

Articles

Lethal Injections: The Law, Science, and Politics of Syringe Access for Injection Drug Users*

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ENSURING THAT INJECTION drug users who cannot or will not stop injecting have access to sterile syringes is an important part of a comprehensive approach to reducing the transmission of viral and bacterial infections associated with injection drug use.¹ Seen purely in terms of public health science and prevention practice, ensuring syringe access for injection drug users is clearly an appropriate strategy: both evaluation research and experience in the field show that adequate syringe access produces positive health effects without negative social side effects.

I. Introduction

Access to sterile syringes through syringe exchange programs (SEPs) has been associated with decreased rates of needle sharing, decreased prevalence and incidence of blood borne infections such as

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1. ACADEMY FOR EDUCATIONAL DEVELOPMENT, *NEW ATTITUDES AND STRATEGIES: A COMPREHENSIVE APPROACH TO PREVENTING BLOOD-BORNE INFECTIONS AMONG IDUs* (2000), available at <http://www.cdc.gov/HIV/projects/IDU-ta/brochure.htm>.

HIV and hepatitis B and C, and increased rates of entry into drug treatment among injection drug users (IDUs). There is no evidence that such programs increase crime, drug use or the number of discarded needles on the street. Pharmacies, syringe vending machines, and deregulating syringe access can further expand sterile syringe coverage to IDUs, thereby increasing the potential to achieve these positive public health outcomes.

Despite its public health value, however, syringe access has been politically controversial in the United States. In our political culture, driven by symbols and perceptions, improved syringe access has been painted as “soft on drugs,” a retreat from zero tolerance that will be seen as an endorsement of drug use. Polls continue to show that only a little more than half of respondents support enhanced syringe access—a majority, but evidently one that is too narrow or uncommitted to counterbalance the intense symbolic force of the syringe access issue in policy-making. Syringe access, then, is quite a familiar public health policy dilemma: science and professional judgment point to an intervention that is unsettling, if not absolutely unacceptable, to a significant part of the United States public and its political leaders.

Syringe access is regulated by state law. The legal regulation of syringe access varies from state to state but takes one or more of three forms: syringe prescription laws and regulations; other pharmacy regulations or miscellaneous statutes imposing a variety of restrictions on the sale of syringes by pharmacists or others; and drug paraphernalia laws prohibiting the sale or possession of items intended to be used to consume illegal drugs.² Laws on drug possession also may be applied in a manner that in practical terms regulate the possession of syringes and so must also be considered for their possible effects on syringe access.³

The primary policy questions have been the legality of over-the-counter sales of syringes to IDUs, the legality of syringe possession by IDUs, and the authority of public health officials or private sector providers to initiate access interventions. Where clearly legal modes of syringe access are absent, proponents of health interventions such as syringe exchange have had to seek the support of legislators, governors, mayors, and law enforcement officials. Money, too, has been an

2. Lawrence O. Gostin & Zita Lazzarini, *Prevention of HIV/AIDS Among Injection Drug Users: The Theory and Science of Public Health and Criminal Justice Approaches to Disease Prevention*, 46 EMORY L.J. 587, 595 (1997).

3. Scott Burris et al., *State Syringe and Drug Possession Laws Potentially Influencing Safe Syringe Disposal by Injection Drug Users*, 42 J. AM. PHARM. ASS'N S94 (Supp. 2 2002).

issue. At the federal level, there has been an ongoing debate for many years over what, if any, syringe access research or program activities can be conducted with federal funding. Meanwhile, syringe access programs have depended on state or local funding, philanthropy, and the work of volunteers to operate.

This Article updates and significantly expands upon prior legal analyses of syringe access. In addition to syringe exchange, it also evaluates the role of drug possession laws and addresses the important issue of syringe disposal. Although it will also discuss the *science* behind the syringe access issue, its main purpose is to set out where the United States stands on syringe access law, practice, and public attitudes, and to suggest ways in which policy can be changed. Because syringe access is politically controversial, we acknowledge our perspective on the issue: as public health researchers and scholars, we believe that an assessment of the best available research in this area suggests that policies easing access to clean needles can reduce disease transmission without producing substantial countervailing harms.

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. Part II describes the emergence of syringe access as a matter of health policy and practice. Part III is a thorough review of the law of syringe access. 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. To place this body of law in context, Part IV 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. In Part V, we examine the public opinion poll results, and discuss the ethics and politics of syringe access reform. Finally, Part VI offers our key recommendations for public policy.

II. Background

Access to injection equipment has been regulated at the state level for many years. The hypodermic syringe came into common usage in the latter half of the nineteenth century, often as a means for injecting opiates such as morphine and heroin. As rates of opiate addiction began to increase, states responded with legislation making it

more difficult for drug users to obtain syringes.⁴ New York State enacted the first such law in 1911. Among other provisions, New York's law required a written order from a physician before a syringe could be obtained. Just three years later, Congress passed the Harrison Act, which marked the beginning of a major federal role in the control of the narcotics trade. Beginning in 1915, several other states, mostly in the east, followed New York's lead and enacted their own laws limiting the availability of syringes.⁵

Legislative efforts to restrict access to injection equipment were not limited to the early part of the past century, however. Another important flurry of activity occurred in the 1970s with the rapid adoption of state laws criminalizing the possession of certain devices, including syringes, used to inject illegal drugs. These so-called "drug paraphernalia" laws were often patterned after a Model Drug Paraphernalia Act (MDPA) written by the Drug Enforcement Agency in 1979 at the request of President Carter.⁶ They were originally intended to provide a means of prosecuting operators of "head shops"—stores specializing in equipment for drug users. By 1976, it was estimated that between fifteen and thirty thousand of these stores were doing an annual three billion dollar business in such items as cigarette rolling papers, bongs, and freebasing kits. Syringes were not generally mentioned in the legislative debates or court challenges to these laws, nor is it even clear that syringes were being sold in head shops. Debate about the laws usually focused on their breadth and the danger that innocent sellers of items with both legal and illegal uses (such as rolling papers or scales) might be prosecuted.⁷ In a few states, the model law was amended to explicitly exclude pharmacists, but in most states the possibility that pharmacists would be covered through the laws' reference to needles was apparently not considered. Until the emergence of HIV, these laws were seen exclusively in the context of the control of drug abuse.

HIV changed that as transmission through drug injection was recognized as a serious threat to public health. The first syringe exchange program (SEP) was introduced in Amsterdam, the

4. See Gostin & Lazzarini, *supra* note 2, at 597.

5. Mark Parts, *Disease Prevention as Drug Policy: A Historical Perspective on the Case for Legal Access to Sterile Syringes as a Means of Reducing Drug-Related Harm*, 24 *FORDHAM URB. L.J.* 475, 482-83 (1997).

6. Gostin & Lazzarini, *supra* note 2, at 614.

7. Laura Ferguson et al., *Syringe Exchange in Pennsylvania: A Legal Analysis*, 8 *TEMP. POL. & CIV. RTS. L. REV.* 41, 48-49 (1998).

Netherlands, in 1984.⁸ The program, initiated by a drug user organization whose name may loosely be translated as the Junkies' Union, was soon adopted by the Municipal Health Department of Amsterdam, where it became a fundamental component of HIV prevention activities among IDUs. In the late 1980s, SEPs were introduced in the United Kingdom, Australia, Canada, and several other European countries. Global expansion of SEPs has occurred in both developed and developing countries, including China, Russia, the Ukraine, Kyrgyzstan, Nepal, Bangladesh, India, Pakistan, and Colombia. "As of December 2000, there were at least 46 regions, countries and territories that reported having at least one [S]EP."⁹

In the United States, the first SEP was introduced in 1988, in Tacoma, Washington, and spread with the help of non-governmental organizations such as the National AIDS Brigade, the North American Syringe Exchange Network, and Act-Up. Expert reviews of the science supported syringe exchange,¹⁰ but early commentators generally assumed that syringe exchange was illegal in the United States unless explicitly authorized by state law.¹¹ By 1995, there were at least 60 SEPs operating in 46 cities in 21 states.¹² A review of the legal strategies used to implement these SEPs found that 27 programs in ten jurisdictions had been authorized by law or court decision, or were in a state without a syringe-related law. Thirteen programs were operating without any change in law, backed by local governments exercising

8. J.A. van den Hoek et al., *Risk Reduction Among Intravenous Drug Users in Amsterdam Under the Influence of AIDS*, 79 AM. J. PUB. HEALTH 1355, 1355 (1989).

9. Steffanie A. Strathdee & David Vlahov, *The Effectiveness of Needle Exchange Programs: A Review of the Science and Policy*, 1 AIDSCIENCE 1 (2001), at <http://aidsscience.com/Articles/aidsscience013.pdf>.

10. See, e.g., PETER LURIE ET AL., THE PUBLIC HEALTH IMPACT OF NEEDLE EXCHANGE PROGRAMS IN THE UNITED STATES AND ABROAD: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS (1993); JACQUES NORMAND ET AL., PREVENTING HIV TRANSMISSION: THE ROLE OF STERILE SYRINGES AND BLEACH (1995); NATIONAL COMMISSION ON AIDS, THE TWIN EPIDEMICS OF SUBSTANCE ABUSE AND HIV 10 (1991); OFFICE OF THE SURGEON GENERAL, EVIDENCE-BASED FINDINGS ON THE EFFICACY OF SYRINGE EXCHANGE PROGRAMS: AN ANALYSIS FROM THE ASSISTANT SECRETARY FOR HEALTH AND SURGEON GENERAL OF THE SCIENTIFIC RESEARCH COMPLETED SINCE APRIL 1998 (2000), available at <http://www.harmreduction.org/surgreview.html>.

11. See LURIE ET AL., *supra* note 10; L.O. Gostin, *The Interconnected Epidemics of Drug Dependency and AIDS*, 26 HARV. C.R.-C.L. L. REV. 113 (1991); see also Centers for Disease Control and Prevention, *Syringe Exchange Programs—United States, 1994-1995*, 44 MORBIDITY & MORTALITY WKLY. REP. 684 (1995).

12. See Centers for Disease Control and Prevention, *supra* note 11, at 684.

their legal authority to protect public health. At least nine SEPs were operating without any claim to legal authorization.¹³

Although syringe exchange was developing rapidly at the state level and finding support in several key states, a controversy over funding SEPs began to dominate the debate at the federal level. In November 1988, a ban on federal funding for SEPs was enacted.¹⁴ Provisions stated that the ban on federal funding could be lifted only if the President of the United States or the Surgeon General determined that SEPs reduced the transmission of HIV infection and did not increase drug abuse. More restrictive language was inserted into the Comprehensive Alcohol Abuse, Drug Abuse, and Mental Health Amendments Act of 1988, specifying that no funding could be spent "to carry out any program of distributing sterile needles for the hypodermic injection of any illegal drug or distributing bleach for the purpose of cleansing needles for such hypodermic injection."¹⁵ The Ryan White Comprehensive AIDS Resources Emergency Act of 1990 included similar provisions. Later Department of Health and Human Services appropriations acts prohibited funding for SEPs "unless the President of the United States certifies that such programs are effective in stopping the spread of HIV and do not encourage the use of illegal drugs."¹⁶ The legislative restrictions included a proviso that would allow funding if it were certified that syringe exchange reduced HIV incidence without increasing drug abuse. Because there was also an administrative ban on research to evaluate SEPs from 1988 to 1991,¹⁷ this was the quintessential Catch-22.

In 1998, Secretary of the Department of Health and Human Services, Donna Shalala issued the findings required to lift the ban on federal funding, but the Clinton administration, in the face of continuing opposition in Congress and from its own Office of National Drug Control Policy, declined to seek funding for syringe exchange pro-

13. Scott Burris et al., *The Legal Strategies Used in Operating Syringe Exchange Programs in the United States*, 86 AM. J. PUB. HEALTH 1161 (1996).

14. See Health Omnibus Programs Extension of 1988, Pub. L. No. 100-607, § 256, 102 Stat. 3048 (codified in 42 U.S.C. § 300ee-5 (2003)).

15. Comprehensive Alcohol Abuse, Drug Abuse, and Mental Health Amendments Act, Pub. L. No. 100-690, § 2025, 102 Stat. 4193 (1988) (amended 42 U.S.C. § 300x-3; repealed by ADAMHA Reorganization Act, Pub. L. No. 102-321, § 201, 106 Stat. 378).

16. Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 101-166, § 520, 103 Stat. 1159 (1990); see also Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 101-517, § 513, 104 Stat. 2190 (1991).

17. David Vlahov et al., *Needle Exchange Programs for the Prevention of Human Immunodeficiency Virus Infection: Epidemiology and Policy*, 154 AM. J. EPIDEMIOLOGY S70, S71 (2001).

grams or for research. The Surgeon General reiterated the Secretary's findings in 2000.¹⁸ Nevertheless, since 1999 the annual Labor, Health and Human Services appropriations bills have contained a ban on federal funding of syringe exchange.¹⁹

For many years there has also been an annual battle over the Congressional budget appropriation for the District of Columbia. Riders to the fiscal year 2001 not only prohibited the District from funding syringe exchange, but also barred a privately funded SEP from operating close to public housing and within 1000 feet of a school.²⁰ After vigorous lobbying from proponents of SEPs, the fiscal year 2002 appropriation removed the restrictions on the operation of the private SEP, but maintained the ban on federal funding.²¹

Despite the lack of federal funding, by 1999 there were over 160 SEPs in operation in 39 states, the District of Columbia, and Puerto Rico.²² Yet the lack of federal and state support for SEPs has clearly taken its toll. In a survey of 81 SEPs across the United States, Denise Paone and colleagues reported that SEPs that operated illegally were significantly less likely to offer crucial ancillary services, such as on-site HIV testing and counseling and formal arrangements for referrals to drug abuse treatment services.²³ In 1993, an evaluation of twelve North American SEPs reported that these programs seldom reached

18. See OFFICE OF THE SURGEON GENERAL, *supra* note 10.

19. Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 105-78, § 505, 111 Stat. 1467 (1998); Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 105-277, § 505, 112 Stat. 2681 (1999); Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 106-113, §505, 113 Stat. 1501 (2000); Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 106-554, § 505, 114 Stat. 2763 (2001); Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 107-116, § 505, 115 Stat. 2177 (2002); Departments of Labor, Health and Human Services, and Education, and Related Agencies Appropriations Act, Pub. L. No. 108-7, § 505, 117 Stat. 11 (2003) (stating, "[n]otwithstanding any other provision of this Act, no funds appropriated under this Act shall be used to carry out any program of distributing sterile needles or syringes for the hypodermic injection of any illegal drug").

