseline (BL) in August 2000, from neighborhoods with high numbers of injection-related acquired immunodeficiency syndrome (AIDS) cases and 231 surveys at law change (LC) in January 2001. To correct for differences in sampling, the authors limited the analysis to pharmacies in ZIP codes represented in both samples and weighted results to adjust for the median income level of those postal codes. From BL (n=83) to LC (n=84), law awareness increased (43% to 90%, $P<.001$), as did personal support for selling syringes without a prescription to IDUs (36% to 63%, $P<.001$). From BL to LC, a larger proportion of supporters believed that selling syringes was an important part of human immunodeficiency virus (HIV) prevention and would help decrease HIV transmission, and a smaller proportion was concerned about customer discomfort and increased drug use. A total of 40% of respondents were ESAP registered at LC but registration was not associated with support for selling syringes to IDUs. Support for ESAP among pharmacists increased in high-risk neighborhoods as the program was implemented. The finding that some pharmacists were ESAP registered but did not support selling syringes to IDUs and others were supportive, but not ESAP registered, may have program implications.

Coffin PO, Linas BP, Factor SH, et al. New York City pharmacists' attitudes toward sale of needles/syringes to injection drug users before implementation of law expanding syringe access. Journal of Urban Health. 2000;77(4):781-793.

In May 2000, New York State passed legislation permitting the sale, purchase, and possession of up to 10 needles and syringes (hereafter "syringes") without a prescription, intended to reduce blood-borne pathogen transmission among injection drug users (IDUs). To obtain baseline data on pharmacists' attitudes and practices related to human immunodeficiency virus (HIV) prevention and IDUs, a telephone survey was administered to 130 pharmacists systematically selected in New York City. Less than half of pharmacists were aware of the new law; 49.6% were willing to or supported providing nonprescription sales of syringes to IDUs. Pharmacists in support tended to be less likely to consider customer appearance

“very important.” Managing and supervising pharmacists were more likely than staff pharmacists to support syringe sales to IDUs. Managing and supervising pharmacists who stocked packs of 10 syringes and personal sharps disposal containers, pharmacists who supported syringe exchange in the pharmacy, and pharmacists who were willing to sell syringes to diabetics without a prescription were more likely to support syringe sales to IDUs. Syringe disposal was a prominent concern among all pharmacists. Those not in support of syringe sales to IDUs tended to be more likely to believe the practice would increase drug use. These data suggest the need for initiatives to address concerns about syringe disposal and tailored continuing education classes for pharmacists on HIV and viral hepatitis prevention among IDUs.

Compton WM III, Cottler LB, Decker SH, et al. Legal needle buying in St. Louis. American Journal of Public Health. 1992;82(4):595-596.

This study sought to determine if and why barriers to the over-the-counter purchase of syringes in the St. Louis metropolitan area might exist, given that no ordinance prohibits such a sale there. Two male research assistants (one African American, one white) approached 33 of the area’s pharmacies to buy syringes. In 14 of those pharmacies, either the purchase was refused or the minimum number of syringes that could be bought was so large (at least 100) that the sale was not practical. Racial bias in rates of refusal and implications for prohibiting or restricting legal availability of syringes are discussed.

Cotton-Oldenburg NU, Carr P, DeBoer JM, et al. Impact of pharmacy-based syringe access on injection practices among injecting drug users in Minnesota, 1998 to 1999. Journal of Acquired Immune Deficiency Syndromes. 2001;27(2):183-192.

In Minnesota, state legislation, enacted July 1998, provided for voluntary pharmacy sales of syringes/needles without a prescription for an accompanying drug. The goal was to stem HIV transmission among injecting drug users (IDUs) by providing greater access to sterile syringes. The authors used a pre-post evaluation design to investigate the impact of less restrictive syringe/possession laws on IDUs’ HIV-related syringe practices. Independent cross-sectional samples of IDUs were recruited from street sites and a correctional facility immediately before and 1 year after enactment of the laws. Of the 671 IDUs interviewed, 570 (270 prelegislation and 300 postlegislation) had injected at least once in the 30 days before the interview. IDUs were more likely to purchase syringes at pharmacies after enactment of the laws (odds ratio [OR], 2.66; 95% confidence interval [CI], 1.83-3.85), yet did not change their behaviors regarding carrying unused syringes (OR, 0.90; 95% CI, 0.63-1.28). After adjusting for speedball injection and criminal history, syringe sharing decreased among IDUs (adjusted OR, 0.67; 95% CI, 0.45-1.00) yet syringe reuse remained the same (adjusted OR, 0.67; 95% CI, 0.40-1.11). Safe disposal of syringes did not differ significantly across the sampling periods (adjusted OR, 1.32; 95% CI, 0.84-2.06).

Increased access to pharmacy syringes offers a first step at reducing HIV-related syringe practices but must be coupled with strong HIV prevention messages, drug treatment referrals, and safe syringe disposal options.

Derflinger BB, Druckenmiller JK. How Wisconsin promotes household sharps collection. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S111-S112.

An estimated 2 to 3 billion syringes annually are generated outside of health care settings in the United States. Discovery of needles and syringes (hereafter referred to as “sharps”) on beaches and other public places have led to widespread concern about sharps in the environment and extensive laws and regulations of sharps generated in health care settings. However, sharps discarded in municipal waste have largely been ignored. Sharps in waste can injure waste handlers and recycling facility workers. Even the suspected presence of sharps can prevent recyclable materials from being recycled. In the early 1990s, Wisconsin’s health care providers, waste handlers, environmentalists, and state government collaborated to write rules that both require and enable all generators to dispose of sharps safely. The goals were as follows: (1) to reduce risks of injury and disease; (2) to include all who generate or encounter small amounts of sharps, including the public, waste handlers, injection drug users, pet owners, farmers, and small businesses; and (3) to foster sharps collection programs, which are safe, convenient, inexpensive, flexible, and anonymous.

Des Jarlais DC, McKnight C, Friedman P. Legal syringe purchases by injection drug users, Brooklyn and Queens, New York City, 2000-2001. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S73-S76.

The objective of this study was to assess preliminary results of the Expanded Syringe Access Demonstration Program (ESAP) in New York City. Temporal trends of pharmacy use among injection drug users (IDUs) in Brooklyn and Queens were analyzed from December 2000 through December 2001. Participants consisted of IDUs from Brooklyn and Queens, New York City. Of the 1,072 IDUs interviewed from December 2000 through December 2001, the majority were daily heroin injectors, but there was also substantial speedball and cocaine injection. There was a clear increase over time in both the percentage of subjects who attempted to purchase syringes in pharmacies and in the percentage who successfully purchased syringes. Among IDUs interviewed 4 or more months after ESAP began, large majorities of those who attempted to purchase syringes were successful in doing so. No differences in use of ESAP by IDUs were identified in Brooklyn versus Queens: 27% of IDUs interviewed in Queens reported that they had attempted to purchase syringes in pharmacies versus 28% in Brooklyn. Persons who reported injecting on a daily or more frequent basis were more likely to have attempted pharmacy purchases than persons who reported injecting less frequently, 32% versus 21%. The ESAP program has led

to an increase in the use of pharmacies as sources of sterile injection equipment among IDUs in New York City. The extent to which pharmacies become an important source of sterile injection equipment and the effect of legal pharmacy sales on risk behaviors for human immunodeficiency virus (HIV) infection remain to be determined.

Dierks D, Miller D. Community sharps disposal program in Council Bluffs, Iowa. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S117-S119.

An alarming increase in needle sightings and six needle-stick injuries in autumn 1991 and spring 1992 in Council Bluffs, Iowa, led its contracted solid waste handling company, Browning Ferris Industries, Inc. (BFI), to seek help from the Council Bluffs Health Department (CBHD). BFI requested that CBHD establish a community sharps disposal program to reduce the number of used needles, syringes, and other sharps (hereafter referred to as “syringes”) entering the residential solid waste stream. In collaboration with BFI and local pharmacies, and with financial support from a local foundation, the Dodge Foundation, CBHD designed and implemented the Council Bluffs Sharps Disposal Program. Initiated in May 1992, the program distributed free of charge, wide-mouth, 1-gallon plastic bottles with screw-on lids to be used as containers for used syringes. Initially, new containers were distributed to the local pharmacies by health department employees. Local pharmacies and the CBHD provided the containers to patients whose medical care required injections. A pamphlet describing the program was given to anyone receiving a container. When a container was filled, residents were to return it, in exchange for a new container, to the CBHD office or to one of several participating local pharmacies. CBHD collected filled containers from pharmacies and consolidated the containers for pickup by a medical waste transportation company (Bio-Hazardous). BFI, the city’s solid waste collection contractor at that time, paid the costs of transporting and treating the syringes as infectious waste.

Drda B, Gomez J, Conroy R, et al. San Francisco safe needle disposal program, 1991-2001. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2).S115-S116.

In the late 1980s, the San Francisco Department of Health (SFDH) received multiple reports of discoveries of discarded needles and syringes. Although the large majority involved residential trash and trash workers, needles were found in San Francisco parks, mailboxes, and street excavations. Because the San Francisco syringe exchange program (SEP) was assumed to provide disposal services to injection drug users (IDUs), SFDH staff worked to set up a disposal scheme for people with diabetes and other non-IDU needle users. Over a period of about 2 years, SFDH staff brought together diabetes organizations, the solid waste haulers, the major pharmacy chains, syringe manufacturers, and medical waste disposal companies. As a result, in 1991 the San Francisco Safe Needle

Disposal Program (SFSNDP) was created to provide free, safe, and convenient needle disposal to San Francisco residents to reduce the risk that garbage workers and city workers would be injured or infected by used needles. SFSNDP has become one of the largest community-based programs to keep needles, syringes, and other sharps out of residential solid waste. Multiple community groups including the San Francisco garbage companies, community pharmacies, and local health officials contribute to sustaining SFSNDP.

Farley TA, Nicolai LM, Billeter M, et al. Attitudes and practices of pharmacy managers regarding needle sales to injection drug users. Journal of the American Pharmaceutical Association. 1999;39:23-26.