20. See Department of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, FY2001, Pub. L. No. 106-553, § 150, 114 Stat. 2762.

21. See District of Columbia Appropriations Act, Pub. L. No. 107-96, § 125, 115 Stat. 923 (2002).

22. P.O. Coffin et al., *New York City Pharmacists' Attitudes Toward Sale of Needles/Syringes to Injection Drug Users Before Implementation of Law Expanding Syringe Access*, 77 J. URB. HEALTH 781 (2000).

23. Denise Paone et al., *Syringe Exchange in the United States, 1996: A National Profile*, 89 AM. J. PUB. HEALTH 43, 44-45 (1999).

more than 30% of the IDUs in their communities.²⁴ Although SEPs in the United States distribute some 15–20 million syringes each year,²⁵ it is estimated that America's 1.5 million IDUs annually perform between 920 million and 1.7 billion injections.²⁶ In countries like the UK and Australia, where SEPs are supported both federally and locally, the number of sterile syringes provided per IDU per year is much higher.²⁷

The continuing federal funding controversy coincided with and may even have contributed to a stall in the authorization of new SEPs at the state and local levels. In part, however, the decline in legislation addressing SEPs has reflected the increasing awareness by syringe access proponents of the limitations of SEPs and the need for other, complementary strategies. In recent years, advocates in several states have successfully sought "syringe deregulation"—the removal of legal barriers to over-the-counter sales and free distribution of syringes. Deregulation in its purest form eliminates all significant legal restrictions on the sale or possession of hypodermic needles and syringes. It allows the broadest range of syringe access options for IDUs, including SEPs, retail sales, physician prescription and distribution, vending machine sales, and free distribution through community organizations and public health agencies. It decriminalizes needle possession, eliminating criminal law as a deterrent to sterile injection. Less sweeping forms of deregulation allow the sale and possession of a specified number of syringes, or lift restrictions on sales in pharmacies.

Since the beginning of the HIV epidemic, twelve states (Connecticut, Hawaii, Illinois, Maine, Minnesota, New Hampshire, New Mexico, New York, Oregon, Rhode Island, Washington, and Wisconsin) have deregulated the sale or possession of at least some number of syringes. In others, notably California, efforts at deregulation have been unsuccessful. To date, no state that has liberalized syringe access in response to HIV has rescinded the change, but change continues to be a controversial matter in states that maintain restrictive access policies.

24. LURIE ET AL., *supra* note 10, at 15.

25. See, e.g., Paone et al., *supra* note 23, at 44; Centers for Disease Control and Prevention, *Update: Syringe Exchange Programs—United States, 1998*, 50 MORBIDITY & MORTALITY WKLY REP. 384, 386 (2001).

26. Parts, *supra* note 5, at 476–77; P. Lurie et al., *A Sterile Syringe for Every Drug User Injection: How Many Injections Take Place Annually, and How Might Pharmacists Contribute to Syringe Distribution?*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S45, S46–S47 (Supp. 1 1998).

27. Strathdee & Vlahov, *supra* note 9.

Public health authorities recommend that injection drug users use a new, sterile syringe for every injection.²⁸ Despite the continued growth of syringe exchange, and the deregulation of syringes in one-fifth of the states, the United States has consistently fallen far short of this public health goal. In the third decade of its HIV epidemic, the United States continues to debate whether and how to make syringes available to injection drug users.

III. Syringe Access Policy in the United States: A Summary of the Law and the Prior Studies

Selling, buying, possessing, and disposing of syringes are heavily regulated activities. With a few exceptions, the prior studies of syringe access legality, summarized in Section A below, have focused on the presence or absence of the various forms of syringe access regulation in the states. This is an important topic, and Section B below summarizes the latest data on which states have what laws. But syringe access law is much more complicated than what a simple list of laws can show. Although many of these laws are generally similar from state to state, there is in fact a great deal of state-to-state variation in legal syringe access for IDUs. Moreover, legal researchers have increasingly recognized that the legality of different means of syringe access depends upon the form of access (e.g., syringe exchange or pharmacy), the legal status of the person providing the access (e.g., a physician), the particular combination of laws and case decisions in the state, and the attitudes of people who enforce the laws where the access provider wants to operate. This review therefore adds a new analytic step to the existing literature on syringe access law, by analyzing state-by-state the legality of three basic modes of syringe access: retail sale without a prescription, sale with a prescription, and syringe exchange or other forms of free distribution.

A. Previous Studies of SEP Laws

The legality of syringe access for IDUs in the United States has been previously explored. Mark Parts' review of the history of syringe access laws provided an excellent overview of current and past legislation, as well as a thorough review of largely forgotten medical literature describing outbreaks of malaria, tetanus, and other needle-borne

28. U.S. PUBLIC HEALTH SERVICE, HIV PREVENTION BULLETIN: MEDICAL ADVICE FOR PERSONS WHO INJECT ILLICIT DRUGS 4 (1997).

disease among IDUs in the early and mid-twentieth century.²⁹ Several articles and reports in the first decade of the AIDS epidemic identified syringe prescription and drug paraphernalia laws as possible barriers to preventing HIV infection among IDUs.³⁰ Some early surveys of SEPs based their assessment of legality on the presence or absence of a syringe prescription law, ignoring paraphernalia or pharmacy practice laws.³¹ When discussed, paraphernalia laws were assumed to prohibit SEPs and retail sale of syringes.³² Gostin and Lazzarini³³ undertook a study of the laws and regulations applicable to syringe access, including the prescription, drug paraphernalia, and pharmacy practice rules of all fifty states and United States territories. Although comprehensive in its scope, the study did not analyze the law on a state-by-state basis, so meaningful differences in the wording of paraphernalia, prescription, and pharmacy regulations, and important legal issues of their interaction in a given state, were noted but not examined.

Burris and colleagues³⁴ used legal research and survey techniques to identify the legal strategies used by SEPs to operate in the United States. Their analysis identified considerable uncertainty in the legal status of syringe exchange, uncertainty that reflected not only the complexity of the relevant statutes but also the interplay of multiple statutes and the practices of law enforcement and public health officials. Uncertainty about the legal status of syringe exchange was considerably different than clear illegality. SEPs, the study found, could successfully operate without explicit authorization in a climate of uncertainty. Likewise, absent a clear legal prohibition in state law, local governments often had the authority under public health laws to operate or authorize SEPs. The legal and practical effects of this uncer-

29. See Parts, *supra* note 5, at 490-504.

30. Larry O. Gostin, *The Interconnected Epidemics of Drug Dependency and AIDS*, 26 HARV. C.R.-C.L. L. REV. 113, 139 (1991); see Jeff Stryker, *IV Drug Use and AIDS: Public Policy and Dirty Needles*, 14 J. HEALTH POL., POL'Y AND L. 719, 728 (1989); Larry Gostin, *Drug-Dependent Populations: Legal and Policy Options*, in AIDS AND IV DRUG ABUSERS 253 (R. Galea et al., 1988); see Chris Pascal, *Intravenous Drug Abuse and AIDS Transmission: Federal and State Laws Regulating Needle Availability*, in NEEDLE SHARING AMONG INTRAVENOUS DRUG ABUSERS: NATIONAL AND INTERNATIONAL PERSPECTIVES 119, 119 (R. Batjes & R. Pickens eds., 1988); see Catherine O'Neill, *Intravenous Drug Abusers*, in AIDS AND THE LAW: A GUIDE FOR THE PUBLIC 253, 278-280 (H. Dalton et al., 1987) (describing early reports and recommendations).

31. See Centers for Disease Control and Prevention, *supra* note 11, at 685; Paone et al., *supra* note 23 at 43-44.

32. See Gostin, *supra* note 11, at 136-37.

33. See Gostin & Lazzarini, *supra* note 2.

34. Burris et al., *supra* note 13, at 1161.

tainty were illustrated by Ferguson and colleagues,³⁵ who analyzed in detail the law of one state to show that syringe exchange could reasonably be considered legal using a conventional legal analysis even though the state had both a drug paraphernalia law and a syringe prescription regulation.

The importance of dealing with intra-state legal complexity and the inherent uncertainty of much legal analysis was the starting point for Burris and colleagues,³⁶ who investigated the legality of physician prescription and pharmacy sale of syringes to IDUs, a mode of access first suggested by Gostin and Lazzarini.³⁷ This study used a different methodology than Gostin and Lazzarini, taking the collected data and, for each state and territory covered, creating a memorandum analyzing the statutes and case law according to standard legal practices. These memoranda were also the basis of an analysis of syringe deregulation prepared by Burris and Ng for the AIDS Coordinating Committee of the American Bar Association.³⁸

Related legal issues have also been studied. Maxwell Mehlman assessed the tort issues associated with syringe access by physician prescription and pharmacy sale, finding that the risk of civil liability for providing syringes was remote.³⁹ Daniel Abrahamson reviewed the effect of federal law on syringe access, and concluded it was minimal.⁴⁰

B. Syringe Access Law Today

This section updates Gostin and Lazzarini's⁴¹ survey of syringe access law, accounting for the many changes to the law that have occurred in the past five years. This section also summarizes state laws that define the minimum amount of drugs it is a crime to possess.

35. Ferguson et al., *supra* note 7, at 42.

36. See Scott Burris et al., *Physician Prescribing of Sterile Injection Equipment to Prevent HIV Infection: Time for Action*, 133 ANNALS OF INTERNAL MED. 218, 220 (2000) [hereinafter Burris, *Time for Action*]; see Scott Burris et al., *Harm Reduction in the Health Care System: The Legality of Prescribing and Dispensing Syringes to Drug Users*, 11 HEALTH MATRIX 5, 19-24 (2001) [hereinafter Burris, *Harm Reduction*] (These memoranda are available at <http://www.temple.edu/lawschool/aidspolicy>).

37. See, e.g., Gostin & Lazzarini, *supra* note 2.

38. See generally Scott Burris & Mitzi Ng, *Deregulation of Hypodermic Needles and Syringes as a Public Health Measure: A Report on Emerging Policy and Law in the United States*, 12 GEO. MASON U. CIV. RTS. L.J. 69 (2001).

39. Maxwell J. Mehlman, *Liability for Prescribing Intravenous Injection Equipment to IV Drug Users*, 11 HEALTH MATRIX 73, 82 (2001).

40. Daniel Abrahamson, *Federal Law and Syringe Prescription and Dispensing*, 11 HEALTH MATRIX 65, 65 (2001).

41. Gostin & Lazzarini, *supra* note 2.

1. Prescription Laws

Thirteen states and the Virgin Islands impose some form of syringe prescription requirement by statute. Pennsylvania requires a prescription by pharmacy board regulation, not by statute. The prescription requirement stands as a substantial barrier to syringe access in only six of these jurisdictions: California, Delaware, Massachusetts, New Jersey, Pennsylvania, and the Virgin Islands. In Florida and Virginia, a prescription is required only for minors.⁴² In Nevada, a prescription is not required for syringes to be used for asthma, diabetes, or other medical conditions;⁴³ these exceptions, in combination with a favorable view of syringe sales from the pharmacy board, have reportedly led to reasonably liberal syringe access in the state. The remaining five prescription-law states—Connecticut, Illinois, New Hampshire, New York, and Maine—have partially deregulated syringes and now allow non-prescription sale and possession of syringes in limited numbers. Illinois, like Florida and Virginia, does not permit non-prescription sale to minors. These statutes, and any requirements they may impose in addition to a prescription, are summarized in Table I.

2. Other Pharmacy Regulations and Miscellaneous Statutes

Four other types of restriction on the sale of syringes appear in state law, usually but not always within the Pharmacy Code. Twenty-two states allow only pharmacies to sell syringes. Nine require the seller to determine, or the buyer to produce information about, how the syringe will be used. Fourteen require records of some type to be kept. Eleven require the buyer to show identification. Finally, twelve states specify limits on the display of syringes in retail establishments, normally requiring that they be kept behind the counter. These sub-prescription limits on syringe sales are most often (but not always) found in state pharmacy laws and regulations, and are therefore usually referred to as “pharmacy regulations.” Pharmacy regulations were collected and presented in tabular form by Gostin and Lazzarini in 1997, and we were provided with access to some of their data.⁴⁴ Pharmacy regulations are also reported annually in tabular form by the National Association of Boards of Pharmacy. To update and verify the information from these sources, we compared pharmacy regulations

42. FLA. STAT. ANN. § 893.147(3)(b) (West 2002); VA. CODE ANN. § 54.1-3468 (Michie 2003).

43. NEV. REV. STAT. ANN. § 454.480(2) (Michie 2001).

44. Gostin & Lazzarini, *supra* note 2, at 631–637.

Table I: State Syringe Statutes and Regulations (excluding paraphernalia laws)

State	Pharmacy Only	Prescription Required	Information on Purpose Required	Record Keeping by Pharmacists Required	Purchasers Required to Show ID	Display limits
AL	S					
CA	S	S (except for use with insulin or adrenaline)		S (date and time of sale, type, size and quantity of syringe, and signature of the pharmacist)	S (name, address, signature and ID of purchaser required for non-Rx sales)	S
CT	S	S (for > than 10 only)		S (prescriptions must be retained on file for not less than 3 years)		S
DE		S		S (date of sale, description of instrument sold and prescription on file)	S (name, age and address of purchaser)	S
FL		S (sale to minors only)				
GA	R		R (no sale if seller has reasonable cause to believe syringe will be used for an "unlawful purpose")			R
IL	S	S (sale to minors, or for > 20 only)				
IN	R			R (name and quantity of device, purchase date, and the name or initials of the pharmacist)	R (unknown purchasers must show ID)	
KY			S (pharmacists must determine purchaser's planned use of the syringes)	S (purchaser name and address, quantity of syringes purchased, date, purpose)	S (ID)	S
LA	R		R (pharmacist must determine bona fide medical purpose)	R (date, item, quantity and pharmacist signature)	R (purchaser's name, address and ID)	R

Table I (continued)

State	Pharmacy Only	Prescription Required	Information on Purpose Required	Record Keeping by Pharmacists Required	Purchasers Required to Show ID	Display limits
ME	S	S (for > than 10 only)			S (purchaser must be >17 years old)	
MD	R		R (sales shall be made in good faith by the pharmacists to purchasers showing indication of need)	R (date of sale, item and quantity sold and the signature of the pharmacist)	R (purchaser's name, address and proper identification must be provided)	
MA	S	S		S (date of sale and description of the instrument and the signature of the pharmacist shall be recorded on the face of the prescription)	S (name and address of purchaser)	S
MIN	S					
NV	S	S (Except for asthma or diabetes)				
NH	S	S (for > than 10 and minors only)		S (date of sale and number of instruments sold shall be recorded on the prescription)		
NJ	S	S		S (date of sale)		
NY	S	S (for > than 10 only)		S & R (date of sale and pharmacist's signature for prescription sales)		
OH	S (and authorized dealers)		S (Seller must know or reasonably believe that the purchaser is not an unauthorized user)			S
PA		R				

Table I (continued)

State	Pharmacy Only	Prescription Required	Information on Purpose Required	Record Keeping by Pharmacists Required	Purchasers Required to Show ID	Display limits
RI	S					S
SC	S		R (pharmacists must obtain written or oral affirmation that the sale is for a legitimate medical use)	R (type and quantity of needles/syringes sold)	R (signature, address, sex, age and ID)	
TN	R		R (proof of medical need)			R
VA	S	S (for minors <16 only)	S (purchaser must furnish written legitimate purpose)	S (date of sale and name, quantity and price of device)	S (name, address and ID, including proof of age)	R
VI	S	S		S (prescription must be retained for 2 years)		
WA			S (pharmacist must be satisfied device is for a "legal use")			
WV	R					
Total	22	14	9	14	10	12

R = requirement imposed by regulation; S = requirement imposed by statute

collected by Gostin and Lazzarini with the results of our own collection of pharmacy regulations from Lexis, Westlaw, and printed copies of regulations compiled in 1999-2000, and with the 2001 NABP pharmacy law survey.⁴⁵ Where there were discrepancies, we rechecked the regulations on Westlaw or Lexis, and/or contacted regulatory agencies. Results are included in Table I.

3. Drug Paraphernalia Laws

The District of Columbia and every jurisdiction studied except Alaska and Puerto Rico have drug paraphernalia laws. Most of these laws were passed in the 1970s and 1980s to regulate an increasing retail trade in drug-use equipment, and closely followed a model paraphernalia law drafted by the United States Department of Justice.⁴⁶ The typical statute defines drug paraphernalia to include all equipment, products, and materials of any kind which are used, intended for use, or designed for use to “manufacture, inject, ingest, inhale, or otherwise introduce into the human body a controlled substance” in violation of law.⁴⁷ It then provides an exemplary list of items that could be considered drug paraphernalia in some intended uses. In the majority of states, this list includes “[h]ypodermic syringes, needles, and other objects used, intended for use, and designed for use in parenterally injecting controlled substances into the human body.”⁴⁸ Under this definition, the status of any item as paraphernalia depends not just on the characteristics of the item itself but also on the intention or acts of the defendant. To commit a crime, the seller must not only transfer possession of the syringe, but must do so knowing of the intended drug-related use.⁴⁹ Paraphernalia laws usually create two basic offenses: manufacturing or distributing and possessing paraphernalia. Not every state has created both offenses. The crime is typically a misdemeanor.

Nearly all state paraphernalia laws follow the same pattern, though there are small but important differences in many states that influence the applicability of paraphernalia laws to syringes. In addition to the states, discussed below, that have fully or partially deregulated syringes as a public health measure, a significant minority of

45. NATIONAL ASSOCIATION OF BOARDS OF PHARMACY, 2001-2002 SURVEY OF PHARMACY LAW (2002).

46. Gostin & Lazzarini, *supra* note 2, at 615.

47. NEB. REV. STAT. § 28-441(1) (2002).

48. NEB. REV. STAT. § 28-439(3).

49. Commonwealth v. Lacey, 496 A.2d 1256, 1259-1260 (Pa. Super. Ct. 1985).

states have provisions that, at least on paper, make it legal under some circumstances for a seller knowingly to dispense a syringe to an IDU. These exemptions, set out in Table II, take several forms. Ten state paraphernalia laws explicitly or implicitly exempt the possession of syringes in at least some quantity. Indiana's statute, for example, exempts items "historically and customarily used in connection with the . . . injecting . . . of . . . lawful substance[s]," thus, at least in theory, legalizing over-the-counter pharmacy sales of syringes.⁵⁰ In nine states, pharmacists and in some instances other health care providers are exempt from the law. In four states with laws based on the Justice Department's model act, the drafters of the paraphernalia law chose to depart from the model and did not refer to injection or syringes in the text of the law. Although the broad definition of paraphernalia reasonably could be deemed to include syringes even without explicit reference, the decision to omit the references while otherwise adopting the Justice Department model could be read by a judge as evidence of a legislative decision not to prohibit syringe sale and possession. In a fifth state, South Carolina, the statute was not based on the model act: it does not allude to injection or syringes, and more importantly does not apply to items to be used in the consumption of heroin.⁵¹ In states that have both paraphernalia and prescription laws, the interaction of the two must be assessed individually.

Paraphernalia laws were broadly written to criminalize sale or possession of any item intended to be used to facilitate illegal drug use. In theory, items that are used in drug injection—like cotton and small vessels used to dissolve drugs ("cookers") and even bleach kits—are legally indistinguishable from syringes. Because items used in drug preparation have also been implicated in the spread of blood borne diseases, especially hepatitis C virus, public health agencies and syringe exchange programs have routinely distributed them along with syringes. In areas where syringe exchange has not been authorized, some agencies distribute bleach kits as an alternative harm reduction measure. With the political focus on syringe access, the potential legal ambiguity of these other activities was largely ignored. In recent years, however, there have been anecdotal reports of SEPs being deterred from offering, and IDUs being arrested for possessing, sterile cookers and cotton. Efforts to import specially designed sterile cookers that have been used in other countries' public health efforts have been affected by concern about the potential application of paraphernalia

50. IND. CODE ANN. § 35-48-4-8.5(d)(2) (2003).

51. S.C. CODE ANN. § 44-53-391(a) (Law. Co-op 2000).

Table II: Syringe-Related Exemptions in State Drug Paraphernalia Laws (excludes SEP provisions)

Exempts some or all syringes (10)	Exempts some types of sellers (9)	Omits reference to syringes or injection (5)	Other significant exemption (6)
CT (<31)	CA (MDs & pharmacists)	CO	IA (syringes sold for "lawful purpose")
IN (items customarily used to inject lawful substances)	GA (pharmacists)	MI	LA (items for medical use)
IL (<21)	HI (MDs, pharmacists & health care institutions)	NV	MA (does not criminalize paraphernalia possession)
ME	MT (MDs & pharmacists)	WY	MI (does not criminalize paraphernalia possession)
MN	NM (pharmacists)		SC (does not cover items used with heroin)
NH	OH (MDs & pharmacists)		VA (does not criminalize paraphernalia possession)
NY (syringes legally obtained from pharmacy or SEP)	TN (MDs & pharmacists)		
OR	WA (pharmacists)		
RI	WV (licensees such as pharmacists)		
WI			

laws. The problem does not appear to be widespread, but does illustrate the potential scope of drug paraphernalia laws.

4. Deregulation

A number of states have substantially changed their regulation of syringe access in response to the public health threat of injection-related diseases. What is often referred to as "deregulation" is the removal of state law as a barrier to syringe access. It has taken a variety of forms, which are summarized in Table III.

Oregon was the first state to squarely face the question of syringe access as a public health measure. Prior to 1987, syringe sales were not regulated. In that year, the state legislature passed a paraphernalia law based on the model statute, but heeded the advice of state health officials to explicitly exclude syringes from the definition of paraphernalia.⁵² In Oregon, it is therefore legal to sell needles not only in pharmacies but also in other retail outlets, possibly even vending machines, and to distribute them for free through SEPs or other mechanisms. This approach can be described as "complete deregulation" and minimizes the legal barriers to syringe access.

Wisconsin followed Oregon's approach in 1989, but the next state to act adopted a rather different model. Connecticut, which had been the first state to legislatively authorize an SEP, took on the issue

52. OR. REV. STAT. §§ 475.525(3) (2002); Lester N. Wright & Kristine M. Gebbie, *Oregon's Exclusion of Syringes from Its 1987 Drug Paraphernalia Law Was an HIV Prevention Measure*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S144 (Supp. 1 1998).

of wider retail access in 1992. The legislature elected to allow retail sale of syringes without a prescription, but only in pharmacies and only in an amount of ten or fewer.⁵³ At the same time, the paraphernalia law was amended to exclude hypodermic syringes and needles sold or possessed in an amount of ten or fewer. In 1999, the possession, but not the purchase, limit was raised to thirty.⁵⁴ The numbers, and indeed the entire approach, were born of politics rather than health concerns.⁵⁵ The “ten-and-under” approach, in which sale and/or possession is legalized only in a specified number of syringes, has been followed by Illinois (twenty and under), Maine, Minnesota, New Hampshire, and New York.⁵⁶

The ten-and-under approach appears to cause some confusion or conflict over the legality of particular syringes. Because the legality of a syringe depends, in a partial deregulation system, on factors including where it was obtained and how many others are in the possessor’s control, some police officers continue to regard a syringe as illegal unless proven otherwise. In Connecticut, the ambiguous legal status of needles led to continuing reports from SEPs, IDUs and public health officials that police officers were continuing to stop drug users and arrest them for needle possession. The problem eventually came to federal court. In *Doe v. Bridgeport Police Dept.*,⁵⁷ a federal judge prohibited the Bridgeport Police Department from stopping, searching, arresting, or threatening any person in possession of fewer than thirty-one sterile or previously used needles.

Unrestricted pharmacy sales—a third variation on deregulation—emerged in 2000-2002 in Rhode Island, New Mexico, Hawaii, and Washington. The Rhode Island legislature repealed its prescription law and eliminated all criminal penalties for syringe possession. The legislature also amended its paraphernalia law to make clear that syringes were not covered by removing its reference to “[h]ypodermic syringes, needles, and other objects intended for use or designed for use in parenterally injecting controlled substances into the human

53. CONN. GEN. STAT. ANN. § 21a-65 (West 2003).

54. *Id.* § 21a-240(20).

55. See Sarah Bray, et al., *Doffing the Cap: Increasing Syringe Availability by Law but Not in Practice*, 12 INT’L J. DRUG POL’Y 221, 222 (2001).

56. See 720 ILL. COMP. STAT. ANN. 600/3.5-4, 635/1-2 (West 2003); see also ME. REV. STAT. ANN. tit. 17-A, § 1110 (West 2003); MINN. STAT. §§ 151.40(2), 325F.785, 145.924 (2002); N.H. REV. STAT. ANN. § 318:52-c(1)(c), (2002); N.Y. PUB. HEALTH LAW § 3381.1(c) (Consol. 2003); N.Y. GEN. BUS. LAW § 853.2 (Consol. 2003) (other than Illinois, these states specify ten and under).

57. *Doe v. Bridgeport Police Dep’t*, 198 F.R.D. 325, 350 (D. Conn. 2001).

body.”⁵⁸ This deregulation act requires pharmacists to provide information on drug treatment, HIV prevention, and safe disposal practices to purchasers.

By regulating only *sales*, Rhode Island provides more options for public health distribution of needles for free. Thus, the Rhode Island law effectively legalizes syringe exchange altogether and could allow other, less formal modes of distribution.⁵⁹ (In Rhode Island, syringe exchange programs were previously allowed under a separate provision, R.I. Gen. Laws Section 23-11-19, which places the department of health in charge of operating or supervising the program(s).) It should be noted that a deregulation law that confined all delivery of syringes to pharmacies would not liberalize free distribution as Rhode Island’s law has done, because that term usually embraces all transfers, not just sales. Because it eliminates all criminal penalties for syringe access, Rhode Island’s model, like Oregon’s, substantially reduces the role of law enforcement as a deterrent to sterile injection.

New Mexico’s new policy was less sweeping. It exempted from the paraphernalia law only “the sale or distribution of hypodermic syringes and needles by pharmacists licensed pursuant to the Pharmacy Act.”⁶⁰ Because it mentioned both sale and distribution, the statute could not reasonably be read to follow Rhode Island in deregulating free distribution. Passed in haste at the end of the legislative session, the law did not as clearly as possible decriminalize the possession of syringes by IDUs, though this appears to have been the intent.

In 2001, the Hawaii legislature passed a temporary act (set to repeal in 2004) that allows a physician, pharmacist, or institutional health care employee acting under the supervision of a physician or pharmacist to provide sterile hypodermic syringes in a pharmacy, physician’s office, or health care institution for the purpose of preventing the transmission of dangerous blood-borne diseases.⁶¹ The law also legalized syringe possession by the IDU. In contrast to Rhode Island, its language seemed by implication to forbid free distribution.

Washington’s legislature passed, in 2002, an amendment to the state paraphernalia law exempting syringes distributed through pharmacies (free or for cost) from the paraphernalia law, stating that “[i]t

58. Uniform Controlled Substances Act Amendments, R.I. Pub. L. ch. 520 (2000) (codified as amended at R.I. GEN. LAWS § 21-28-4.04 (2002)).

59. See R.I. GEN. LAWS § 23-11-19(a) (2002) (The department of health maintains and supervises the needle exchange program.).

60. N.M. STAT. ANN. § 30-31-25.1(B)(2) (Michie 2002).

61. 2001 Haw. Sess. Laws, Act 292, § 1 (West 2001).

is lawful for any person over the age of eighteen to possess sterile hypodermic syringes and needles for the purpose of reducing blood borne diseases;" it also specified, however, that no pharmacist is required to sell syringes.⁶² A section of the bill mandating the provision of materials about drug treatment and proper syringe disposal, and setting other limits on pharmacy sales, was vetoed by the Governor.⁶³

5. Drug Possession Laws

Although they are not directed explicitly at syringes, drug possession statutes are also relevant to syringe access. In all but six jurisdictions, controlled substance possession laws embrace or could be interpreted to embrace any measurable amount of drug.⁶⁴ See Table IV. This means that the amount of drug left in the barrel of a syringe after use could be sufficient to ground a conviction for drug possession. This in turn means that a used syringe possessed under circumstances indicative of drug use can legally justify arrest and "search" for drugs both in the syringe and on the person of the possessor. There are reports that IDUs have been prosecuted under these circumstances and that fear of such prosecutions acts in practical terms to regulate the possession of the syringe itself.⁶⁵

The prosecution of IDUs for possession of controlled substances based on the residue of drugs left in a used syringe was challenged in lawsuits in Connecticut and New York. The plaintiffs, who were clients of legal SEPs and (in Connecticut) legal pharmacy purchasers, successfully argued that such prosecutions were illegal under the state laws that had liberalized syringe access.⁶⁶ In Connecticut, the federal court held that Connecticut's syringe exchange and pharmacy-sale laws had not only eliminated criminal penalties for possessing fewer than 31 needles, but also necessarily decriminalized possession of any trace amounts of drug in the used syringe. The court reasoned that

[c]riminalizing the possession of trace amounts of narcotics within decriminalized, previously-used hypodermic syringes and needles would lead to absurd results which would thwart the public-health

62. See 2002 Wash. Legis. Serv. 213 (West) (codified in WASH. REV. CODE ANN. §§ 69.50.4121(3), 69.50.412(5), 70.115.060 (West 2003)).