The objective of this study was to determine Louisiana pharmacy managers' attitudes and practices regarding needle and syringe sales to suspected injection drug users (IDUs) without prescriptions, and to assess which factors affect their decisions to sell nonprescription needles and syringes. The authors designed a cross-sectional mail survey and distributed them to pharmacy managers with active permits not affiliated with large hospitals or institutions. Approximately one-fourth of the respondents reported that they had sold needles and syringes to suspected IDUs without a prescription. The most frequently cited reason for not selling was fear of increasing drug use; however, many of these pharmacists reported that they would conduct a sale if the customer had a referral from an agency or clinic. Pharmacists can assist in the prevention of HIV transmission through nonprescription needle sales to IDUs. This role can be promoted through education of pharmacists and development of referral systems for IDUs.

Finkelstein R, Tiger R, Greenwald R, et al. Pharmacy syringe sale practices during the first year of expanded syringe availability in New York City (2001-2002). Journal of the American Pharmaceutical Association. 2002; 42(Suppl. 2):S83-S87.

The objective of this study was to assess the role that customer characteristics, including race, age, and gender and pharmacy characteristics, including type and location, play on actual syringe-selling practice by pharmacies registered to sell syringes under the New York State Expanded Syringe Access Demonstration Program (ESAP). Eighty-nine syringe-purchasing visits were made in randomly selected ESAP-registered pharmacies, stratified by chain and independent status. Visits were conducted in 14 New York City neighborhoods. Three neighborhoods (two with high need for human immunodeficiency virus [HIV] prevention services and one with low need) were selected in each of New York City's five boroughs (except Staten Island, where only two neighborhoods were visited, as only one exists with high need for HIV prevention services.) Visits were conducted by syringe-purchasing testers with different demographic characteristics, including age (≤ 25 and >25), race/ethnicity (white, black, Latino), and gender (men, women). Testers were able to purchase syringes in 69% of visits. Tester race, age, and gender did not significantly affect sales of syringe-

selling practices. Location of pharmacy was statistically significant, with only 33% of the registered pharmacies selling syringes in the Bronx, but 67% to 89% selling in other four boroughs. ESAP has been widely implemented among registered pharmacies in four of New York City's five boroughs. The program's effectiveness could be enhanced through pharmacy-based efforts focused broadly on the ESAP goal of preventing the transmission of HIV and other blood-borne infections among injection drug users.

Friedman SR, Perlis T, DesJarlais DC. Laws prohibiting over-the-counter syringe sales to injection drug users: Relations to population density, HIV prevalence, and HIV incidence. American Journal of Public Health. 2001;91(5):791-793.

This study sought to assess relations of laws prohibiting over-the-counter syringe sales (anti-OTC laws) to population prevalence of injection drug users and HIV prevalence or incidence among 96 US metropolitan areas. A cross-sectional analysis was used. Metropolitan areas with anti-OTC laws had a higher mean HIV prevalence (13.8% vs. 6.7%) than other metropolitan areas (pseudo- $P < .001$). In 83 metropolitan areas with HVI prevalence of less than 20%, anti-OTC laws were associated with HIV incidence rates of 1% or greater (pseudo- $P < .001$). Population proportions of injection drug users did not vary by presence of anti-OTC laws. Anti-OTC laws are not associated with lower population proportions of injection drug users. Laws restricting syringe access are associated with HIV transmission and should be repealed.

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. Journal of the American Pharmaceutical Association. 2002;42(Suppl 2):S77-S82.

The objective of this study was to evaluate the New York State Expanded Syringe Access Demonstration Program (ESAP) through injection drug user (IDU) surveys, discarded needles and syringe studies, and pharmacy sales and experiences surveys. In Harlem, New York City, risk surveys among street-recruited IDUs, needle/syringe street counts on 27 systematically sampled city blocks, and Harlem pharmacist reports of sales and experiences. The authors measured the number and types of IDU syringe sources, block mean counts of discarded needles and syringes, level of pharmacy nonprescription syringe sales (NPSS), and pharmacists' experiences. Comparing 209 pre-ESAP with 396 post-ESAP IDUs, pharmacies as a primary syringe source increased: 3.4% to 5.3% ($P < .001$, and ever pharmacy use increased: 4.9% to 12.5% ($P < .001$), respectively. Compared with pre-ESAP IDUs, post-ESAP IDUs tended to be younger and more often black. Harlem pharmacy participation in ESAP increased considerably from March 1, 2001, to March 1, 2002, 49% to 79%, respectively. Among three Harlem pharmacies, there was a modest increase in NPSS; pharmacists reported no problems, and no discarded needles and syringes were

observed in pharmacy areas. In the three pharmacies, the proportion of syringe sales that were NPSS was 46% (110 to 240 NPSS/month), 3% (25 to 90 NPSS/month), and 0%. The mean ratios of needles/syringes to background trash have not increased in Harlem since ESAP began. To date, no evidence of harmful effects (discarded needles/syringes, pharmacy altercations) resulting from ESAP were observed. While NPSS have increased in Harlem, pharmacy use among IDUs remains low. In Harlem, efforts are underway to increase ESAP awareness and reduce socio-environmental barriers to ESAP.

Ginley B, Patterson SL, Nickerson N, et al. Maine board of pharmacy strongly supports unrestricted sale of sterile syringes. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S24-S25.

The Portland Needle Exchange Program (PNE) is the only syringe exchange program (SEP) in Maine. Although Maine law allows anyone over 18 years of age to buy syringes without a prescription and without showing identification, during summer 1999, several PNE participants complained that they had not been able to purchase syringes from pharmacies. PNE participants reported that pharmacists had either refused to sell syringes or discouraged persons asking to purchase syringes by requiring photo identification and/or a signature. The state of Maine has taken several steps to improve public access to sterile syringes to prevent the transmission of human immunodeficiency virus (HIV) and other blood-borne diseases. In 1993 Public Law 394 removed the prescription requirement for syringe sales. In 1997 legislation was passed legalizing syringe exchange and amending the Maine drug paraphernalia law to legalize possession of as many as 10 syringes. The Maine SEP law requires the SEP to receive one used syringe for every new syringe provided to a SEP participant (“one-for-one exchange”). To use a Maine SEP, a participant must obtain the initial syringes to turn in (“starter” syringes) from a source other than the SEP. Pharmacies are the only legal source of “starter” syringes.

Glanz A, Byrne C, Jackson P. Role of community pharmacies in prevention of AIDS among injecting drug misusers: Findings of a survey in England and Wales. British Medical Journal. 1989;299:1076-1079.

The objective of this study was to determine the current and potential roles of community pharmacists in the prevention of AIDS among misusers of injected drugs. The authors designed a cross sectional postal survey of a one in four random sample of registered pharmacies in England and Wales. This project was conducted in the addiction research unit of the Institute of Psychiatry, London. Participants consisted of 2,469 community pharmacies in the 15 regional health authorities in England and Wales. The authors measured the willingness of pharmacists to sell injecting equipment to known or suspected misusers of drugs; pharmacists' attitudes to syringe exchange schemes, keeping a “sharps” box for use by misusers of drugs, and offering face to face advice and leaflets; and opinions of community pharmacists on their role in AIDS prevention and drug

misuse. One thousand nine hundred and forty-six questionnaires were returned, representing a response rate of 79%. This fell short of the target of one in four pharmacies in each family practitioner committee area in England and Wales, and total numbers of respondents were therefore weighted in inverse proportion to the response rate in each area. The findings disclosed a substantial demand for injecting equipment by drug misusers. After weighting of numbers of respondents an estimated 676 of 2,434 pharmacies were currently selling injecting equipment and 65 of 2,415 (3%) were participating in local syringe exchange schemes; only 94 of 2,410 pharmacies (4%) had a sharps box for used equipment. There was a high degree of concern among pharmacists about particular consequences of drug misusers visiting their premises, along with a widespread acceptance that the community pharmacist had an important part to play. Promoting the participation of community pharmacists in the prevention of AIDS among misusers of injected drugs is a viable policy, but several problems would need to be overcome before it was implemented.

Gleghorn AA, Gee G, Vlahov D. Pharmacists' attitudes about pharmacy sale of needles/syringes and needle exchange programs in a city without needle/syringe prescription laws. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1998;18(Suppl. 1):S89-S93.

The authors assessed pharmacists' practices for needle and syringe (NS) sales and their attitudes toward a needle exchange program through a telephone survey of 75 randomly selected pharmacies in Baltimore, Maryland, where possession of drug paraphernalia is illegal but where NS can be purchased without a prescription. Pharmacists' (n = 46) procedures for NS sales included asking for picture identification (54%), requiring a prescription (34%), or requiring a diabetic identification (DID, 34%) for NS purchase; multiple responses were allowed. The median number of prescription and nonprescription NS sold per month was 950. Most (86.6%) pharmacists reported selling NS without prescriptions at their discretion. Pharmacists sold a median of 16 nonprescription NS per month. Pharmacists who required prescriptions or DID (56.5%) sold nonprescription NS significantly less often than those who did not require prescriptions or DID (p=.007). Most pharmacists (87%) were aware of the needle exchange program, 78.3% supported the program, and 67.4% supported selling nonprescription NS in pharmacies. Although there was no difference in anticipated effects of needle exchange or in support for needle exchange between pharmacists who did or did not require prescriptions, DID, or both, pharmacists who did require these items were significantly less likely to support pharmacy sales of nonprescription NS than pharmacists with less restrictive sales policies (p=.04). Although most pharmacists surveyed supported access to sterile NS by injection drug users through a needle exchange program, there was a diversity of approaches to nonprescription NS sales among pharmacists in a city that does not require prescriptions for access to sterile NS. Most supported nonpharmacy needle exchange programs, and more than one half limited injection drug users' access to NS through restrictive sales practices. To reduce injection drug users'

exposure to HIV, pharmacists should be educated about HIV prevention and injection drug use and be included in development of HIV prevention programs, including legal pharmacy NS sales.

Gostin LO. The legal environment impeding access to sterile syringes and needles: The conflict between law enforcement and public health. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1998;18(Suppl. 1):S60-S70.