63. See 2002 Wash. Legis. Serv. 213 (West).

64. See Danny R. Veilleux, *Minimum Quantity of Drug Required to Support Claim that Defendant Is Guilty of Criminal Possession of Drug under State Law*, 4 A.L.R. 5th 1 (1992); Burris et al., *supra* note 3.

65. See *Doe v. Bridgeport Police Dep't*, 198 F.R.D. 325, 329-330 (D. Conn. 2001); see also *Roe v. City of New York*, 232 F. Supp. 2d 240, 246-247 (S.D. N.Y. 2002).

66. See *Doe v. Bridgeport Police Dep't*, 198 F.R.D. 325; *Roe v. City of New York*, 232 F. Supp. 2d 240 (finding for plaintiffs in both cases).

Table III: Syringe Deregulation in the United States

State	Year	Prior Law(s)	Change
OR	1987	Paraphernalia law	Syringes explicitly excluded from paraphernalia law
WI	1989	Paraphernalia law	Syringes explicitly excluded from paraphernalia law
CT	1992	Prescription law	Allowed purchase of 10 or fewer syringes without prescription
		Paraphernalia law	Allowed possession of 10 or fewer syringes without a prescription (raised to 30 or fewer in 1999 amendment)
ME	1993	Prescription law	Allowed the sale of 10 or fewer syringes without a prescription
	1997	Paraphernalia law	Allowed possession of 10 or fewer syringes
MN	1997	Paraphernalia law	Allowed pharmacy sale of up to 10 syringes without a prescription and the possession of up to 10 unused syringes at a time
NY	2000	Prescription law	Allowed the sale of 10 or fewer syringes without a prescription (during two-year experiment)
		Paraphernalia law	Allowed the possession of legally obtained syringes (during two-year experiment)
NH	2000	Prescription law	Allowed the purchase of 10 or fewer needles in a pharmacy without a prescription
		Paraphernalia law	Syringes excluded from paraphernalia law
RI	2000	Prescription law	Repealed
		Paraphernalia law	Syringes excluded from paraphernalia law
NM	2001	Paraphernalia law	Allowed the sale of syringes by licensed pharmacists
HI	2001	Paraphernalia law	Exempts sale by medical professionals to IDU for disease control purposes; exempts possession by IDU
WA	2002	Paraphernalia law	Allows pharmacy sale and IDU possession "for the purpose of reducing the transmission of bloodborne diseases"
IL	2003	Prescription law	Allowed pharmacy purchase and subsequent possession of up to 20 syringes without a prescription
		Paraphernalia law	Allowed the possession of legally obtained syringes

purpose behind the 1992 legislation: discouraging needle and syringe exchange program participants from transporting previously-used injection equipment to the Exchange, and encouraging all injecting drug users to hastily and likely improperly abandon now-easily-obtainable injection equipment after one use in order to avoid arrest.⁶⁷

We found no data on the number of people prosecuted and imprisoned for possession of trace amounts of heroin or other injectable drugs. One could reasonably assume that the number is small: there is little glory for prosecutors or police in trying or arresting users, and one can imagine jurors and judges, particularly in big cities, disfavor-

67. *Bridgeport Police Dep't*, 198 F.R.D. at 349.

Table IV. Possession of Trace Amounts of Illegal Drug

Law explicitly or by judicial interpretation criminalizes possession of trace amount (34)	Law could reasonably be interpreted to criminalize possession of trace amount (13)	Law explicitly or by judicial interpretation exempts possession of trace amount (6)
AL, AK, CO, CT* , DC+, GA, ID, IL, IN, KS, KY, LA, ME, MD+, MI, MN, MS, MO, NE, NH, NJ, NM, NY** , NC, ND, OH, OK, OR, SC, TX, UT, VA, WA, WI	DE, FL, IA, MA, MT, PA, PR , SD, TN, VT, VI, WV, WY	AZ, AR, CA, HI, NV, RI

* A federal district court has enjoined enforcement of this law in Bridgeport

+ SEP clients exempt

** A federal district court has declared that this law does not apply to SEP clients

Boldface type indicates crime is a felony

ing efforts to treat small-time use as big time crime. If those assumptions are true, raising the minimum amount of drug possessed necessary to constitute a crime to a specified or “usable” amount would not have a real impact on the ability of the state to prosecute and jail people who possessed drugs. Without minimizing the value of data on these points, however, it is likely that the real value to law enforcement of these low possession thresholds is in their facilitation of “street policing.”

It has long been recognized that the strategies and legal interpretations of law enforcement officers on the streets can differ from the law on the books. Police officers have considerable discretion within the rules to use law to control street situations. Dealing with IDUs, they can stop and frisk, question, confiscate syringes, warn, or arrest. Arrest does not necessarily have to be aimed at prosecution and conviction upon a major charge, such as drug possession. An officer may simply use the arrest to get a person off the street for a few hours. A charge of drug possession based on residue possession may be plea-bargained to a lesser charge, still occasioning a period of pre-trial imprisonment and an addition to the user’s criminal record. Many drug users are already on probation or parole, so that a drug related arrest or conviction, however minor the charge, may lead to re-incarceration on the original charge.

C. Syringe Access by Jurisdiction and Mode

Identifying what laws a state has, relevant to syringe access, is only the first step in the analysis of syringe access legality. Leaving aside syringe exchange or deregulation laws, the statutes and regulations discussed above were not written with disease prevention in mind, and

frequently leave some room for uncertainty as to their applicability to syringe access initiatives. Even laws that unambiguously prohibit some forms of syringe access may authorize others: syringe prescription laws generally prohibit sales without a prescription, but may not prohibit physicians from prescribing syringes to IDUs. In the absence of an explicit statute or judicial decision on the precise issue, the determination of the legality of a mode of syringe access in a particular state is a matter of professional legal judgment taking into consideration statutory language, legislative intent, case decisions, and social factors. Such legal analysis is constrained to some extent by norms of interpretation within the legal profession, but these constitute outer bounds of plausible reasoning, leaving considerable room for reasonable disagreement. The conclusions below should thus be understood as professionally defensible predictions about how a judge—the legal official ultimately empowered to say what the law means—would interpret the law in a state. This is reflected by our use of three categories of legality: “clearly legal” and “clearly illegal”—both indicating that the plain text of laws or case decisions would be deemed by most lawyers to authorize or bar the activity—and “reasonable claim to legality,” indicating that an attorney could ethically advise a client that the law, while unclear, could be interpreted to allow the conduct at issue. This legal uncertainty is a characteristic and important aspect of syringe access policy and practice.

1. Retail Syringe Sale Without a Prescription

In states without a prescription requirement, the main legal influences on the retail sale of syringes are drug paraphernalia laws and statutes or regulations requiring the buyer to demonstrate a legitimate medical purpose for the purchase. Assessing the legality of over-the-counter sales in these states is not always clear-cut. As discussed above, drug paraphernalia laws at most only prohibit the knowing sale of syringes to an IDU; a seller who does not know of the intended use, and is not being willfully blind to the clear indications of the user’s intention, does not violate the law. Table V, therefore, addresses the harder question of whether a knowing sale is legal.

Paraphernalia laws in some states contain exemptions that would cover at least some knowing retail sales. Moreover, nearly all state paraphernalia laws were passed before the HIV epidemic, and were aimed at the sale of non-medical equipment in stores catering to recreational drug users. In many of these states, it is reasonable to conclude that paraphernalia laws were not intended to prohibit sales of a

medical device like a syringe in retail establishments not catering primarily to drug users, as part of an effort to reduce HIV transmission. The argument that paraphernalia laws do not apply is particularly strong in the case of pharmacy sales because pharmacists enjoy special legal status as licensed sellers of a wide variety of regulated drugs and devices. This argument is generally *not* reasonable where legislatures have subsequently amended paraphernalia laws to allow SEPs. Amending a paraphernalia law to allow SEPs would not be necessary unless the legislature believed that syringe sales were generally limited by the paraphernalia law. The Courts' practice of interpreting statutes that afford a limited exception to continue to bar activity that has not been exempted would lead to the same conclusion.

Retail sales may be restricted to pharmacies by explicit provision of law or regulation or because the generally applicable law prohibiting sales exempts only pharmacists. Other regulations or syringe laws may also influence sales.

Table V. Retail Sale of at Least Some Number of Syringes to an IDU, Knowing of the Intended Use

Clearly legal (21)	Reasonable claim to legality (22)	Clearly illegal (10)
AK, CT*, HI*, IL*, IN*, LA*, ME*, MN*, MT*, NH*, NM*, NY*, OH*, OR, PR, RI*, SC*, TN*, WV*, WA*, WI	AL*, AR, AZ, CO, FL, ID, IA, KY, MD*, MI, MO, MS, NE, NV*, NC, ND, OK, SD, TX, UT, VA*, WY	CA, DE, DC, GA, KS, MA, NJ, PA, VT, VI

(* denotes sale clearly legal or has a reasonable claim to legality in pharmacy only)

2. Sale with Prescription

Physicians generally have broad discretion to prescribe drugs and devices they believe will be medically beneficial for patients.⁶⁸ A prescription is proper if it is written (1) in good faith, (2) in the course of normal professional practice, and (3) for a legitimate medical purpose in accordance with treatment principles accepted by a responsible segment of the medical profession.⁶⁹ Pharmacists are authorized

68. See BARRY F. FURROW ET AL., *HEALTH LAW* (1995); see also CAL. BUS. & PROF. CODE ANN. § 2051 (West 1998).

69. Lawrence O. Gostin, *The Legal Environment Impeding Access to Sterile Syringes and Needles: The Conflict Between Law Enforcement and Public Health*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S60, S62 (Supp. 1 1998); 21 U.S.C. § 802(21) (2003); See PA. STAT. ANN. tit. 35, § 780-111(d) (West 2003); *United States v. Rosenberg*, 515 F.2d 190, 193 (9th Cir. 1975); *People v. Schade*, 32 Cal. Rptr. 2d 59, 69 (1994); Christopher Vaeth, *Annotation: State Law Criminal Liability of Licensed Physician for Prescribing or Dis-*

to dispense medications ordered by a valid prescription and are ordinarily expected to do so in the absence of good reason to refuse.

Scott Burris and colleagues⁷⁰ examined the legality of physician prescription of injection equipment to patients as a means of preventing disease transmission associated with injection drug use. The practice was clearly legal in 49 of the 53 jurisdictions, while dispensing prescribed syringes in pharmacies was clearly legal in 28. State law was considered to provide a reasonable claim to legality in two states with respect to prescribing and 22 with respect to dispensing. Prescribing injection equipment was clearly prohibited by law in only two jurisdictions; dispensing was clearly illegal in only three. The legality of needle distribution through the health care system is thus quite different than lay distribution through syringe exchanges or pharmacy sale without prescription. These findings are outlined in Table VI below.

Table VI. Prescription and Sale of Syringes

Physician prescription of sterile injection equipment			Pharmacy sale of prescribed syringes		
Clearly legal (49)	Reasonable claim to legality (2)	Clearly illegal (2)	Clearly legal (28)	Reasonable claim to legality (22)	Clearly illegal (3)
AL, AK, AR, AZ, CA, CO, CT, DC, FL, GA, HI, ID, IL, IN, IA, KY, LA, ME, MD, MA, MI, MN, MS, MO, MT, NE, NV, NH, NJ, NM, NY, NC, ND, OR, PA, PR, RI, SC, SD, TN, TX, UT, VT, VA, VI, WA, WV, WI, WY	OH, OK	DE, KS	AK, CA, CO, CT, HI, IL, IN, LA, ME, MA, MI, MN, MT, NV, NH, NJ, NM, NY, OR, PA, PR, RI, SC, TN, VA, WA, WV, WI	AL, AR, AZ, DC, FL, ID, IA, KY, MD, MS, MO, NE, NC, ND, OH, OK, SD, TX, UT, VT, VI, WY	DE, GA, KS

3. Syringe Exchange

Syringe exchange continues to grow as a mechanism of sterile syringe access. Programs reportedly operating in the United States are summarized in Table VII. In legal terms, SEPs may be placed into four categories, which are described in Table VIII below. Twelve states and the District of Columbia have affirmatively authorized syringe ex-

dispensing Drug or Similar Controlled Substance, 13 A.L.R. 5th 1, 3 (1994); FRANK M. MCCLELLAN, *MEDICAL MALPRACTICE: LAW, TACTICS AND ETHICS* (1994).

70. See Burris et al., *Time for Action*, *supra* note 36, at 220 (We have updated their results to take into consideration subsequent changes in state law.); Burris et al., *Harm Reduction*, *supra* note 36 at 8.

change programs. Seven states—Connecticut, Hawaii, Maine, Maryland, New Mexico, Rhode Island and Vermont—and the District have done so by passing laws establishing programs. (In Maryland, SEPs are authorized in Baltimore only. In New Hampshire, though authorized by law, no SEP has actually been approved to operate by the health department). Two states—California and Massachusetts—have delegated the decision to allow SEPs to local governments. In New York, syringe exchange programs are authorized by the Commissioner of Health exercising power granted in the paraphernalia law to waive its application.⁷¹ In Washington, local health officials secured a declaratory judgment from the state Supreme Court holding that the paraphernalia law did not prohibit them from authorizing syringe exchange programs, a ruling that was later codified by the legislature.

Syringe exchanges in three states are presently operating by authority of local government, without explicit authorization from state authorities. In Philadelphia, Allegheny County (PA), and Cleveland, local officials determined that their public health authority extended to authorizing syringe exchange, despite the existence of state laws otherwise limiting syringe access to IDUs. In Chicago, local law enforcement and health officials have interpreted a “research” exemption from the paraphernalia law to encompass SEPs. While these interpretations are legally debatable, they are also legally reasonable and have proven a politically expedient way to operate SEPs in states unlikely to change their law. In five states, the law does not regulate the free distribution of syringes, and therefore does not prohibit syringe exchange.

Syringe exchange programs operate in at least nineteen states without a specific claim to legality. The laws in these states may or may not clearly forbid SEPs, but these SEPs nevertheless are able to operate through more or less tacit arrangements with law enforcement authorities. In some of these states, such as Massachusetts, illegal exchanges operate along with legally authorized ones, usually in areas where legal exchange does not operate or is regarded as insufficient by the non-sanctioned exchange providers. Where there is no explicit authorization for SEPs, the legality of syringe exchange or other modes of free distribution depends upon the specific language and case law under any applicable syringe prescription, drug paraphernalia and pharmacy practice laws. Based on a review of reported cases, New Jersey is the only state without any legal needle access in which

71. N.Y. PUB. HEALTH LAW § 3381 (Consol. 2003).

Table VII: Syringe Exchange Programs in the United States
(Adapted from Singh et al. 2001)

State	SEPs	Comments
Alaska	1	
Arizona	1	SEPs receive public funding
California	21	SEPs receive public funding & Los Angeles and San Francisco have multiple SEPs
Colorado	2	SEPs receive public funding
Connecticut	6	SEPs receive public funding
DC	1	
Georgia	1	
Hawaii	1	SEPs receive public funding
Illinois	2	SEPs receive public funding
Indiana	2	Indianapolis has multiple SEPs
Kansas	1	
Louisiana	1	
Maryland	1	SEPs receive public funding
Massachusetts	5	SEPs receive public funding
Michigan	3	Detroit has multiple SEPs
Minnesota	2	Minneapolis has multiple SEPs
Montana	2	
New Hampshire	1	
New Jersey	1	Subsequently closed down by police action
New Mexico	9	SEPs receive public funding
New York	14	SEPs receive public funding & New York City has multiple SEPs
North Carolina	1	
Ohio	2	
Oklahoma	1	
Oregon	3	SEPs receive public funding & Portland has multiple SEPs
Pennsylvania	3	SEPs receive public funding
Puerto Rico	2	SEPs receive public funding
Rhode Island	1	SEPs receive public funding
Tennessee	1	
Texas	2	
Utah	1	
Washington	12	SEPs receive public funding & Seattle and Tacoma have multiple SEPs
Wisconsin	3	SEPs receive public funding
Total Number of States = 33	Total = 110	

* Five other cities asked that their program information be kept confidential

lay exchangers have actually been convicted of a syringe law violation. The fact that an exchange operates without a clear legal basis does not necessarily mean that such a basis could not be identified. In Colorado, for example, local governments have substantial authority to deal with local health threats, and so a city would have a reasonable

Table VIII: Legal Status of Syringe Exchange Programs in the U.S. (Some data from Singh et al. 2001)

SEP authorized by state law (13)	SEP authorized by local government based on its interpretation of state law (3)	Free distribution of syringes not restricted by state law (5)	SEP(s) operating without specific claim to legality – 1998 (19)
CA, CT, DC, HI, ME, MA, MD, NH, NM, NY, RI*, VT, WA	IL, OH, PA	AK, LA, OR, RI, WI	AZ, CO, GA, IN, KS, MA, MI, MN, MT, NJ, NY, NC, OK, PA, PR, TN, TX, UT, WA

* State law no longer restricts free distribution

basis for authorizing an SEP under its own authority. Research has not been performed on the legal authority of most cities to authorize syringe exchange.

Syringe exchanges explicitly authorized by statute are subject to a variety of rules concerning the manner in which they may distribute syringes and the services they must offer. Strict one-for-one exchange policies are often required by policy makers to placate concerns that SEPs could lead to an increase in improperly discarded syringes or encourage initiation of injection among youth.⁷² These rules, which like the “ten and under” cap reflect political rather than public health imperatives, may have in some instances a significant impact on the effectiveness of official SEPs, and may explain why illegal or unofficial SEPs may continue to operate in states that have authorized legal programs. These limits are summarized in Table IX. SEP operating policies not explicitly required by applicable law may also influence syringe access. For example, some SEPs follow a “high access” model that focuses on direct contact with each IDU, rather than a “high volume” model that aims for maximum dissemination of syringes. Some high-access SEPs have actively discouraged secondary exchange—giving large numbers of syringes to exchange clients with the expectation that they will be given or sold to others—despite some evidence that secondary exchange could enhance the effectiveness of syringe exchange.⁷³

72. See LURIE ET AL., *supra* note 10, at 17–19.

73. See Carl A. Latkin, & Valerie L. Forman, *Patterns of Needle Acquisition and Sociobehavioral Correlates of Needle Exchange Program Attendance in Baltimore, Maryland, U.S.A.*, 27 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 398, 401–402 (2001); Thomas W. Valente et al., *Satellite Exchange in the Baltimore Needle Exchange Program*, 113 PUB. HEALTH REP. 90 (Supp. 1 1998).

Table IX: Statutes and Regulations Governing Syringe Exchange Programs

	CA	CT	HI	ME	MA	MD	NH	NM	RJ	VT	NY	D.C.
Explicitly legalizes possession by client		S (30 or fewer)	S	S (10 or fewer)	S	S	S	S	S	S		S
ID card authorized						S			R	R	R	
Delegates details to health department		S*	S	S	S*	S	S*		S	S		S*
One for one required		S	S	R		S			R (1 for 1 + 1 more)			
Cap on total syringes to be provided		S (30 per exch.)		R (10 per exch.)								
Waiver of exchange for first visit		S										
Disposal provision				S					R	R	R	
Health care/testing						S			S			S
Drug treatment referral		S	S		S	S		S	S	R	R	S
Educational services offered		S (HIV)	S (HIV)	S (HIV)		S (HIV)	S	S (HIV)	S	R	R (HIV)	

S = By statute. R = By regulation. * = No Department of Health regulations have been issued.

D. Syringe Disposal

Syringe disposal has emerged as another important facet of syringe access policy. The prospect of providing syringes to IDUs sometimes triggers concerns that needles contaminated with HIV will be carelessly discarded in schoolyards or other inappropriate places. For example, in Windham, Connecticut, the SEP was closed in significant part because of allegations that users were discarding needles in the surrounding community.⁷⁴ Generally, however, an effective mechanism for safe syringe disposal is inherent in the SEP intervention. Disposal is an explicit part of SEP regulation in only four states, but SEPs typically provide one new syringe for every used syringe turned in, or in some other way tie the number of needles given out to the number returned. Thus, syringe exchange programs do not increase the time that potentially contaminated syringes circulate in the community and, indeed, reduce the number of inappropriately discarded ones.⁷⁵ Empirical studies of discarded syringes in the vicinity of syringe exchange programs have documented the absence of increases in unsafely discarded syringes.⁷⁶

The disposal issue has loomed even larger in the development of deregulation policies, because deregulation laws may expand syringe availability without necessarily providing new means of safe disposal. Recent deregulation laws, including Minnesota's and New York's, have dealt with the disposal question by mandating information on disposal for buyers and encouraging voluntary disposal programs or referral efforts by sellers. A pre- and post-deregulation study by the Minnesota Department of Health found that the proportion of IDUs using officially approved means of syringe disposal did not change after pharmacy sales were legalized (remaining at about 20%).

[A]lthough most disposal methods used by IDUs were classified as being unsafe, most of these methods did not pose a serious threat to the general public Over 94% of these unsafe disposal methods included some variation of the following: placing a capped syr-

74. Robert S. Broadhead, *The Impact of a Needle Exchange's Closure*, 114 PUB. HEALTH REP. 439, 439 (1999).

75. Kathy J. Oliver et al., *Impact of a Needle Exchange Program on Potentially Infectious Syringes in Public Places*, 5 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 534 (1992); Meg C. Doherty et al., *Discarded Needles Do Not Increase Soon After the Opening of a Needle Exchange Program*, 145 AM. J. EPIDEMIOLOGY 730, 730 (1997); see also Kaveh Khoshnood et al., *Syringe Source, Use, and Discard among Injection-Drug Users in New Haven, Connecticut*, 15 AIDS PUB. POL'Y J. 88, 92, 94 (2000) (IDUs using SEP significantly less likely to report throwing away syringes than pharmacy purchasers).

76. Doherty et al., *supra* note 75, at 731; Oliver et al., *supra* note 75, at 534.

inge in a soda can or other container that is then crushed and thrown in the trash.⁷⁷

But if the early evidence is that pharmacy availability does not make the disposal problem worse—e.g. does not lead to disposal in parks—it also points to the overall lack of safe disposal options for needles used outside the health care system.

In the United States, over 3 billion syringes are used each year in community settings (i.e., outside health care facilities), and are deposited into the general waste stream.⁷⁸ Discarded needles are a source of injury and anxiety to workers in trash disposal, recycling, and related occupations. Most of these syringes come from people administering medications for conditions such as diabetes, but many are attributable to IDUs.⁷⁹ The American Medical Association's Council on Scientific Affairs, summarizing the results of a national conference on disposal, reported that "there are no defined regulations or laws that guide the disposal of sharps in the community."⁸⁰ While states may have their own system for handling the community disposal of used sharps, many are not successful and guidelines that do exist are conflicting and often inappropriate. "This has led to confusion among stakeholders regarding the proper disposal of used sharps in the community."⁸¹ Only a few communities have locally-administered programs for syringe disposal.⁸²

The problem is not merely a lack of regulation, but also the effects of substantial regulation that pertains to but does not adequately address community syringe disposal. Dealing with the disposal of needles puts any policy reformer at the intersection of several complex, overlapping regulatory systems. Discarded syringes may be subject to regulation under general state solid waste management statutes

77. Niki U. Cotten-Oldenburg et al., *Impact of Pharmacy-Based Syringe Access on Injection Practices Among Injecting Drug Users in Minnesota, 1998 to 1999*, 27 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 183, 190 (2001).

78. *Disposing of Hypodermics: Stuck with a Needle Problem*, AM. MED. NEWS, July 30, 2001, at http://www.ama-assn.org/sci-pubs/amnews/amn_01/edsa0730.htm.

79. Grace E. Macalino et al., *Community-Based Programs for Safe Disposal of Used Needles and Syringes*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S111, S113, S117 (Supp. 1 1998).

80. COUNCIL ON SCIENTIFIC AFFAIRS, AM. MED. ASS'N, *SAFE DISPOSAL OF SYRINGES, NEEDLES, AND OTHER SHARPS IN THE COMMUNITY*, Report A-01 (2001), available at <http://www.ama-assn.org/ama/pub/article/2036-4965.html>.

81. *Id.*

82. See Macalino et al., *supra* note 79, at S118; see also E. Riley et al., *Operation Red Box: A Pilot Project of Needle and Syringe Drop Boxes for Injection Drug Users in East Baltimore*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S120 (Supp. 1 1998).

or under specific statutes dealing with medical waste.⁸³ These, however, often exempt syringes generated in individual, community use. The Occupational Safety and Health Administration's Bloodborne Pathogen standard applies to workers who may reasonably anticipate coming into contact with used syringes.⁸⁴ The standard requires employers to write an Exposure Control Plan setting out tangible steps for reducing worker risk. Some states have created voluntary guidelines for community disposal, advising syringe users, for example, to dispose of syringes in coffee cans or plastic milk containers. Use of the mail as a means of returning community syringes for proper disposal is governed by U.S. Postal Service Regulations and some states' solid waste law.⁸⁵ Finally, the array of laws governing syringe and drug possession may also influence disposal, to the extent that fear of arrest may make IDUs unwilling to follow through on safe disposal of their used, blood-contaminated syringes.⁸⁶

Many of these regulations may raise the cost or limit the options for any agency, business, or community group willing to undertake responsibility for disposal. At the same time, the overlapping of jurisdiction leaves unclear who is ultimately responsible for syringes disposed in the community. Of course, a system of syringe disposal is not free, adding the difficult question of who should bear the cost to the policy dilemma. Although the data are only now being systematically collected, there are reports of agencies at the state and local level developing community syringe disposal models, and waste management providers have experimented with mail-back disposal systems in at least one state. Developing a coordinated approach and appropriate funding mechanism for collecting community-generated syringes is an important policy priority that may require legislative action at the state or federal level.

To the extent that safe systems of community sharps disposal are implemented, the syringe access laws set out earlier may act as barriers to participation by IDUs. Community disposal programs usually require the participant to dispose of syringes in specially designed or labeled containers placed in regular trash, or to take the needles to a

83. ALA. CODE § 22-27-1-22-27-7 (2003); Alabama Department of Environmental Management Admin. ALA. ADMIN. CODE r. 335-13-7.01-335-13-7.10 (2003).

84. 29 C.F.R. § 1910.1030 (2003).

85. See 39 C.F.R. § 111.1 (2003).

86. Kristen W. Springer et al., *Syringe Disposal Options for Injection Drug Users: A Community-Based Perspective*, 34 SUBSTANCE USE & MISUSE 1917, 1929 (1999); Cotten-Oldenburg et al., *supra* note 77, at 189.

designated community disposal site.⁸⁷ In either case, an IDU would have to accumulate used needles, many of which would contain drug residue, and dispose of them in a way or in a place that makes concealment difficult. To the extent that possession, use of syringes for drug use, or possession of trace amounts of an illegal drug are crimes, participating in safe disposal creates a legal risk for IDUs. As one IDU put it, "They'd [the police] catch you with a dirty syringe and you'd go to jail for possession, so people ain't hardly gonna keep 'em laying around, keep 'em in a container or whatever."⁸⁸

Burris and colleagues reviewed syringe access and drug possession laws to determine whether they could be interpreted to criminalize the possession of a used syringe by an IDU.⁸⁹ Drug possession laws could be applied to trace amounts in forty-seven jurisdictions. Taking into account the two jurisdictions without a paraphernalia law, the fifteen states that have authorized at least some possession of syringes (through deregulation, syringe exchange legislation or otherwise), and six other jurisdictions whose paraphernalia laws regulate only sale (Massachusetts, Michigan, Vermont, Virginia, West Virginia, Wyoming), the study found thirty jurisdictions whose paraphernalia laws make it a crime for an IDU to possess a used syringe. In three of these (Arizona, Delaware, North Dakota), the crime is a felony. Prescription laws in six jurisdictions (California, Delaware, Nevada, New Jersey, Virginia, Virgin Islands) also prohibit possession of syringes without a prescription. Together, these provisions operate to create at least potential criminal liability for IDUs participating in safe disposal activities in all but two states. For complete results see Table X.