This article examines the legal environment for programs to prevent transmission of HIV and other blood-borne diseases among injection drug users (IDUs). Cost-effective public health programs often have questionable legal authority, and health professionals, community activists, and IDUs may be subject to arrest and prosecution. Legal impediments to the sale and distribution of syringes exist in every state: 47 states have drug paraphernalia statutes, 8 states have syringe prescription statutes, and 23 states have pharmacy regulations or practice guidelines. The Mail Order Drug Paraphernalia Act permits federal enforcement against individuals who knowingly sell or distribute syringes to IDUs. Congress has prohibited the use of federal funds for syringe exchange programs (SEPs). Legal restrictions on access to sterile syringes present formidable obstacles to public health prevention. These restrictions render it much more difficult for pharmacists to sell syringes over the counter or for physicians to prescribe syringes, create a chilling effect on IDUs seeking to comply with medical advice and protect themselves and their partners from disease, and place significant obstacles on the lawful establishment and operation of SEPs. Public health authorities have only sometimes creatively circumvented legal restrictions through judicial declarations of lawfulness, municipal declarations of a “state of emergency,” and by use of the “necessity” defense. The author recommends repeal of syringe prescription statutes and reform of drug paraphernalia statutes and pharmacy regulations.

Gostin LO, Lazzarini Z, Jones S, et al. Prevention of HIV/AIDS and other blood-borne diseases among injection drug users: A national survey on the regulation of syringes and needles. Journal of the American Medical Association. 1997;277(1):53-62.

According to the authors’ abstract of an article published in JAMA – Journal of the American Medical Association, they report the results of a survey of laws and regulations governing the sale and possession of needles and syringes in the United States and its territories and discuss legal and public health proposals to increase the availability of sterile syringes, as a human immunodeficiency virus (HIV) transmission prevention measure, for persons who continue to inject drugs. Every state, the District of Columbia (DC), and the Virgin Islands (VI) have enacted state or local laws or regulations that restrict the sale, distribution, or possession of syringes. Drug paraphernalia laws prohibiting the sale, distribution, and/or possession of syringes known to be used to introduce illicit drugs into the

body exist in 47 states, DC and VI. Syringe prescription laws prohibiting the sale, distribution, and possession of syringes without a valid medical prescription exist in 8 states and VI. Pharmacy regulations or practice guidelines restrict access to syringes in 23 states. The authors discuss the following legal and public health approaches to improve the availability of sterile syringes to prevent blood-borne disease among injection drug users: (1) clarify the legitimate medical purpose of sterile syringes for the prevention of HIV and other blood-borne infections; (2) modify drug paraphernalia laws to exclude syringes; (3) repeal syringe prescription laws; (4) repeal pharmacy regulations and practice guidelines restricting the sale of sterile syringes; (5) promote professional training of pharmacists, other health professionals, and law enforcement officers about the prevention of blood-borne infections; (6) permit local discretion in establishing syringe exchange programs; and (7) design community programs for safe syringe disposal.

Groseclose SL, Weinstein B, Jones TS, et al. Impact of increased legal access to needles and syringes on practices of injecting-drug users and police officers – Connecticut, 1992-1993. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1995;10(1):82-89.

To determine whether the simultaneous, partial repeal of needle prescription and drug paraphernalia laws in Connecticut affected purchasing and usage of needles and syringes (syringes) by injecting-drug users (IDUs) and risk of needlestick injuries to police officers, the authors conducted two serial cross-sectional surveys with IDUs recruited in drug treatment centers, correctional facilities, and health department settings. Reports of needlestick injuries among Hartford police officers were reviewed before and after the new laws. Among IDUs who reported ever sharing a syringe, syringe-sharing decreased after the new laws (52% before vs. 31% after; $p = 0.02$). Fewer IDUs reported purchasing syringes on the street after the new laws (74% before vs. 28% after; $p < 0.0001$). More IDUs reported purchasing syringes from a pharmacy after the new laws (19% before vs. 78% after; $p < 0.0001$). Eight to eleven months after the new laws were enacted, over two thirds (91 of 134) of active IDUs interviewed were aware of both new laws. Needlestick injury rates among Hartford police officers were lower after the new laws (six injuries in 1,007 drug-related arrests for 6-month period before new laws vs. two in 1,032 arrests for 6-month period after new laws). The changes in Connecticut laws were associated with decreases in self-reported syringe-sharing and increases in purchasing by IDUs of sterile syringes from reliable sources, suggesting that the simultaneous repeal of both prescription and paraphernalia laws is an important HIV prevention strategy.

Ingold FR, Ingold S. The effects of the liberalization of syringe sales on the behavior of intravenous drug users in France. Bulletin on Narcotics. 1989;1(1):67-81.

A study to evaluate the effects of the liberalization of syringe sales in France, which was carried out in 1987 and 1988 in Paris and at Crteil, Maisons-Alfort, Metz, Bordeaux and Marseille by a research team of the Institute for Epidemiological Research on Drug Dependence (IREP) in Paris, included two samples of intravenous users of drugs, primarily heroin: a street sample of 157 persons and a sample of 123 persons undergoing treatment for drug addiction at in-patient facilities. The study, based on interviews, showed that the emergence of acquired immunodeficiency syndrome (AIDS) had brought about a radical change in the environment of intravenous drug users, of whom approximately 40 per cent were infected with the human immunodeficiency virus (HIV). Liberalized syringe sales had an obvious effect on the behaviour of intravenous drug users: approximately half of them did not share syringes and purchased them at pharmacies, while the rest continued sharing syringes in a variety of ways. The authors concluded that the decision to make syringes freely available for sale was not, by itself, sufficient to cope with the syringe-sharing problem and that, in addition, appropriate educational programmes, personalized and geared to each subject's special circumstances, needed to be provided.

Junge B, Vlahov D, Riley E, et al. Pharmacy access to sterile syringes for injection drug users: Attitudes of participants in a syringe exchange program. Journal of the American Pharmaceutical Association. 1999; 39(1):17-22.

The objective of this study was to examine attitudes of participants of a van-based syringe exchange program (SEP) toward the hypothetical prospect of pharmacy-based syringe access. The authors designed a one-time, cross-sectional survey and conducted face to face interviews with 206 injection drug users who participate in the Baltimore syringe exchange program. The sample was 67% men, 95% African American, and 95% unemployed; mean age was 39.8 years. A total of 19% of respondents had bought syringes at a pharmacy during the prior six months. Some 37% reported having been turned down when asking for syringes at a pharmacy, most commonly due to lack of identification to prove diabetic status (50%). If legal restrictions were lifted, 92% of respondents would obtain syringes from pharmacies, and would be willing to pay a mean price of \$0.80 (median = \$1.00) per syringe. Women were more likely than men to report the intention to switch from van-based SEP to pharmacy (57% versus 38%, $p = .045$). If current legal restrictions were lifted, pharmacies would be a viable syringe source appealing particularly to women, suggesting gender-specific access issues that should be addressed. The per-syringe price that study participants would be willing to pay exceeds typical retail prices, suggesting that pharmacists could charge enough per syringe to recoup operational costs.

Kassler W, Ayotte D. Deregulation of syringe sale and possession in New Hampshire, 1991-2000. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S19-S20.

On April 20, 2000, two decades into the human immunodeficiency virus (HIV) epidemic and nearly a decade after it was first introduced, the New Hampshire senate passed a bill allowing drug users to buy and possess syringes without a prescription. This legislation had been repeatedly introduced since 1991 and on two occasions was passed by the house and senate but vetoed by previous governors. In 2000 Governor Jeanne Shaheen signed the bill.

Keyl PM, Gruskin L, Casano K, et al. Community support for needle exchange programs and pharmacy sale of syringes: A household survey in Baltimore, Maryland. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1998;18(Suppl. 1):S82-S88.

In October 1995, community attitudes toward needle exchange programs were assessed Baltimore, Maryland. Household interviews were conducted with a random sample of residents living within six contiguous census tracts. Multivariate logistic regression was used to determine which factors were independently associated with acceptance of needle exchange programs. Of 274 eligible respondents contacted, 138 (50%) completed the interview. Respondents were statistically similar to the 1990 census population by income but were more likely to be female, black, between the ages of 35 and 44 years, and to have attended college or be a college graduate. Although 72% of respondents thought needle exchange programs would attract injection drug users to the neighborhood, 65% favored needle exchange, and 47% favored selling needles in a pharmacy without a prescription. Factors independently associated with acceptance of needle exchange programs included the perceptions that needle exchange programs decrease the number of discarded needles on the street, that needle exchange programs do not encourage a person's injection drug use, and that needle exchange programs decrease HIV incidence. Despite concern about attracting injection drug users to the neighborhood, support for needle exchange programs was high.

Klein SJ, Birkhead GS, Candelas AR. Expanded syringe access demonstration program in New York State: An intervention to prevent HIV/AIDS transmission. Journal of Urban Health. 2000;77(4):762-767.

The contributions of injection drug use to the domestic human immunodeficiency virus (HIV) epidemic have been well documented. In 1996, the Centers for Disease Control and Prevention concluded that half of all new HIV infections in the US occurred among injection drug users (IDUs). The intersection of HIV and injection drug use has raised unprecedented challenges to urban health. The estimated number of IDUs in New York City alone exceeds 200,000. In New York State, injection drug use has been a driving force of the HIV epidemic since

the mid-1980's. In 1987, the percentage of reported acquired immunodeficiency syndrome (AIDS) cases in New York State as reported to the New York State AIDS Case Registry attributable to injection drug use was 40%. An additional 4.8% of cases occurred among men reporting male homosexual/bisexual contact and injection drug use. Together, these two risk categories – injection drug use and male homosexual/bisexual contact with an IDU—surpassed those with the reported risk of the male homosexual/bisexual contact (43.5%). In 1988, more cases were attributed to injection drug use (44.8%) alone than to male homosexual/bisexual contact (38.5%). Although the proportional contribution of injection drug use to the New York State epidemic began to decline in 1992, in 1999 this risk category alone still accounted for almost one-third of new AIDS cases in New York State.

Klein SJ, Candelas AR, Birkhead GS. Mobilizing public and private partners to support New York's Expanded Syringe Access Demonstration Program. Journal of the American Pharmaceutical Association. 2002; 42(Suppl. 2):S28-S29.

Improved access to hypodermic needles and syringes (hereafter referred to as “syringes”) through pharmacy sales without a prescription can help prevent blood-borne disease transmission among injection drug users (IDUs), their sex partners, and their children, as well as others who self-inject medications. On January 1, 2001, the Expanded Syringe Access Demonstration Program (ESAP) went into effect in New York State. ESAP offered to register pharmacies, health care facilities, and health care practitioners with the New York State Department of Health (NYSDOH) to sell or furnish up to 10 syringes without a prescription to persons at least 18 years of age. ESAP was authorized through March 31, 2003, as a demonstration program. The legislation required an extensive independent evaluation. Beginning in 2000, NYSDOH developed and implemented extensive outreach to promote and explain ESAP to secure the cooperation of agencies and organizations that could maximize ESAP's success. This report provides a brief description of outreach to some key organizations.

Klein SJ, Estel GR, Candelas AR, et al. Promoting safe syringe disposal goes “hand in hand” with expanded syringe access in New York State. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S105-S107.

Safe disposal of hypodermic needles and syringes (hereafter referred to as “syringes”) used outside of health care settings is a critical public health concern for which options are limited in many communities. Safe disposal options for people who need home health care, people who inject insulin, and people who are injection drug users (IDUs) are often inadequate. Access to sharps containers for syringe disposal may be a barrier for persons with limited incomes. When the New York State Legislature authorized sale of syringes without a prescription as a demonstration program to prevent blood-borne pathogen transmission, it emphasized proper disposal of syringes. The authors review syringe disposal

options in place before the January 1, 2001, start of the New York State Expanded Syringe Access Demonstration Program (ESAP), and summarize actions taken in conjunction with ESAP to enhance safe disposal.

Klein SJ, Harris-Valente K, Candelas AR, et al. What do pharmacists think about New York State's new nonprescription syringe sale program? Journal of Urban Health. 2001;78(4):679-689.

Access to sterile syringes can prevent transmission of blood-borne diseases such as human immunodeficiency virus (HIV) and hepatitis B and C. The authors conducted a survey of attitudes of pharmacists to aid in development of the Expanded Syringe Access Demonstration Program (ESAP) in New York State. ESAP is an HIV prevention initiative that authorizes nonprescription sale of hypodermic needles and syringes by registered pharmacies in New York State beginning January 1, 2001. As part of planning for program implementation, the New York State Department of Health (NYSDOH), in collaboration with the New York State Education Department, conducted a mailed survey of all 4,392 licensed pharmacies in New York State during the summer of 2000. Some surveys (171) were returned as undeliverable. Of the 4,221 eligible respondents, 874 (20.7%) completed surveys were received, of which 574 (65.7%) indicated that their pharmacy would likely participate in ESAP. An additional 11.0% were not sure. Only 139 (15.9%) indicated that they would definitely not participate; 7.4% left this question blank. There were 608 responses to questions on safe disposal practices. Of these, 315 (51.8%) respondents indicated that their pharmacy sold sharps containers, and an additional 29 made them available at no cost. Only 133 (21.9%) respondents to this question did not offer sharps containers and were not interested in doing so. In all, 54 responses indicated that they accepted used hypodermic needles and syringes for disposal. Some (170, 28%) that did not accept sharps for disposal were interested in doing so. More than half (382, 63.0%) did not wish to do so. NYSDOH considered respondent suggestions and minimized ESAP requirements. By March 31, 2001, only 3 months after ESAP became effective, more than half of all licensed pharmacies in New York State were registered for ESAP. Survey results provided useful information to NYSDOH and a good indication of likelihood of registration. The high level of pharmacy participation in ESAP may be reflective of NYSDOH attention to issues raised by pharmacists, as well as the direct effects of outreach to pharmacy chains regarding ESAP.

Klein SJ, Spence MS, Fahr RA, et al. Maximizing the benefits of expanded syringe access and safe disposal for persons with diabetes. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S29-S31.

Increasing access to sterile syringes is a well established intervention to prevent transmission of human immunodeficiency virus (HIV) and other blood-borne infections among injection drug users (IDUs). The additional benefits of syringe access initiatives to individuals who are not IDUs are less well documented. The

Expanded Syringe Access Demonstration Program (ESAP) is a New York State initiative to prevent the spread of blood-borne diseases, particularly HIV and hepatitis B and C, by providing access to sterile hypodermic needles and syringes (hereafter referred to as “syringes”) without a prescription and improving options for safe disposal of used syringes. Consistent with legislative intent, the New York State Department of Health (NYSDOH) prioritized the development of messages, materials, and methods to promote syringe access and safe disposal to IDUs. During program implementation, the benefits of ESAP to other syringe users became apparent.

Koester SK. Copping, running, and paraphernalia laws: Contextual variables and needle risk behavior among injection drug users in Denver. Human Organization. 1994;53(3):287-295.

This paper addresses syringe sharing, the primary method of HIV transmission among drug injectors. It argues that this high risk drug injection behavior cannot be adequately understood by relying on psychological and cultural explanations alone. Rather, this ethnographic study contends that, among drug injectors in Denver, syringes are shared because they are scarce, and they are scarce because they are illegal to possess without medical justification. A legal mandate combines with other aspects of law enforcement to discourage street-based drug users from carrying syringes, particularly when they are in the process of obtaining drugs. The result is that drug injectors are least likely to have syringes when they need them the most. This study concludes by suggesting that the paraphernalia laws currently in place in approximately 44 states and numerous municipalities may no longer be serving the public interest.

Koester SK, Bush TW, Lewis BA. Limited access to syringes for injection drug users in pharmacies in Denver, Colorado. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S88-S91.

The objective of this study was to determine the availability of syringes for injection drug users (IDUs) from pharmacies in Denver. The authors designed a single-group, uncontrolled, noncomparative study. Participants consisted of 23 randomly selected pharmacies in the Denver metropolitan area and 3 additional pharmacies located near drug-buying locations. Of 26 pharmacies, 4 reported not stocking syringes, 3 did not sell syringes to any research assistants, 10 sold to some research assistants but not to others, and 9 sold to all research assistants. Of 206 purchase attempts, 54% were successful. In 37.9% of 95 refusals, the pharmacist reported that syringes were not sold at the store, and in 28.4% the pharmacist refused to sell because the research assistant did not produce diabetic identification or answer insulin-related questions. No differences in pharmacy response were found with respect to the racial or ethnic characteristics of the research assistant. Price varied substantially within and among stores. No pharmacies that sold syringes to research assistants were open 24 hours per day. While IDUs who live near a pharmacy that regularly sells syringes and IDUs with

a convincing diabetes story may have adequate access to syringes, others face inconsistent availability. Price fluctuations and limited hours of those pharmacies that sell syringes may be additional barriers to access to sterile syringes for IDUs in Denver.

Lawitts S. Needle sightings and on-the-job needle-stick injuries among New York City Department of Sanitation Workers. Journal of the American Pharmaceutical Association. 2002;42(Suppl.2):S92-S93.

The New York City Department of Sanitation (DSNY) is responsible for collecting and disposing of all residential waste in New York City, collecting and marketing recyclable materials from all residences, cleaning the city's 6,200 miles of streets, and clearing the streets of ice and snow. Of DSNY's approximately 9,500 employees, 6,400 are uniformed sanitation workers, whose primary responsibility is operating almost 4,900 "truck-shifts" (one truck, with a crew of two sanitation workers, on an 8-hour shift) per week to collect household garbage and another 2,300 truck-shifts per week to collect residential recyclables. In this paper, the author describes the problems and processes associated with improper disposal of used syringes and needles in household garbage and recyclable materials in New York City.

Lewis BA, Koester SK, Bush TW. Pharmacists' attitudes and concerns regarding syringe sales to injection drug users in Denver, Colorado. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S46-51.

The objective of this study was to identify factors influencing pharmacists' decisions about selling syringes to injection drug users (IDUs). The authors designed audiotaped interviews. These interviews took place in Denver, Colorado with 32 pharmacists at 24 pharmacies. Of the 32 pharmacists interviewed, 16 indicated that they sold syringes to all customers ("pro-sell"), 11 refused to sell unless shown proof of diabetic status ("no-sell"), and 5 were "undecided." Several factors influenced the decision to sell. A perceived conflict between prevention of disease and prevention of drug abuse most clearly distinguished the three categories, with pro-sell pharmacists more likely than others to prioritize disease prevention and believe that syringe sales would not increase drug abuse. Business concerns, such as the effect of the presence of IDUs on other customers and the possibility of discarded syringes around the store, were especially prevalent among no-sell and undecided pharmacists. Seventeen pharmacists did not know about Colorado laws governing syringe sales. Four no-sell pharmacists used the laws to justify their decision not to sell, and two undecided pharmacists said they used the law when they did not want to sell syringes to IDU. All pharmacists supported syringe exchange programs. One-half of the pharmacists sold syringes to IDUs, and several more indicated that they would do so if certain concerns were addressed. These data suggest that improved syringe disposal options, continuing education programs, and clarification of existing laws and

regulations would encourage more pharmacists in Denver to sell syringes to IDUs.

Linan BP, Coffin PO, Backes G, et al. New York State pharmacists' attitudes toward needle and syringe sales to injection drug users before implementation of syringe deregulation. Journal of Urban Health. 2000; 77(4):768-780.

In May 2000, New York State passed legislation permitting the sale, purchase, and possession of up to 10 needles and syringes without a prescription. The law is intended to reduce the transmission of human immunodeficiency virus (HIV) and hepatitis among injection drug users (IDUs), their sexual partners, and their children. To obtain baseline information about the attitudes and likely practices of New York State pharmacists, the authors distributed a self-administered questionnaire to attendees of the state pharmacy association meeting in June 2000. Of 48 usable responses, 19% were from New York City and the rest from New York State. Of the 48, 42% were unaware of the new law before the day of the survey, and 60% were somewhat or very willing to sell needles and syringes to an IDU. Of those who were not willing to sell to an IDU, 82% cited familiarity of the customer as a very important consideration in their decision making. Those who were not willing to sell to an IDU were more concerned about the detrimental impact of syringe sales on the community, were less likely to be aware of the new law, and were more likely to be concerned about legal liability for syringe sales. Over 80% of all pharmacists believed that syringe sales to IDUs are an important preventive health measure. The majority also favored learning more about the law. Compared to other state surveys of pharmacists, these preliminary data show a similar level of interest in becoming involved with syringe availability programs.