From a policy perspective, the most significant finding of the study is that these barriers exist even in most of the states that have deliberately adopted policies affording IDUs legal access to syringes (and indeed even in states that have mandated that syringe purchasers be given information about safe disposal). In these states, the specific barrier is usually a drug possession provision, which may not have been addressed because of a lack of awareness of the way that drug possession laws are tied to disposal, or because of political reluctance to "weaken" drug possession laws by excluding the possession of residue. In some states, the failure to remove barriers to disposal may also reflect the legal complexity of syringe access and drug possession law; in New Mexico, for example, legislation to ease syringe access re-

87. See Macalino et al., *supra* note 79, at S112.

88. Springer et al., *supra* note 86, at 1923.

89. See Burris et al., *supra* note 3.

Table X. Disposal Disincentives

BOTH a syringe and drug possession provision that could deter IDU participation in safe disposal (29)	EITHER a syringe or drug possession provision that could deter IDU participation in safe disposal (22)	NO syringe or drug law barriers to IDU participation in safe disposal (2)
AL, CO, DE, DC*, FL, GA, ID, IN, IA, KS, KY, LA, MA*, MD*, MS, MO, MT, NE, NJ, NC, ND, OH, OK, PA, SD, TN, TX, UT, VA, VI	AK, AZ, AR, CA*, CT*, IL*, ME*, MI*, MN*, NV*, NH*, NM*, NY*, OR*, PR, SC, VT*, WA*, WV, WI*, WY	HI*, RI*

* State has authorized SEP, fully or partly deregulated syringes to prevent blood borne disease, or otherwise acted to enhance syringe access for IDUs

moved legal barriers to the sale of syringes to IDUs, but apparently inadvertently did not legalize their possession once purchased.⁹⁰ Nevertheless, some policy makers have recognized and addressed the problem in part; in the District of Columbia and Maryland, syringe exchange legislation explicitly immunized SEP clients (though not other IDUs) from prosecution for the possession of residues.

IV. Research Regarding the Effects of Syringe Access Policies

Both sides in the debate over enhancing syringe access frequently rely on health research data to support their positions. A large body of literature exists on injection drug use, law and health, although several questions that have been crucial in policy debate have not been clearly answered. In this section, we will highlight research addressing the most important factual findings for policy. These issues are whether restrictive syringe access laws do indeed influence the ability of IDUs to purchase syringes, whether removing some or all legal barriers to syringe access is effective in enhancing syringe access and reducing needle sharing, and whether changes in syringe law have adverse health or societal consequences, such as increasing drug use or crime. Although the research generally is of high quality—it has, as we observed at the outset, convinced us of the value of syringe access to public health—there are methodological limitations associated with studying syringe access. There is also a paucity of research in specific areas such as the effects of deregulation of syringe laws or pharmacy access. Because sound policy depends upon sound data, and because policy debates are often framed in terms of empirical evi-

90. See Controlled Substances Act, N.M. STAT. ANN. § 30-31-25.1 (Michie 2002).

dence, we conclude by discussing the limits of data and the implications of those limits for policy development.

A. The Effects of Syringe Access Laws on the Ability of IDUs to Purchase Syringes

Syringe access laws were intended to prevent IDUs from obtaining syringes. Research shows that syringe laws do not prevent IDUs from obtaining the syringes they need for injecting drugs, but they generally do make it more difficult for IDUs to obtain and keep *sterile* syringes in their possession.

The effect of these laws varies with their specific type and stringency. Prescription laws appear to have the most consistently negative impact on syringe access. They are unambiguous, leaving the pharmacist virtually no discretion. They generally entail the maintenance of records that can be reviewed by pharmacy or drug-control authorities, heightening their deterrent effect. Possession of a syringe without a prescription is also a crime under these laws, which have been found to be regularly enforced in states where research has been done.⁹¹ An immediate effect is seen in the price of "street" syringes: a survey of SEP personnel in eighteen states found that street prices rose steadily and substantially according to whether there was no syringe possession law, an unenforced law, or an enforced law.⁹² Friedman and colleagues found that prescription laws in the United States were associated with a higher incidence and prevalence of HIV infection.⁹³

Prescription laws indirectly prohibit SEP operation and have been used to prosecute syringe exchange personnel.⁹⁴ In 1996, nearly a quarter of SEPs operating in the United States were illegal underground programs.⁹⁵ The same year, over half of all SEPs in the United

91. Patricia Case, *Arrests and Incarceration of Injection Drug Users for Syringe Possession in Massachusetts: Implications for HIV Prevention*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES S71, S72 (Supp. 1 1998); see also Josiah D. Rich et al., *High Street Prices of Syringes Correlate with Strict Syringe Possession Laws*, 26 AM. J. DRUG & ALCOHOL ABUSE 481, 482-83 (2000) [hereinafter Rich et al., *High Street Prices*]; Josiah D. Rich et al., *Strict Syringe Laws in Rhode Island Are Associated with High Rates of Reusing Syringes and HIV Risks among Injection Drug Users (Letter)*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES S140, S140 (1998) [hereinafter Rich et al., *Letter*].

92. Rich et al., *High Street Prices*, *supra* note 91, at 484-85 (These results were significant at the .01 level.).

93. Samuel R. Friedman et al., *Laws Prohibiting Over-the-Counter Syringe Sales to Injection Drug Users: Relations to Population Density, HIV Prevalence, and HIV Incidence*, 91 AM. J. PUB. HEALTH 791, 791 (2001); see also Rich et al., *Letter*, *supra* note 91, at 791.

94. See Burris et al., *supra* note 13, at 1163.

95. See D. Paone et al., *supra* note 23, at 43.

States reported police harassment of clients, and one quarter reported police harassment of SEP staff or volunteers.⁹⁶ At least three dozen SEP volunteers have been arrested in 21 cities and 8 states since 1986.⁹⁷ Although few studies have assessed the impact of police pressure on SEP activities, some studies have reported that such arrests have reduced SEP attendance, limited their expansion, and may have increased the length of time contaminated needles circulated on the streets.⁹⁸ Heimer and colleagues concluded that “[a]mong the many structural impediments SEPs face, none may be more important than their legal status.”⁹⁹

Because syringes are normally sold in pharmacies, pharmacy regulations, which are directed primarily at pharmacists, are probably almost as significant a barrier to syringe access as prescription requirements.¹⁰⁰ Being required to show an ID, or to prove medical need (e.g., diabetes), may deter many IDUs from even trying to purchase syringes. Research indicates that pharmacists are generally aware of, and are intent on complying with, pharmacy regulations.¹⁰¹ Unlike prescription laws, however, these pharmacy regulations allow pharmacists a fair amount of discretion. For example, a South Carolina pharmacist may decide that preventing blood borne disease is a “legitimate medical purpose” justifying sale, or may accept without further evidence the buyer’s claim to be a diabetic. In recent years, pharmacy boards in Washington, Maine, Maryland, and Nevada have taken formal or informal action to encourage pharmacists to exercise their discretion to sell syringes to IDUs.

96. Ricky N. Bluthenthal et al., *Use of an Illegal Syringe Exchange and Injection-Related Risk Behaviors Among Street-Recruited Injection Drug Users in Oakland, California, 1992 to 1995*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY 505, 506 (1998).

97. *Id.*; see also Ricky N. Bluthenthal *Syringe Exchange as a Social Movement: A Case Study of Harm Reduction in Oakland, California*, 33 SUBSTANCE USE & MISUSE 1147, 1153 (1998); LURIE ET AL., *supra* note 10.

98. See Ricky N. Bluthenthal, *Impact of Law Enforcement on Syringe Exchange Programs: A Look at Oakland and San Francisco*, 18 MED. ANTHROPOLOGY 61, 71 (1997); see generally Robert Heimer et al., *Structural Impediments to Operational Syringe-Exchange Programs*, 11 AIDS & PUB. POL’Y J. 169, 172 (1996).

99. Heimer et al., *supra* note 98, at 171.

100. Jennifer A. Taussig et al., *Syringe Laws and Pharmacy Regulations Are Structural Constraints on HIV Prevention in the US*, 14 AIDS S47 (Supp. 1 2000).

101. Alice A. Gleghorn et al., *Pharmacists’ Attitudes About Pharmacy Sale of Needles/Syringes and Needle Exchange Programs in a City Without Needle/Syringe Prescription Laws*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES S89 (1998); P. Case et al., *Access to Sterile Syringes in Maine: Pharmacy Practice After the 1993 Repeal of the Syringe Prescription Law*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES S94 (Supp. 1 1998).

Paraphernalia laws appear to be enforced against IDUs who possess syringes. In a 1995 Connecticut study, seven of 147 IDUs reported recent paraphernalia arrests, as did plaintiffs and witnesses in a recent Connecticut law suit.¹⁰² Ethnographic research among IDUs has repeatedly found that fear of arrest is a factor in whether or not IDUs carry their own syringes with them when they are purchasing and using drugs.¹⁰³ Arrests, or fear of arrest, can lead to circumstances where needle sharing is inevitable.¹⁰⁴

The effect of paraphernalia laws on IDU's ability to *purchase* syringes is uncertain, in large part because the applicability of paraphernalia laws to pharmacy sales is unclear.¹⁰⁵ Although the language of the typical paraphernalia law would embrace the knowing sale of a syringe to an IDU for drug consumption, paraphernalia laws do not require pharmacists to question a syringe purchaser about the intended use. A search of reported cases by Burris and colleagues found no instance in which a pharmacist had been prosecuted under a paraphernalia law or pharmacy regulation for improperly selling a syringe.¹⁰⁶ Research among pharmacists indicates that most are either not specifically aware of paraphernalia laws or that these laws do not figure heavily into their decisions to sell syringes.¹⁰⁷ Paraphernalia

102. Jean-Paul C. Grund et al., *In Eastern Connecticut, IDUs Purchase Syringes from Pharmacies but Don't Carry Syringes (Letter)*, 10 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 104, 105 (1995); *Doe v. Bridgeport Police Dep't*, 198 F.R.D. 325, 330 (D. Conn. 2001). Accord Rich et al., *High Street Prices*, *supra* note 91, at 484.

103. Stephen Koester, *Copping, Running, and Paraphernalia Laws: Contextual and Needle Risk Behavior among Injection Drug Users in Denver*, 53 HUMAN ORG. 287, 291 (1994); see Philippe Bourgois, *The Moral Economies of Homeless Heroin Addicts: Confronting Ethnography, HIV Risk, and Everyday Violence in San Francisco Shooting Encampments*, 33 SUBSTANCE USE & MISUSE 2323, 2336 (1998); Michael C. Clatts et al., *The Impact of Drug Paraphernalia Laws on HIV Risk Among Persons Who Inject Illegal Drugs: Implications for Public Policy*, in HOW TO LEGALIZE DRUGS 80, 91-92 (J.M. Fish ed., 1998); Jean-Paul Grund et al., *Drug Use Contexts and HIV-Consequences: The Effect of Drug Policy on Patterns of Everyday Drug Use in Rotterdam and the Bronx*, 87 BRITISH J. ADDICTION 381, 386 (1992); see David Metzger et al., *Risk Factors for Needle Sharing Among Methadone-Treated Patients*, 148 AM. J. PSYCHIATRY 636, 639 (1991); Lisa Maher, & David Dixon, *Policing and Public Health: Law Enforcement and Harm Minimization in a Street-Level Drug Market*, 39 BRIT. J. CRIMINOLOGY 488, 499 (1999).

104. Koester, *supra* note 103, at 291.

105. See Burris et al., *Time for Action*, *supra* note 36, at 221-222.

106. *Id.* at 223.

107. See Stephen K. Koester et al., *Role of Pharmacists in Increasing Sterile Syringe Accessibility: A Formative Study*, Paper presented at the National HIV Prevention Conference (Atlanta, GA 1999); see also Claire E. Sterk et al., *Pharmacists' Syringe Sale Practices with Injection Drug Users in Atlanta, Georgia*, Paper presented at the National HIV Prevention Conference (Atlanta, GA 1999); see Merrill Singer et al., *Pharmacy Access to Syringes Among Injecting Drug Users: Follow-up Findings from Hartford, Connecticut*, 113 PUB. HEALTH REP. 81, 82 (Supp. 1 1998); Case et al., *supra* note 101, at S96-S97; Gleghorn et al., *supra* note 101, at S91; J.

laws have been a barrier to SEPs, though in several states they have been interpreted by courts or local officials not to bar exchange programs.¹⁰⁸

Studies examining deregulation also suggest that the legal rules governing syringe access and possession influence drug users' behavior, although changes in law may not immediately have their intended effects. Despite a 1992 change in Connecticut laws that allowed the purchase of up to ten syringes without a prescription, only 30% of IDUs surveyed after the new law took effect reported that they regularly carried their own syringes. The majority (65%) cited fear of arrest as the main reason for not carrying syringes in public.¹⁰⁹ Nevertheless, over a three year period in Connecticut (1992-1995), the proportion of IDUs who shared syringes decreased from 71% to 29%.¹¹⁰ A Minnesota study comparing IDUs' behaviors before and after the state legislation repealed syringe prescription laws found that IDUs were more likely to purchase syringes and were less likely to share needles, but there were no changes in the proportions who carried or re-used syringes, or safely disposed of syringes.¹¹¹ In their report of needle use practices in Seattle, Washington, where needle purchase is legal, Calsyn and colleagues¹¹² observed lower rates of needle sharing compared to regions where needle purchase and possession was illegal. Furthermore, a recent analysis suggests that such restrictions on syringe access have in fact influenced HIV acquisition. In an analysis of 96 metropolitan areas in the United States, Friedman and colleagues¹¹³ found that metropolitan areas with anti-over-the-counter syringe laws had a significantly higher mean HIV prevalence (13.8% versus 6.7%) than other metropolitan areas. These authors concluded that laws restricting syringe access are associated with HIV transmission and should be repealed. However, the impact of a repeal in syringe prescription laws may be limited in settings where paraphernalia and possession laws persist.