Lurie P, Jones TS, Foley J. A sterile syringe for every drug user injection: How many injections take place annually, and how might pharmacists contribute to syringe distribution? Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1998;18(Suppl. 1):S45-S51.

The authors' objectives were to estimate the annual number of injections by injection drug users (IDUs) in the United States of America, and to describe the potential role of pharmacists in providing IDUs with a sterile syringe for every injection. The authors estimated the number of annual injections by IDUs for the United States, selected U.S. states, and selected U.S. cities according to the following formula: number of injections per year = (number of IDUs) x (average number of injections per IDU per day) x 365. Data were obtained from published articles, personal communications with local experts, and selected national databases. The authors also reviewed published and unpublished studies of pharmacy kits, pharmacist attitudes, and pharmacist practices in the United States and abroad. Between 920 million and 1.7 billion injections by IDUs take place each year in the United States. The authors estimated 12 million injections per

year in San Francisco and >80 million in New York City. A similar number of syringes would be needed to satisfy the goal of a sterile syringe for every injection. Pharmacy-based strategies, including the sale of kits for injection drug use, have provided sterile syringes to IDUs in Europe, Australia, and New Zealand. Modification of laws restricting syringe purchase and possession has led to marked increases in purchase of syringes from pharmacies and reductions in needle-sharing. In conclusion, large numbers of syringes would be required to provide a sterile syringe for every injection, but significant numbers of pharmacists seem to be willing to play a central role in syringe sale and distribution. Outreach programs should emphasize that using a sterile syringe for every injection is the optimal HIV prevention practice for IDUs who cannot or will not stop injecting. Pharmacy-based syringe sale or distribution has the potential to augment current efforts to prevent HIV infection in IDUs, their sex partners, and their children.

Marks RW, Hanrahan M, Williams DH, et al. Encouraging pharmacy sale and safe disposal of syringes in Seattle, Washington. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S26-S27.

Seattle and King County are served by active SEPs that exchange more than 2 million syringes a year. However, because some IDUs continued to share syringes, and because of the millions of additional syringes needed for IDUs to have a new, sterile syringe for each injection, Public Health wanted to expand pharmacy syringe sales to IDUs. The new policy of the Washington Board of Pharmacy and new state laws allowed pharmacists to expand syringe sales to IDUs. Public health staff established working relationships with practicing pharmacists to promote such sales. The support of pharmacy leaders and institutions (the Board of Pharmacy and the Washington Pharmacy Association) have promoted pharmacist participation.

Miller CL, Tyndall M, Spittal P, et al. Risk-taking behaviors among injecting drug users who obtain syringes from pharmacies, fixed sites, and mobile van needle exchanges. Journal of Urban Health. 2002;79(2):257-265.

Needle-exchange programs (NEPs) have been shown to be effective in reducing harm related to injection drug use and to act as an important link between the injection drug using community and preventive/treatment services. Different needle exchange distribution methods may reach different subpopulations of injecting drug users (IDUs). The authors undertook this study to characterize risk behaviors by primary source of clean needles accessed by IDUs in a city with pharmacy access and fixed and mobile exchange programs. They hypothesized there would be a gradient of risk across the three types of distribution. Data were collected from within the Vancouver Injection Drug Users Study (VIDUS), a prospective cohort study. Participants who primarily obtained clean needles from pharmacies, fixed sites, or mobile exchange vans were compared using the Cochran-Armitage trend test to test for trends in increasing risk behaviors across

the three types of distribution. Ordinal multivariate regression was used to adjust the associations for potential confounders. Results illustrate clear trends for increasing risk profiles from pharmacy to fixed site to mobile exchange vans. Van users were generally at higher risk than fixed-site and pharmacy users. Independent predictors of van use were fewer years injecting, difficulty finding needles, Aboriginal ethnicity, incarceration in the previous 6 months, and injecting cocaine daily. An important component of needle-exchange programs is outreach to access those who are at highest risk. Use of distribution beyond fixed sites will improve such outreach, thereby increasing program effectiveness and further preventing the transmission of blood-borne infections.

Myers T, Cockerill R, Worthington C, et al. Community pharmacist perspectives on HIV/AIDS and interventions for injection drug users in Canada. AIDS Care. 1998;10(6):689-701.

In several countries, community pharmacies play a major role in the provision of HIV prevention services to injection drug users (IDUs). In this study, results from a national Canadian Survey of Community Pharmacies and HIV/AIDS Prevention are used to describe pharmacists' perspectives on HIV/AIDS and services to IDUs, and explore the relationship between personal and organizational characteristics and the level of support for HIV/AIDS prevention initiatives. A mailed questionnaire was directed to a random sample of 2,017 pharmacist owner-managers. The response rate was 84.6%. Results suggest that current services to IDUs primarily are limited to discretionary needle and syringe sales to non-diabetics, with almost three-quarters supportive. Staff safety was an important consideration in the provision of this service (77%), while remuneration was the lowest (27%). Community pharmacists were most comfortable with the provision of counseling, advice and literature ($x=2.6$) and environmental and technological interventions ($x=2.4$) and least supportive of provision of services as part of a programme ($x=1.6$) and legalization of drugs or prescription of methadone ($x=1.9$). Female pharmacists were more likely to support preventive measures such as the provision of counseling or advice, and males were more likely to promote legislative change. Pharmacists appear generally willing to expand their services in the fight against HIV/AIDS. However, it is not feasible to expect uniform programmes to be immediately introduced. While organizational, educational and policy changes may facilitate programme development, individual pharmacy and pharmacist discretion remains important.

National Alliance of State and Territorial AIDS Directors. Focus on syringe disposal and access. NASTAD HIV Prevention Bulletin, September 2002.

Since the emergence of AIDS in the United States over two decades ago, injection drug use (IDU) has played a major role in the spread of HIV. One-third of all AIDS cases are IDU-related and IDU accounts for approximately 60% of hepatitis C virus (HCV) transmission. Injection drug users (IDUs) risk contracting and transmitting HIV, HCV and other blood-borne infections directly through sharing

contaminated syringes, drug preparation and injection equipment, and drugs. IDU also indirectly contributes to the spread of blood-borne infections when IDUs transmit these infections through high risk sexual behaviors to their sex partners and perinatally to their children. Despite significant political, legal, and funding constraints, HIV prevention programs have developed and implemented effective disease prevention interventions to reach injection drug users (IDUs). Central to these efforts are ensuring IDUs access to sterile syringes. Several different strategies have been used to increase access to syringes, including, changing existing syringe laws and regulations to allow for pharmacy sales of syringes, removing criminal penalties for the possession of syringes, and implementing syringe exchange programs (SEPs).

Novotny GA, Cotton-Oldenburg NU, Bond B, et al. The Minnesota Pharmacy Syringe Access Initiative: A successful statewide program to increase injection drug user access to sterile syringes. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S21-S22.

As of December 2001, injection drug use and sex with injection drug users (IDUs) accounted for 14% of cumulative non-acquired immunodeficiency syndrome (AIDS) cases of human immunodeficiency syndrome (HIV) infection in Minnesota. On July 1, 1998, new Minnesota laws went into effect legalizing pharmacy sale without a prescription and individual possession of as many as 10 syringes. These new laws were intended to reduce HIV transmission among IDUs and their sex partners by increasing access to sterile syringes. The legislation required the Minnesota Department of Health (MDH) to develop, implement, promote, and evaluate a new public health program called the Minnesota Pharmacy Syringe Access Initiative (SAI). A few months before SAI went into effect, MDH conducted two surveys of pharmacy managers to identify possible barriers and incentives to participation in SAI. In the first survey, the authors interviewed a convenience sample of 29 chain pharmacists who generally supported SAI. In the second, the authors mailed a short questionnaire to 918 Minnesota retail pharmacy managers. Of the 648 (70%) managers who responded, 421 (65%) reported that they would participate in SAI, 130 (20%) reported that they would not participate, and 97 (15%) were undecided. Of the 227 pharmacy managers who were undecided or who would not participate, 111 (49%) had concerns about having IDUs in the pharmacy, and about possibly supporting an illegal activity, or felt that there was no need for SAI in their town. Only 15 of these 227 pharmacists reported factors that would increase their likelihood of participating, including availability of home needle disposal systems, referral of customers to substance abuse treatment, and educational materials for customers. More than 60% (265/421) of the pharmacists likely to participate in SAI were concerned about syringe disposal. They requested more syringe disposal options, such as state- or county- sponsored disposal systems or a \$0.25 surcharge to syringe sales to help fund disposal. They indicated that the availability of educational materials on syringe disposal and HIV transmission would facilitate their participation in SAI.

N.Y.'s ESAP: Spring 2002 update for New York State pharmacists. Pharmacy Law. 2002;9(2):5-6.

Chapter 56 of the Laws of 2000 amended Article 33 of the New York State (NYS) Public Health Law to authorize a time limited demonstration program allowing sale of hypodermic needles and syringes without a prescription to individuals ages 18 and over by registered pharmacies, healthcare facilities and healthcare practitioners. Entities wishing to participate in ESAP (Expanded Syringe Access Demonstration Project) must register with the NYS Department of Health (DOH). Registered providers also must participate in a program to ensure safe disposal of used needles and syringes (household sharps). This can include distributing copies of the ESAP "brochure" or "safety insert" (required); making available the DOH brochure "Household Sharps, Dispose of Them Safely;" participating in education efforts about the importance of safe and proper disposal of household sharps; referring individuals to sharps-disposal programs located in hospitals, nursing homes and other settings and selling or furnishing puncture-resistant personal sharps containers or sharps disposal by mail systems. Providers also may register to accept sharps for disposal. This program, implemented by the NYS DOH, became effective January 1, 2001. ESAP was profiled in the November-December 2000 issue of *Pharmacy Law*.