Taussig et al., *Individual and Structural Influences Shaping Pharmacists' Decisions to Sell Syringes to Injection Drug Users in Atlanta, Georgia*, 42 J. AM. PHARM. ASS'N (6 SUPP. 2) S40 (2002).

108. Burris et al., *supra* note 13, at 1164.

109. Grund et al., *supra* note 102, at 105.

110. Theresa Diaz et al., *Injection and Syringe Sharing among HIV-Infected Injection Drug Users: Implications for Prevention of HIV Transmission*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S76, S77 (1998).

111. Cotten-Oldenburg et al., *supra* note 77, at 185-86.

112. Donald A. Calsyn et al., *Needle-Use Practices among Intravenous Drug Users in an Area Where Needle Purchase Is Legal*, 5 AIDS 187, 191-192 (1991).

113. Friedman et al., *supra* note 93, at 792.

In the majority of states, which have only a paraphernalia law and perhaps some pharmacy regulations, the sale of syringes to IDUs is largely at the discretion of the individual pharmacist. Pharmacists vary considerably in their willingness to sell syringes, as well as in the prices they charge.¹¹⁴ Race, gender, and over-all appearance were related to the ability to purchase syringes in some but not all experimental syringe buying studies.¹¹⁵ Store or chain policies were identified as important factors in some studies.¹¹⁶ Pharmacists also report restrictive sales practices not required by law. These include requiring the buyer to provide photo identification, a prescription, a diabetes ID, or the name and address of their doctor.¹¹⁷ Applicable law, particularly pharmacy law, appears to play into the pharmacists' decisions to sell syringes to IDUs, but other factors, such as store or chain policies, attitudes towards IDUs and harm reduction, or fear that selling syringes to IDUs will attract an unsavory clientele are also important.¹¹⁸ Studies of pharmacist syringe sale practices suggest that attitudes towards the activity are more important to pharmacist behavior than law, at least in states not requiring a prescription.

While laws clearly have a serious impact on access to equipment and its use, law is not the only factor. Individual-level factors, gender dynamics, social norms, and the need to relieve symptoms of withdrawal are also important determinants of needle sharing behaviors.¹¹⁹ Even in settings where there are no legal limits to sterile syringe acquisition by IDUs (e.g., Holland),¹²⁰ needle sharing has not been entirely eliminated. However, it is clear that this is not a neces-

114. See Koester, *supra* note 103, at 289; Broadhead, *supra* note 74, at 446; Wilson M. Compton, III et al., *Legal Needle Buying in St. Louis*, 82 AM. J. PUB. HEALTH 595, 596 (1992); Case et al., *supra* note 101, at S96; C.R. Harbke et al., *Telephone Survey of Alaskan Pharmacists' Nonprescription Needle-Selling Practices*, 77 J. URB. HEALTH 113 (2000). Beth N. Trubatch et al., *Nonprescription Pharmacy Sales of Needles and Syringes*, 90 AM. J. PUB. HEALTH 1639, 1639 (2000); F.S. Bridges et al., *Sale of Nonprescription Syringes to Men and Women—Florida, 1994-1995*, 1 FLA. J. PHARMACY 12 (1998).

115. Trubatch et al., *supra* note 114, at 1639; Koester, *supra* note 103; Bridges et al., *supra* note 114.

116. Harbke et al., *supra* note 114.

117. Case et al., *supra* note 101, at S97; see Gleghorn et al., *supra* note 101, at S91; Taussig et al., *supra* note 107, at S90-S91.

118. Ted Myers et al., *Community Pharmacist Perspectives on HIV/AIDS and Interventions for Injection Drug Users in Canada*, 10 AIDS CARE 689, 696 (1998); Harbke et al., *supra* note 114.

119. Carl Latkin et al., *People and Places: Behavioral Settings and Personal Network Characteristics as Correlates of Needle Sharing*, 13 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY 273, 277 (1996); Steffanie A. Strathdee et al., *Social Determinants Predict Needle-Sharing Behaviour Among Injection Drug Users in Vancouver, Canada*, 92 ADDICTION 1339, 1345 (1997).

120. J.A.R. van den Hoek et al., *supra* note 8, at 1357.

sary requirement since cities such as New York and Amsterdam have essentially reversed their HIV epidemic among IDUs without eliminating needle sharing altogether.¹²¹ Nevertheless, the evidence supports the view that changing policy can have the desired effect of decreasing needle sharing levels in a community, and in turn, decreasing the likelihood of an HIV epidemic. An important goal is to determine the optimal levels of sterile syringe access that are required to prevent or reverse an epidemic of HIV or other blood borne infections.

Summary: Available data indicate that syringe access laws make it harder for IDUs to obtain new syringes and create disincentives to carry them. While these laws do interfere with access to and use of new, sterile syringes, they do not prevent IDUs from getting some sort of syringe and injecting drugs. In most places in the United States, pharmacists make the decision about whether or not an IDU will be able to purchase a sterile syringe. Law has some influence on this decision, but a number of surveys of pharmacists' attitudes and practices indicate that other considerations, including views on health and drug use, play a stronger role. Thus, although syringe access law is clearly an important factor in determining whether IDUs will have and use sterile syringes, it is only one of many.

B. Evidence of the Health Effects of Syringe Access Initiatives

Data on the effectiveness of syringe access has been reviewed extensively elsewhere.¹²² In this section, we briefly recount the main findings.

Almost all of the international literature investigating syringe access and health effects has focused on the relationship between SEPs and blood borne infections. SEPs have been associated with a number of positive health outcomes. As early as 1986, Buning and colleagues from Amsterdam reported declines in needle sharing and injection frequency associated with SEP participation.¹²³ "Other studies subse-

121. See Eric J.C. van Ameijden & Roel A. Coutinho, *Maximum Impact of HIV Prevention Measures Targeted at Injecting Drug Users*, 12 AIDS 625, 631-632 (1998); D. Des Jarlais et al., *Behavioral Risk Reduction in a Declining HIV Epidemic: Injection Drug Users in New York City, 1990-1997*, 90 AM. J. PUB. HEALTH 1112, 1116 (2000).

122. Normand et al., *supra* note 10; LURIE ET AL., *supra* note 10; David R. Gibson et al., *Effectiveness of Syringe Exchange Programs in Reducing HIV Risk Behavior and HIV Seroconversion Among Injecting Drug Users*, 15 AIDS 1329 (2001); Strathdee & Vlahov, *supra* note 9; F.I. Bastos & S.A. Strathdee, *Evaluating Effectiveness of Syringe Exchange Programmes: Current Issues and Future Prospects*, 51 SOC. SCI. & MED. 1771 (2000).

123. See E.C. Buning et al., *Preventing AIDS in Drug Addicts in Amsterdam*, 1 LANCET 1435, 1435 (1986).

quently reported reductions in incidence of HIV, HBV [hepatitis B virus] and HCV [hepatitis C virus] infections, decreased needle sharing among HIV-negative and HIV-positive persons, decreases in syringe re-use and increased rates of entry into drug treatment programs."¹²⁴

In the United Kingdom and Australia, where SEPs were introduced early and vigorously within the context of a comprehensive prevention program including expanded methadone maintenance programs, HIV epidemics among IDUs have been essentially averted.¹²⁵ Despite variations between programs, a recent international comparison showed that in 29 cities with established SEPs, HIV prevalence decreased on average by 5.8% per year, but increased on average by 5.9% per year in 52 cities without SEPs.¹²⁶ In New York City, SEPs have been associated with a dramatic decline in the incidence of HIV infection, indicating an HIV epidemic among IDUs that has essentially been reversed.¹²⁷ To date, this study represents some of the most compelling evidence in favor of SEPs, prompting New York City health officials to launch an expanded syringe access initiative involving pharmacists and registered physicians who are actively prescribing syringes to IDUs.

In contrast to the above findings, two studies have not found SEPs to have a protective effect on the risk of acquiring HIV infection. In 1997, an outbreak of HIV infection was described among IDUs in Vancouver, Canada, despite the existence of a high volume SEP that had been introduced early.¹²⁸ In Montreal, Canada, SEP attendees were reported to have higher HIV incidence rates than non-attendees.¹²⁹ Both studies fanned the flames of controversy surrounding SEP effectiveness in the United States. However, in Canada these data were interpreted as an indication that SEPs alone may be insufficient for

124. Strathdee & Vlahov, *supra* note 9, at 3 (citations omitted).

125. Alex Wodak & Peter Lurie, *A Tale of Two Countries: Attempts to Control HIV in Australia and the United States*, J. DRUG ISSUES 117, 118-19 (1997); Gerry V. Stimson, *AIDS and Injecting Drug Use in the United Kingdom, 1987-1993: The Policy Response and the Prevention of the Epidemic*, 41 SOC. SCI. & MED. 699, 711, 713 (1995); G.V. Stimson, *Has the United Kingdom Averted an Epidemic of HIV-1 Infection among Drug Injectors?* 91 ADDICTION 1085, 1086 (1996); Don C. Des Jarlais et al., *Maintaining Low HIV Seroprevalence in Populations of Injecting Drug Users*, 274 JAMA 1226, 1228-1229 (1995).

126. Susan F. Hurley et al., *Effectiveness of Needle-Exchange Programmes for Prevention of HIV Infection*, 349 LANCET 1797, 1799 (1997).

127. Des Jarlais et al., *supra* note 121, at 1115-1116.

128. Strathdee et al., *supra* note 119, at 1340.

129. Julie Bruneau et al., *High Rates of HIV Infection Among Injection Drug Users Participating in Needle Exchange Programs in Montreal: Results of a Cohort Study*, 146 AM. J. EPIDEMIOLOGY 994, 996 (1997).

meeting the need for sterile syringes among an IDU community, especially in settings where frequent cocaine injection predominates.¹³⁰ In fact, it was estimated that both Vancouver and Montreal would need to more than triple the number of syringes being exchanged to meet the public health goal of a sterile syringe for every injection.¹³¹ Another study that failed to find a protective effect of SEPs on HBV and HCV infection was reported by Hagan and colleagues in Seattle.¹³² This study again prompted concerns from policy makers and scientists that the science surrounding SEP effectiveness suffered from methodological shortcomings.¹³³

To some extent, methodological concerns are valid, since evaluations of SEPs typically rely on observational study designs, which are inherently prone to bias. For example, recent analyses have shown that in many cities, SEPs attract high risk IDUs.¹³⁴ Such self-selection is not unexpected, nor even undesirable, given that most SEPs function as low threshold interventions.¹³⁵ These selection factors may explain why cities such as Montreal and Vancouver have observed higher HIV seroconversion (development of antibodies in blood serum in re-

130. See Martin T. Schechter et al., *Do Needle Exchange Programmes Increase the Spread of HIV Among Injection Drug Users?: An Investigation of the Vancouver Outbreak*, 13 AIDS F45, F50 (1999); see Strathdee et al., *supra* note 119, at 1343–1344; Evan Wood et al., *Factors Associated with Persistent High-Risk Syringe Sharing in the Presence of an Established Needle Exchange Programme*, 16 AIDS 941, 942 (2002).

131. See Robert S. Remis et al., *Enough Sterile Syringes to Prevent HIV Transmission Among Injection Drug Users in Montreal?*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S57, S58 (Supp. 1 1998); Strathdee et al., *supra* note 9.

132. Holly Hagan et al., *Syringe Exchange and Risk of Infection with Hepatitis B and C Viruses*, 149 AM. J. EPIDEMIOLOGY 203, 212 (1999) [hereinafter Hagan et al., *Syringe Exchange*]. But see Holly Hagan et al., *Reduced Risk of Hepatitis B and Hepatitis C Among Injection Drug Users in the Tacoma Syringe Exchange Program*, 85 AM. J. PUB. HEALTH 1531, 1536 (1995) [hereinafter Hagan et al., *Reduced Risk*].

133. See Roel A. Coutinho, *Needle Exchange, Pragmatism, and Moralism*, 90 AM. J. PUB. HEALTH 1387, 1388 (2000); see also A.R. Moss, *Epidemiology and the Politics of Needle Exchange*, 90 AM. J. PUB. HEALTH 1385, 1386 (2000).

134. Judith A. Hahn et al., *Who Uses Needle Exchange? A Study of Injection Drug Users in Treatment in San Francisco, 1989-1990*, 15 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY 157, 162 (1997); Bruneau et al., *supra* note 129, at 996; David Vlahov et al., *Reductions in High-Risk Drug Use Behaviors Among Participants in the Baltimore Needle Exchange Program*, 16 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY 400, 403–404 (1997); Chris P. Archibald et al., *Factors Associated with Frequent Needle Exchange Program Attendance in Injection Drug Users in Vancouver, Canada*, 17 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY 160, 162–163 (1998). See generally Schechter et al., *supra* note 130, at F47, F50 (citing many other factors that make IDUs at high risk for HIV infection).

135. Ernest Drucker et al., *Measuring Harm Reduction: The Effects of Needle and Syringe Exchange Programs and Methadone Maintenance on the Ecology of HIV*, 12 AIDS S217, S220 (Supp. A 1998).

sponse to infection) rates among SEP attendees compared to non-attendees.¹³⁶ In such settings, IDUs who subsequently begin attending a SEP may have a higher risk of HIV seroconversion before ever attending the program.¹³⁷ This has been clearly shown in San Francisco, where IDUs who later began attending SEPs had higher HIV incidence rates than those who never attended.¹³⁸ More recently in Vancouver, the number of HIV seroconversions observed among frequent versus infrequent SEP attendees could be predicted solely on the basis of their higher baseline risk profile.¹³⁹ These findings suggest that selection factors could entirely explain observed disparities in HIV incidence rates based on SEP attendance. Despite these limitations, the majority of observational studies have consistently shown a protective effect of SEPs on rates of needle sharing and HIV incidence. These data lend strong support to the contention that SEPs can effectively reduce the risk of blood borne diseases, especially when they operate within the context of a comprehensive program including other forms of syringe access.¹⁴⁰

Studies have also been conducted about the cost-effectiveness of various syringe access programs. A recent study of seven SEPs in New York reported a cost-effectiveness ratio of \$20,947 per HIV infection averted, suggesting that SEPs are both cost effective and cost saving.¹⁴¹ A national policy of funding SEPs, pharmacy sales, and syringe disposal in the United States was estimated to cost \$34,278 per HIV infection averted, which is well below the lifetime costs of treating an individual's HIV infection.¹⁴² Lurie and colleagues estimated the cost per syringe distributed for five syringe distribution strategies: SEP, a

136. See Catherine M. Lowndes & Michael Alary, *High Rates of HIV Infection Among Injection Drug Users Participating in Needle Exchange Programs in Montreal: Results of a Cohort Study*, 148 AM. J. EPIDEMIOLOGY 713, 713 (1998) (letter to ed.); see also Schechter et al., *supra* note 130, at F50.