Obadia Y, Feroni I, Perrin V, et al. Syringe vending machines for injection drug users: An experiment in Marseille, France. American Journal of Public Health. 1999;89(12):1852-1854.

This study evaluated the usefulness of vending machines in providing injection drug users with access to sterile syringes in Marseille, France. Self-administered questionnaires were offered to 485 injection drug users obtaining syringes from 32 pharmacies, 4 needle exchange programs, and 3 vending machines. Of the 343 respondents (response rate = 70.7%), 21.3% used the vending machines as their primary source of syringes. Primary users of vending machines were more likely than primary users of other sources to be younger than 30 years, to report no history of drug maintenance treatment, and to report no sharing of needles or injection paraphernalia. Vending machines may be an appropriate strategy for providing access to syringes for younger injection drug users, who have typically avoided needle exchange programs and pharmacies.

Reich W, Compton WM, Horton JC. Injection drug users report good access to pharmacy sale of syringes. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S68-S72.

The objective of this study was to examine injection drug users (IDUs) opinions and behavior regarding purchase of sterile syringes from pharmacies. The authors designed focus groups to be conducted in urban and rural sites in Colorado, Connecticut, Kentucky, and Missouri. Participants consisted of 8 focus groups,

with 4 to 15 IDU participants per group. Transcripts of focus group discussions were evaluated for common themes by the authors and through the use of the software program NUD*IST. The authors measured the knowledge of human immunodeficiency virus (HIV), pharmacy use, barriers to access from pharmacies, high-risk and risk-reducing behavior, and rural/urban difference. Almost all participants knew the importance of using sterile syringes for disease prevention and reported buying syringes from pharmacies more than from any other source. Two IDUs believed pharmacists knew the syringes were being used for injecting drugs and perceived pharmacists' sales of syringes to be an attempt to contribute to HIV prevention. Most IDUs reported that sterile syringes were relatively easy to buy from pharmacies, but most also reported barriers to access, such as having to buy in packs of 50 or 100, being made to sign a book, having to make up a story about being diabetic, or having the feeling that the pharmacists were demeaning them. While the majority of IDUs reported properly cleaning or not sharing syringes and safely disposing of them, others reported inadequate cleaning of syringes and instances of sharing syringes or of improper disposal. There were few differences in IDUs' reported ability to buy syringes among states or between urban and rural sites, although the data suggest that IDUs could buy syringes more easily in the urban settings. For the most part, participants understood the need for sterile syringes in order to protect themselves from HIV, hepatitis B virus, and hepatitis C virus and saw pharmacies as the best source of sterile syringes. Although these data are not generalizable, they suggest that pharmacists can and do serve as HIV-prevention service providers in their communities.

Reich W, Compton WM, Horton JC, et al. Pharmacist ambivalence about sale of syringes to injection drug users. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S52-S57.

The objective of this study was to examine pharmacists' attitudes and practices surrounding human immunodeficiency virus (HIV) prevention among injection drug users. The authors conducted focus groups in Urban and rural sites in Colorado, Connecticut, Kentucky, and Missouri. There were a total of 8 focus groups, with 4 to 11 pharmacists participating in each group. The authors measured the willingness to sell syringes to all customers, views on syringe exchange programs (SEPs), knowledge of laws governing syringe sales and racial, ethnic, or gender biases in syringe selling practices. Two pharmacists established their own policies of selling syringes to everyone, and three expressed a willingness to have their pharmacies serve as SEPs. A total of 20% of the pharmacists expressed an interest in learning more about the efficacy of SEPs and distribution of syringes by pharmacists, and were willing to change their views based on this information. Many also indicated a general willingness to work with SEPs or to participate in the effort to curb the spread of HIV. However, a majority of pharmacists opposed having SEPs in their pharmacies and reported selling syringes only within specific limits: to known diabetics, to individuals who looked reasonable, or to individuals who presented a logical explanation. No

racial, ethnic, or gender bias was observed. Opinions among pharmacists varied across and within sites. While a majority of pharmacists would not establish SEPs in their own pharmacies, nearly all would participate in other HIV-prevention programs. Educational programs for pharmacists may be valuable in HIV prevention efforts.

Rich JD, Foisie CK, Towe CW, et al. High street prices of syringes correlate with strict syringe possession laws. American Journal of Drug and Alcohol Abuse. 2000;26(3):481-490.

The current epidemic of injection drug use in the United States and abroad has precipitated an increase in transmission of infectious diseases, including human immunodeficiency virus (HIV), hepatitis B, hepatitis C, and human T-lymphotrophic virus II (HTLV-II) in injection drug users (IDUs) who share syringes and other injection equipment. Sharing is often due to a lack of available sterile syringes, which is, in part, a result of laws and regulations controlling the purchase and possession of syringes. These laws, in turn, raise the price of questionably sterile black market syringes, inadvertently encouraging the reuse and sharing of syringes. To date, very little information has been gathered on the street price of syringes in different communities. The authors surveyed 42 needle exchange programs (NEPs) in the United States in July and August 1998 to determine the street prices of syringes. The relationship among local laws regulating syringe possession, the enforcement of those laws, and street syringe prices was examined. There was a strong correlation between the presence of syringe possession laws and higher street syringe price (\$2.87 vs. \$1.14, p [is less than] .01). In areas with syringe possession laws, cost was significantly higher when laws were perceived to be enforced strictly (\$3.66 vs. \$2.08, p [is less than] .01). Street prices for syringes are an easily quantifiable indirect measure of availability of sterile syringes and may reflect syringe sharing and reuse.

Rich JD, Macalino GE, McKenzie M, et al. Syringe prescription to prevent HIV infection in Rhode Island: A case study. American Journal of Public Health. 2001;91(5):699-700.

Injection drug users (IDUs) are a population at high risk for many diseases, including AIDS, and are clearly in need of medical and substance abuse treatment. Access to sterile syringes is critical for lowering the risk of transmission of HIV and other blood-borne pathogens among IDUs. Previously tried strategies include needle exchange programs and changing laws to allow the legal purchase and possession of syringes. An alternative strategy is to have physicians prescribe syringes to IDUs. To the best of knowledge, this has previously been tried by only a few physicians in rare situations and never on a programmatic basis. This report describes the genesis of physicians's syringe prescription in Rhode Island and some of the lessons learned to date. Because of the illicit nature of drug use, a tremendous amount of mistrust and fear on the part of IDUs often leads to poor interaction with the medical establishment.

Prescription of syringes by a physician can serve as a tool for reaching out to a high-risk and often out-of-treatment population of drug users. It is a way for the health care community to tap into drug-using networks and bring those populations into a medical care system.

Rich JD, Martin EG, Macalino GE, et al. Pharmacist support for selling syringes without a prescription to injection drug users in Rhode Island. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S58-S61.

The objective of this study was to examine pharmacists' attitudes and obstacles to syringe sales to IDUs without prescriptions in Rhode Island, around the time that such sales became legal in the state. The authors designed a self-administered written survey. Participants consisted of 400 randomly selected pharmacist members of the Rhode Island Pharmacists Association. Of the 400 pharmacists contacted, 131 (33%) completed and returned the survey; of these, 101 (77%) were pharmacists who worked in stores that provided direct nonprescription syringe sales to the public. The majority of these 101 pharmacists were willing to sell syringes to a suspected IDU without a prescription (65%), favored providing free sharps containers for disposal (68%), and supported providing pamphlets on safer injection practices (88%). Willingness to sell syringes to IDUs without a prescription was significantly correlated with various beliefs about possible consequences of sales. The high level of support for nonprescription syringe sales to IDUs is promising. The correlation between the willingness to sell syringes to IDUs without a prescription and various beliefs suggests that future educational interventions might encourage pharmacists to sell syringes to this population without a prescription to decrease HIV and hepatitis transmission.

Rich JD, Taylor L, Mehrotra M, et al. Prescribing syringes to injection drug users: What the family physician should know. American Family Physician. 2003;68(1):45-47.

Injection drug use (IDU) is currently the single largest factor contributing to the spread of human immunodeficiency virus (HIV) infection in the United States. The Centers for Disease Control and Prevention (CDC) reports that one third of all cases of acquired immunodeficiency syndrome (AIDS) are caused by IDU. Transmission to other family members through heterosexual and perinatal contact, and the impact of addiction on the family, makes this a family disease. In addition to HIV infection, injection drug users (IDUs) face many health risks, including viral and bacterial infections (e.g., hepatitis, tuberculosis, endocarditis, abscesses), overdoses, violence, and suicide. Many IDUs have complex medical, social, and psychiatric problems and face tremendous difficulties in accessing the appropriate services.

Rich JD, Wolf FA, Macalino G. Strategies to improve access to sterile syringes for injection drug users. AIDS Reader. 2002;12(12):527-535.

The high prevalence of infection with HIV and other blood-borne pathogens in injection drug users (IDUs) is directly related to the lack of syringe access. Needle exchange programs (NEPs), syringe prescription, and syringe deregulation are 3 approaches to increasing access to sterile syringes for IDUs. The benefits of NEPs have been repeatedly demonstrated, but the impact of NEPs has been limited by a lack of federal funding. Syringe prescription for IDUs is a promising new strategy supported by many organizations; legalizing syringe purchase and possession has led to a substantial improvement in syringe access in many states. Because each approach has unique advantages, providing IDUs with a variety of options for syringe access is likely to be most beneficial.

Riley ED, Safaeian M, Strathdee SA, et al. Comparing new participants of a mobile versus a pharmacy-based needle exchange program. Journal of Acquired Immune Deficiency Syndromes. 2000;24(1):57-61.

The objective of this study is to compare characteristics of first-time needle exchange participants who enrolled at a mobile van-based exchange site versus a fixed pharmacy-based exchange site, in an area where both types of needle exchange programs were available. Demographic and drug use data were collected on needle exchange program participants on enrollment. Participants were included if they were first-time participants at the Baltimore needle exchange program between December 1997 and March 1999, and if their first visit was at either one van-based site or at one of two pharmacy-based sites. Descriptive statistics and inferences were based on the type of needle exchange into which participants enrolled. Among 286 first-time participants, 92% were African American, 28% were women, 11% were currently employed, 55% completed high school, and the median age was 40 years. In multivariate analyses, van-based enrollment was more common among frequent injectors (odds ratio [OR] = 2.0), but less common among African American participants (OR = 0.21). The authors' data suggest that different venues for needle exchange program settings attract different types of drug injecting participants. This suggests that offering different venue types to reach participants with differing drug use patterns will be important to optimize risk reduction strategies.

Shotsky WJ, Cooper JG, Klein SJ. As easy as ESAP. The New York State Expanded Syringe Access Demonstration Program. Body Positive. 2003;16(1):15-17.

In the past, NYS law said that syringes could only be bought with a prescription. Now, with a change in the New York State Public Health Law in 2000 by the NYS Legislature, individuals can legally obtain and possess clean hypodermic needles and syringes without a prescription. The program that allows them, and anyone in NYS age 18 and over, to do so is called the Expanded Syringe Access

Demonstration Program or ESAP. Developed with extensive input from consumers, under ESAP, NYS licensed pharmacies, health care facilities and certain health care practitioners, may register with the NYS Department of Health to sell or furnish up to 10 hypodermic needles or syringes to individuals 18 years of age or older. This means that people 18 years of age or older can legally obtain and possess hypodermic needles and syringes without a prescription. While pharmacies may not currently advertise the fact that needles and syringes are available without a prescription, nor can they be openly displayed, the distinctive ESAP logo can be displayed to inform customers that the pharmacy participates. Almost all of the major pharmacy chains and many independent pharmacies participate in ESAP.

Simpson HL. Injection drug users and pharmacists: A call for compassion, cooperation, and care. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S10-S12.

As the executive director of the largest minority-operated acquired immunodeficiency syndrome (AIDS) service organization in Michigan and a person who has wrestled with the issue of access to sterile syringes from both personal and professional perspectives, the author will attempt to represent both active drug injectors and the community-based providers who work with them. In doing so, he hopes to (1) provide a better understanding of what it's like to be in the grip of addiction, (2) describe what it's like for a drug injector to try to buy syringes from a pharmacist, and (3) enlist your assistance in preventing further spread of human immunodeficiency virus (HIV).

Singer M, Baer HA, Scott G, et al. Pharmacy access to syringes among injecting drug users: Follow-up findings from Hartford, Connecticut. Public Health Reports. 1998;113(Suppl. 1):81-89.

To break the link between drug use and the human immunodeficiency virus (HIV) in 1992 the state of Connecticut rescinded a 14-year ban on pharmacy sales of syringes without a physicians's prescription. In 1993, the Center for Disease Control and Prevention (CDC) evaluated the impact of the new legislation on access to syringes among injecting drug users (IDUs) and found an initial pattern of expanded access. However, it also found that some pharmacies, after negative experiences with IDU customers, reverted to requiring a prescription. This chapter reports findings from a four-year follow-up study of current IDU access to over-the-counter (OTC) pharmacy syringes in Hartford, Connecticut. Through structured interviews, brief telephone interviews, and mailed surveys, data on nonprescription syringe sale practices were collected on 27 pharmacies, including 18 of the 21 pharmacies in Hartford and none from pharmacies in contiguous towns, during June and July 1997. Interview data on pharmacy syringe purchase from two sample of IDUs, a group of out-of-treatment injectors recruited through street outreach, and a sample of users of the Hartford Needle Exchange Program, also are reported. The study found that, while market trends as well as negative

experiences have further limited pharmacy availability of nonprescription syringes, pharmacies remain an important source of sterile syringes for IDUs. However, the distribution of access is not even; in some areas of the city it is much easier to purchase nonprescription syringes than in other. All of the seven pharmacies located on the north end of Hartford reported that they had a policy of selling OTC syringes, whereas only six (54.5%) of the 11 pharmacies located on the south end have such a policy. Overt racial discrimination was not found to be a barrier to OTC access to syringes. To further decrease acquired immunodeficiency syndrome (AIDS) risk among IDUs there is a need for public education to counter empirically unsupported stereotypes about IDUs that diminish their access to health care and AIDS prevention resources and services. In states or cities where pharmacy sale of nonprescription syringes is illegal, policy makers should examine the benefits of removing existing barriers to sterile syringe acquisition. In cases in which pharmacy sale of nonprescription syringes is legal, local health departments should implement educational programs to inform pharmacy staff and management about the critically important role low-cost (or cost-free), sterile syringe access can play in HIV prevention.

Singer M, Stopka T, Siano C, et al. The social geography of AIDS and hepatitis risk: Qualitative approaches for assessing local differences in sterile-syringe access among injection drug users. American Journal of Public Health. 2000;(90)7:1049-1056.

While significant gains have been achieved in understanding and reducing AIDS and hepatitis risks among injection drug users (IDUs), it is necessary to move beyond individual-level characteristics to gain a fuller understanding of the impact of social context on risk. In this study, 6 qualitative methods were used in combination with more traditional epidemiologic survey approaches and laboratory bioassay procedures to examine neighborhood differences in access to sterile syringes among IDUs in 3 northeastern cities. These methods consisted of (1) neighborhood-based IDU focus groups to construct social maps of local equipment acquisition and drug use sites; (2) ethnographic descriptions of target neighborhoods; (3) IDU diary keeping on drug use and injection equipment acquisition; (4) ethnographic day visits with IDUs in natural settings; (5) interviews with IDUs about syringe acquisition and collection of syringes for laboratory analysis; and (6) focused field observation and processual interviewing during drug injection. Preliminary findings from each of these methods are reported to illustrate the methods' value in elucidating the impact of local and regional social factors on sterile syringe access.

Stergachis A. Roles for pharmacists in the prevention and control of sexually transmitted diseases. Sexually Transmitted Diseases. 1999;26(Suppl. 4):S44-S50.

As the most accessible and trusted health care professionals in the United States, pharmacists can be an important resource for sexually transmitted disease (STD)

prevention and control. Pharmacists and pharmacies are located in every type of community throughout the United States. The profession of pharmacy is positioned well to make a meaningful contribution to STD prevention and control. The accessibility to the public, the large number of pharmacy locations, and the trust shared between pharmacists and the public they serve combine to afford a unique opportunity to reach millions of individuals with STD prevention and control messages and other strategies. The numerous innovative activities involving pharmacists and pharmacies in STD-related services suggest an expanded role for pharmacy.

Stopka TJ, Singer M, Santelices C, et al. Public health interventionists, penny capitalists, or sources of risk?: Assessing street syringe sellers in Hartford, Connecticut. Substance Use and Misuse. 2003;38(9):1345-1377.

Improved access to sterile syringes decreases risks related to blood-borne transmission of HIV and hepatitis among injection drug users (IDUs). While syringe exchange programs and pharmacy sales of over-the-counter syringes have received considerable attention from researchers and interventionists during the past decade, little is known about informal economy street syringe sellers. In Hartford, CT. as well as other regions throughout the United States a large percentage of IDUs utilize street sellers to facilitate their injection activities. A qualitative and ethnographic study was conducted in Hartford between 1999 and 2001 to help elucidate the public health risks and benefits of street syringe sellers.

Taussig J, Junge B, Burris S, et al. Individual and structural influences shaping pharmacists' decisions to sell syringes to injection drug users in Atlanta, Georgia. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S40-S45.

The objective of this study was to better understand the individual (e.g., attitudes and beliefs) and structural (e.g., laws and regulations) factors that influence and shape pharmacists' decisions about selling syringes to injection drug users (IDUs). The authors designed a qualitative research consisting of 20 practicing pharmacists who work in or near areas of high drug use in Atlanta, and nine pharmacists who are considered leaders in their profession in Georgia. The authors conducted semistructured, in-depth interviews. Pharmacists reported that they use their professional discretion in making syringe sale decisions and that these decisions are influenced by individual factors such as their personal attitudes and beliefs about the nature and causes of drug use, and by structural factors such as the Georgia Board of Pharmacy regulation stating that syringes cannot be sold if they will be used for an "unlawful purpose." IDUs' access to sterile syringes from pharmacies in Atlanta, would likely be increased by (1) providing practicing pharmacists with professional education programs that describe the broad professional support for IDU access to sterile syringes and why blood-borne infection prevention is a legitimate medical purpose for selling

syringes and (2) removing or modifying the restrictive Board of Pharmacy regulation governing syringe sales.

Taussig JA, Weinstein B, Burris S, et al. Syringe laws and pharmacy regulations are structural constraints on HIV prevention in the US. AIDS. 2000;14(Suppl. 1):S47-S51.

The objective of this study was to review the legal and regulatory barriers that restrict pharmacy sales of syringes to injection drug users (IDUs) and to discuss how reducing these barriers can facilitate access to sterile syringes for IDUs and improve HIV prevention. IDUs' access to sterile syringes from community pharmacies in the United States is limited by state laws and regulations governing syringe sales. Restricted availability of sterile syringes from pharmacies is a structural barrier that greatly impedes HIV prevention for IDUs, who often share and reuse syringes because they cannot obtain and possess sterile syringes. These high-risk behaviors contribute to the transmission of HIV and other blood-borne pathogens among IDUs, their sexual partners, and their children. In Connecticut, because of high HIV prevalence among IDUs, restrictive syringe laws were changed. After the legal changes in Connecticut, both pharmacy sales of syringes in areas of high drug use and purchases of syringes in pharmacies (reported by IDUs) increased, while syringe sharing (reported by IDUs) decreased. Maine and Minnesota have made similar changes in laws. Increasing access to sterile syringes through pharmacies requires the repeal or modification of legal barriers. Pharmacy sale of syringes to IDUs is an inexpensive HIV prevention intervention with the potential to substantially reduce HIV transmission. Further studies are needed to document how changes to barriers can influence HIV prevention for IDUs.

Tsai R, Goh EH, Webeck P, et al. Prevention of human immunodeficiency virus infection among intravenous drug users in New South Wales, Australia: The needles and syringes distribution programme through retail pharmacies. Asia-Pacific Journal of Public Health. 1988;2(4):245-251.

Prevalence of Human Immunodeficiency Virus (HIV) infection among 12,000 intravenous (IV) drug users in New South Wales (NSW) was estimated to be very low in 1985. However, a large increase of HIV infection in this population group could result within a short period. The NSW government amended existing legislation to permit the sale and possession of sterile needles and syringes. A programme to promote the sale of needles and syringes was launched jointly with the Pharmacy Guild of Australia (NSW Branch) in December 1986. Favourable changes in pharmacists' attitudes were noted four months later. The distribution scheme became an important component of the NSW prevention programme. There are 2,039 retail pharmacies throughout NSW. The number of sterile needles and syringes sold through these outlets increased from 4,200 in January 1987 to 51,000 in November 1987 with a total of 422,000 dispensed over this period. The percentage of Pharmacy Guild members involved in the programme

increased from 0.5% to 22.5%, covering 38% of the state by November 1987. During 1987, HIV infection among IV drug users remained low. This suggests that the needles and syringes distribution programme contributed significantly towards limiting the spread of HIV infection among IV drug users.

Turnberg WL, Coulter E, Clark JR, et al. Community needle collection and disposal programs in Florida. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S108-S109.

In June 2001 sharps collection and disposal programs (referred to as “community needle collection programs” in this article) were operating in at least 29 (43%) of the 67 counties in Florida. This article reports on the development of these community needle collection programs. The authors examined laws, regulations, and guidance documents on this topic and a statewide survey of community needle collection programs.

Turnberg WL, Jones TS. Community syringe collection and disposal policies in 16 states. Journal of the American Pharmaceutical Association. 2002;42 (Suppl. 2):S99-S104.

The objective of this study was to review laws, regulations, and guidelines that affect the collection and disposal of hypodermic needles, syringes, and lancets used outside of professional health care settings (hereafter referred to as “community syringes”). The authors designed a law and policy analysis. Information on syringe collection and disposal in the community was gathered from federal and state records and state agency personnel. Laws, regulations, or guidelines in 13 states allowed community syringes to be legally discarded in household trash; guidelines for in-trash disposal varied among the states. Only 6 states had laws or regulations that specifically addressed community syringe collection. In 10 states, infectious waste laws and regulations that apply to medical facilities such as clinics would also apply to community syringe collection sites. In the 16 states studied, laws, regulations, and guidelines relating to community syringe collection and disposal were somewhat inconsistent and confusing and presented potential barriers to safe disposal. States should consider amending laws, regulations, and guidelines to promote community syringe collection programs. A national effort is needed to achieve consistent community syringe collection and disposal laws and guidelines for all states. Pharmacists can aid in safe syringe disposal by counseling their patients about safe disposal, providing or selling sharps containers, and accepting used syringes for safe disposal. Pharmacists can join other interested groups in advocating clarification of disposal laws and regulations that favor community programs designed to keep syringes out of the trash so that they can be disposed of as infectious waste.

United States Conference of Mayors. The role of pharmacies in preventing HIV among injection drug users. AIDS Information Exchange. December 1999.

There is broad consensus in the public health and AIDS advocacy arenas that preventing the transmission of HIV by increasing injection drug users' (IDUs) access to sterile syringes is a scientifically sound, legitimate public health response to the significant number of HIV cases in the U.S. that are directly or indirectly tied to injection drug use. An emerging strategy is to increase IDUs' access to sterile syringes through retail pharmacies. This *AIDS Information Exchange* summarizes key research findings and recommendations related to this evolving issue.

Valleroy LA, Weinstein B, Jones TS, et al. Impact of increased legal access to needles and syringes on community pharmacies' needle and syringe sales – Connecticut, 1992-1993. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1995;10(1):73-81.

In May 1992, the Connecticut legislature passed new laws aimed at increasing injecting drug users' (IDUs) access to sterile needles and syringes (syringes); as of July 1992, pharmacists were permitted to sell and individuals were permitted to possess up to 10 syringes without medical prescriptions (nonprescription syringes). The authors evaluated the impact of the new laws by conducting (1) prospective surveillance of syringe sales and policies at selected community pharmacies and (2) a telephone survey of pharmacy managers' reports of syringe sales and policies at a statewide stratified random sample of pharmacies. The authors' data provide direct evidence that most, but not all, Connecticut pharmacies sold nonprescription syringes when permitted to do so by the new laws. For example, using the telephone survey data, the authors estimate that during November, 1993, 83% [95% CI: 77-89%] of all Connecticut pharmacies sold nonprescription syringes and 56,000 [95% CI: 44,000-68,000] nonprescription syringes were sold during November 1993. The authors' data provided indirect evidence that IDUs were purchasing nonprescription syringes at pharmacies. For example, in five Hartford pharmacies located in neighborhoods where injection drug use was prevalent, the total number of nonprescription syringes sold per month increased significantly from 460 in July 1992 to 2,482 in June 1993 ($p = 0.0001$). The data suggest that the new laws increased IDUs' access to sterile syringes in Connecticut.

Van Rossum JP, Friederichs J. Household sharps collection program in Brown County, Wisconsin. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S113-S114.

In 1994 Wisconsin State Administrative Code NR526 made it illegal to dispose of untreated sharps (needles, syringes, finger stick lancets) in landfills in the state. The new code prohibited placing used sharps in residential trash for curbside

pick-up. This report describes the program for safe disposal of home-generated sharps developed by Brown County.

Vlahov D. Deregulation of the sale and possession of syringes for HIV prevention among injection drug users. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1995;10(1):71-72.

Injection drug users are at risk for human immunodeficiency virus (HIV) and other blood-borne infections primarily through the sharing (or “multi-person” use) of blood-contaminated syringes and other equipment used to prepare and inject drugs (1). The reasons posited for equipment sharing included the belief that this behavior is a ritual within the subculture of drug injectors (2), however, more recently, there has been a recognition of pragmatic legal and economic motivations for sharing syringes (3,4). Laws which do not allow sale of syringes without a prescription and felony penalties for the possession of syringes originally designed to curtail drug use, may have contributed unwittingly to parenteral transmission of blood-borne infections (5,6). Also, the cost of syringes is not trivial and also could contribute to the practice of sharing syringes (4). In the past decade, hundreds of needle exchange programs have been established in Europe, Australia, and North America to provide injection drug users with increased legal access to sterile syringes (7,8).

Williams DH. Increasing legal and regulatory support for pharmacy syringe sales to injection drug users, Washington State, 1999-2002. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S23-S24.

In 1999 the Centers for Disease Control and Prevention (CDC), the American Pharmaceutical Association (APhA), and the National Association of Boards of Pharmacy co-sponsored a conference in San Antonio to examine blood-borne disease transmission and state policies on pharmacy syringe sales. The presenters provided convincing evidence of the need to modify laws, rules, and policies at the state level to allow the sale of sterile syringes to injection drug users (IDUs) to reduce blood-borne disease transmission. The evidence demonstrated that drug injection with previously used injecting equipment contributes substantially to human immunodeficiency virus (HIV) transmission among IDUs, their sex partners, and their children, and selling sterile syringes addresses a legitimate public health concern by decreasing the reuse of syringes.

Wolfe T, Amelunxen V, Torres D, et al. Encouraging pharmacy sale of syringes to injection drug users in New Mexico. Journal of the American Pharmaceutical Association. 2002;42(Suppl. 2):S32-S33.

Injection drug use is a prominent public health problem in both urban and rural New Mexico. The New Mexico legislature enacted laws in 1997 and 2001 to help increase sterile syringe availability to injection drug users (IDUs) to prevent transmission of human immunodeficiency virus (HIV) and other blood-borne

pathogens. The 1997 laws authorized syringe exchange programs (SEPs) in New Mexico, and the New Mexico Department of Health (DOH) supported the development of a statewide SEP network. Based on enrollment surveys as of June 19, 2002, 20 SEPs were operational and served a total of 4,628 clients. Some IDUs have purchased syringes at community pharmacies, including those in areas served by SEPs. In the parts of New Mexico without access to SEPs, pharmacies have been a particularly important source of sterile syringes. In 2001, to alleviate the concerns of some pharmacists that selling syringes to IDUs might not be fully legal, the state legislature amended the Controlled Substances Act to specifically exempt pharmacists from criminal liability for selling syringes to persons who did not have documented medical need.

Wright-De Aguero L, Weinstein B, Jones TS, et al. Impact of the change in Connecticut syringe prescription laws on pharmacy sales and pharmacy managers' practices. Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology. 1998;18(Suppl. 1):S102-S110.

The authors assessed the impact of the 1992 change in Connecticut syringe prescription laws on pharmacy sales and pharmacy managers' sales practices. A mail survey was conducted in 1994 of all current pharmacy managers in the five largest cities in Connecticut (Hartford, New Haven, Waterbury, Bridgeport, and Stamford) and a random sample of those practicing in all other areas. Of these, 89.3% of the pharmacies in the five largest cities and 85.1% in the other areas had ever sold syringes without a prescription since the July 1992 law went into effect. Most pharmacists identified safety issues as very important in their personal decision about the sale of syringes without a prescription. Although the purpose of the change in the prescription law was to provide expanded access to sterile syringes by injection drug users (IDUs), only 31.4% of the managers who were allowed to sell in all instances and 18.1% of those who sold at their discretion were very willing to sell syringes to IDUs. In the logistic regression model of pharmacies with a sell-in-all-instances policy, the perceived benefit of the sale of syringes on health and community well-being was the only influence independently associated with managers support for nonprescription sales. Overall, managers reported they did not know what other pharmacists thought (40.4%) or did (42.9%) regarding the sale of syringes. When pharmacists had discretion over syringe sales, managers' beliefs about what other Connecticut pharmacists thought and did about the nonprescription sale of syringes remained a significant influence on the degree of support for sales. Most pharmacies implemented and maintained policies permitting the sale of syringes without a prescription. Several issues, including risk of discarded contaminated syringes around pharmacies and in the community and reluctance to sell to IDUs, reduced pharmacists willingness to sell syringes. Efforts to incorporate pharmacists as active partners in HIV prevention in IDUs should promote the sale of syringes without a prescription to IDUs as acceptable public health practice.