137. P. Lurie, *Invited Commentary: Le Mystere De Montreal*, 146 AM. J. EPIDEMIOLOGY 1003, 1004 (1997); Lowndes & Alary, *supra* note 136, at 713; Hahn et al., *supra* note 134, at 157.

138. Hahn et al., *supra* note 134, at 162.

139. See Schechter, et al., *supra* note 130, at F47.

140. E.J.C. van Ameijden et al., *Risk Factors for the Transition from Noninjection to Injection Drug Use and Accompanying AIDS Risk Behavior in a Cohort of Drug Users*, 139 AM. J. EPIDEMIOLOGY 1153 (1994); Hagan et al., *Reduced Risk*, *supra* note 132, at 1536; Don C. Des Jarlais et al., *HIV Incidence Among Injecting Drug Users in New York City Syringe Exchange Programmes*, 348 LANCET 987, 990 (1996); see Vlahov et al., *supra* note 134, at 405.

141. Franklin N. Laufer, *Cost-Effectiveness of Syringe Exchange as an HIV Prevention Strategy*, 28 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 273, 276 (2001).

142. David R. Holtgrave et al., *Cost and Cost-Effectiveness of Increasing Access to Sterile Syringes and Needles as an HIV Prevention Intervention in the United States*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S133, S136 (Supp. 1 1998).

pharmacy-based SEP, free pharmacy distribution of pharmacy kits, sale of such pharmacy kits to IDUs, and sale of syringes in pharmacies.¹⁴³ In this study, the cost per syringe was \$0.97 for the SEP, \$0.37 for the pharmacy-based SEP, \$0.64 for pharmacy kit distribution, \$0.43 for pharmacy kit sale, and \$0.15 for syringe sale. The total annual cost of providing 50% of the syringes needed for a single syringe for every injection ranged from \$6 to \$40 million for New York City, from \$1 to \$6 million for San Francisco, and from \$30,000 to \$200,000 for Dayton, Ohio. The annual HIV seroconversion rate for the program to be cost-neutral compared with the cost of medical treatment for HIV injections was 2.1% for the SEP, 0.8% for the pharmacy SEP, 1.4% for pharmacy kit distribution, 0.9% for pharmacy kit sale, and 0.3% for syringe sales.¹⁴⁴

This study suggests that all five strategies could distribute syringes at relatively low unit costs; however, SEPs would be the most expensive and syringe sales would be the cheapest. At annual seroconversion rates exceeding 2.1%, all strategies are likely to be cost-saving to society. This point is borne out in a report issued in 2002 by the Australian Department of Health and Ageing. The report concluded that Australia's \$83 million investment in needle-exchange programs from 1990 to 2000 returned between \$1.3 billion and \$4.2 billion in avoided costs.¹⁴⁵ Given these results, it is clear United States policies restricting syringe access at the federal and state levels have placed serious limits on the ability to provide a sterile syringe for every injection. Legislation governing SEP funding and operation clearly undermine their effectiveness, and could even contribute to a lack of measurable benefit. Yet even in cities where SEPs are legal, there are fiscal and legislative restrictions on their hours of operation, staffing, and number of syringes exchanged per visit; few SEPs offer true 24-hour coverage. Beyond SEPs, state deregulation laws can persist in limiting the purchase of more than ten syringes without a prescription (e.g., Connecticut), and pharmacy regulations can deter drug users from successfully purchasing syringes over the counter.

Achieving and sustaining adequate syringe coverage in a community will certainly require that restrictive policies do not limit access;

143. Peter Lurie et al., *An Economic Analysis of Needle Exchange and Pharmacy-Based Programs to Increase Sterile Syringe Availability for Injection Drug Users*, 18 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY S126, S129 (Supp. 1 1998).

144. *Id.* at S128-130.

145. COMMONWEALTH DEPARTMENT OF HEALTH AND AGEING, RETURN ON INVESTMENT ON NEEDLE AND SYRINGE PROGRAMS IN AUSTRALIA (2002), available at <http://www.health.gov.au/pubhlth/publicat/document/roireport.pdf>.

however, to achieve the goal of a sterile syringe for every injection, the international literature indicates that diversification of syringe sources and other interventions will be needed.¹⁴⁶

Summary. Evaluations of syringe access policies elsewhere in the world have generally found them to be effective in reducing HIV transmission without causing increases in drug use or other negative effects. Studies in Vancouver and Montreal found that SEPs had no protective effect; although these studies have been widely invoked by SEP opponents, the consensus among SEP researchers (including the authors of the studies) is that SEPs alone may not be sufficient to reverse the health effects of frequent, high risk injection. Cost-effectiveness analyses have generally found that syringe access interventions do produce a net benefit for society.

C. Evidence of Negative Effects of Policies to Improve Syringe Access

From a policy perspective, attention has focused on whether or not increased syringe access is associated with increases in drug use, crime, or the number of discarded needles on the street. Once again, the available research to date has focused almost entirely on these issues in relation to SEPs.

Studies have consistently shown that SEPs are not associated with increases in drug use. In Amsterdam, van Ameijden and colleagues found that the introduction of a SEP was not associated with a decrease in the median age of initiation of injection.¹⁴⁷ The frequency of injection drug use among IDUs attending SEPs in Baltimore did not increase after a SEP was introduced.¹⁴⁸

The possibility that SEPs send adolescents a "mixed message" that contradicts anti-drug messages and condones illicit drug use has been cited as an important reason for maintaining a Congressional ban on federal funding of SEPs in the United States.¹⁴⁹ Yet in a survey of high

146. Strathdee & Vlahov, *supra* note 9, at 6.

147. See generally van Ameijden et al., *supra* note 140, at 1153; see also Ernst C. Buning, *Effects of Amsterdam Needle and Syringe Exchange*, 26 INT'L J. THE ADDICTIONS 1303, 1307 (1991) (reporting no increase in drug use had been observed and rise in average age of drug user occurred in Amsterdam).

148. Vlahov et al., *supra* note 134, at 403.

149. Congressman Bob Goodlatte, Representing Virginia's Sixth District, *Send the Right Message to Our Children: Just Say NO to Free Needles for Drug Addicts!* (February 4, 1999) (Letter to the Congress of the United States of America, from Bob Goodlatte, Dick Armey & Todd Tiaht) available at <http://www.house.gov/goodlatte/needledearc1.htm>. See generally David E. Rogers & June E. Osborn, *AIDS Policy: Two Divisive Issues*, 270 JAMA 494, 495 (1993).

school adolescents in Baltimore, the majority of adolescents did not perceive that seeing drug users utilize SEPs promotes illicit drug use.¹⁵⁰ In fact, almost half perceived seeing drug users utilize SEPs as actually deterring illicit drug use. To our knowledge, the only other study to examine the effect of SEPs on attitudes of youth toward drug use was conducted by Friedman and colleagues in Bushwick, New York. In this study, only 7% of adolescents and young adults surveyed were aware that a SEP was operating in their vicinity. The authors concluded that a SEP was unlikely to have had any effect on drug use decision-making among the youth in the area, given the low level of awareness of the existence of the program.¹⁵¹ Taken together, these findings do not support the concerns that SEPs promote acceptance of drug use among youth.

One of the most enduring community concerns is that SEPs could attract IDUs to congregate in their neighborhoods, thereby increasing crime rates. In a review of 16 SEPs, Lurie and colleagues¹⁵² reported no evidence that SEPs were associated with increased crime. This report, however, accounted only for specific crimes that were likely to be drug-related and did not compare crime rates in terms of proximity to the SEPs. More recently, Marx and colleagues¹⁵³ compared arrest rates in SEP areas against non-SEP areas in Baltimore, before and after the program was introduced over a fifteen month period. Four types of arrest categories were studied (drug possession, economically motivated offenses, resistance to police, and violent offenses). In all cases, there was no significant increase in arrest rates in areas near SEPs compared to other regions in the city, suggesting that at least in this setting, a SEP had no influence on crime rates.¹⁵⁴ The extent to which a SEP is associated with an increase in violent crime has also been examined in Harlem, New York. Here, a detailed analysis found no relationship between reports of robberies or assaults and the proximity to local SEPs, suggesting that SEPs do not cause an increase of violence in their vicinity.¹⁵⁵

150. Melissa A. Marx et al., *Impact of Needle Exchange Programs on Adolescent Perceptions About Illicit Drug Use*, 5 AIDS AND BEHAVIOR 379, 382 (2001).

151. See S.R. Friedman et al., *The Message Not Heard: Myth and Reality in Discussions About Syringe Exchange*, 13 AIDS 738, 739 (1999).

152. LURIE ET AL., *supra* note 10.

153. Melissa A. Marx et al., *Trends in Crime and the Introduction of a Needle Exchange Program*, 90 AM. J. PUB. HEALTH 1933 (2000).

154. *Id.* at 1934-1935.

155. Sandro Galea et al., *Needle Exchange Programs and Experience of Violence in an Inner City Neighborhood*, 28 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 282, 286-287 (2001).

Researchers have also examined whether SEPs are associated with an increased number of discarded needles on the street. An early study by Oliver suggested no such increase.¹⁵⁶ A more detailed study that estimated the quantity and geographic distribution of discarded needles on the streets of Baltimore, Maryland two years after the SEP opened found a significant decline in the overall quantity of discarded needles relative to drug vials and bottles.¹⁵⁷ The mean number of needles per 100 trash items per block was 2.42 before the NEP opened and 1.30 two years later. These data suggest that this SEP did not increase the number or distribution of discarded needles, and in fact was likely to have reduced the number of discarded needles that could lead to community needle stick injuries. Although the above data are largely restricted to Baltimore, to date there appears to be no published evidence or even a body of anecdotal reports that enhanced syringe access has negative societal effects.

There is equally limited evidence of a possible positive effect of syringe possession legalization. At least one study has documented that urban police officers in at least some areas suffer a considerable number of needle-stick injuries in the course of pat-downs and searches.¹⁵⁸ Groseclose and colleagues, in an evaluation of the effects of syringe deregulation in Connecticut, found that reported needle-stick injuries among police declined substantially in the six-month period following the new law.¹⁵⁹ In theory at least, decriminalizing syringe possession could make IDUs more willing to warn police officers of their possession of a syringe, just as it would be expected to make IDUs generally more willing to safely dispose of syringes.

Summary. The research consistently supports the conclusion that increased syringe access does not promote drug use or increase crime or the volume of improperly discarded needles in the community.

D. Limitations of Existing Research on Syringe Access Policies

The majority of the published studies focus on evaluations of SEPs; there is a paucity of data investigating outcomes related to other

156. Kathy J. Oliver et al., *Impact of a Needle Exchange Program on Potentially Infectious Syringes in Public Places*, 5 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES 534 (1992).

157. Meg C. Doherty et al., *The Effect of a Needle Exchange Program on Numbers of Discarded Needles: A 2-Year Follow-Up*, 90 AM. J. PUB. HEALTH 936, 937-938 (2000).

158. John Lorentz et al., *Occupational Needlestick Injuries in a Metropolitan Police Force*, 18 AM. J. PREVENTIVE MED. 146, 147 (2000).

159. Samuel L. Groseclose et al., *Impact of Increased Legal Access to Needles and Syringes on Practices of Injecting-Drug Users and Police Officers—Connecticut, 1992-1993*, 10 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY 82, 83, 87 (1995).

forms of syringe access, such as pharmacies, physician prescription, and syringe vending machines. The small amount of published research in this area may reflect the fact that the importance of alternate syringe sources in achieving sterile syringe coverage among IDUs has only recently been recognized. Similarly, studies examining behavioral, societal, and health effects of deregulation of prescription, paraphernalia or possession laws, and pharmacy sales are sparse. The latter studies are rare because they require a change in legislation or pharmacy regulations in order to create the conditions for a "natural experiment."

Even among studies of SEP effectiveness, an overriding problem has been the lack of a formal evaluation component that includes biologic outcomes, such as HIV incidence. Longitudinal studies are ideal for conducting such investigations, but these studies are costly and time consuming. In most cities, HIV incidence rates are approximately 2% per year, limiting the ability to make inferences based on HIV incidence rates in the absence of a very large sample size. As a consequence, much of the existing data relies on behavioral surrogates, such as reports of needle sharing behavior and syringe exchange attendance, which are prone to socially desirable responding (i.e., giving the response that the respondent believes others would approve of). However, there is evidence to suggest that self-reports of IDUs' behaviors are reasonably valid.¹⁶⁰ In fact, a recent report suggests that socially desirable responding may lead to an underestimation of the protective effect of SEPs by as much as 20%.¹⁶¹

The ideal study design to examine whether or not providing sterile syringes to IDUs reduces the risk of blood borne disease without promoting negative societal effects would be a randomized clinical trial of individuals in communities that have access or no access to sterile syringes. However, a reasonable argument can be made that such a design is unethical, since the majority of the international literature supports a protective effect of sterile syringe access on rates of blood borne disease. To deny some members of a community access to an intervention that is known to save their lives would certainly be accused of violating prevailing ethical standards. Randomization of

160. James C. Anthony et al., *Self-Reported Interview Data for a Study of HIV-1 Infection Among Intravenous Drug Users: Description of Methods and Preliminary Evidence on Validity*, 21 J. DRUG ISSUES 739, 740 (1991).

161. Mahboobeh Safaeian et al., *Validity of Self-Reported Needle Exchange Attendance Among Injection Drug Users: Implications for Program Evaluation*, 155 AM. J. EPIDEMIOLOGY 169, 173 (2002).

different communities rather than individuals with access to different syringe sources may circumvent these ethical concerns. This approach is not generally feasible in most settings, though, since local drug scenes are highly variable. However, in Alaska, a study of data from a community-based randomized trial of SEP versus pharmacy access to syringes is pending.¹⁶²

Given the lack of data on syringe access outcomes from intervention trials, there is likely to be a continued reliance on observational studies (i.e., non-experimental study designs) to examine the effectiveness of SEP, pharmacy access, and deregulation. As a consequence, a major methodological hurdle is the lack of an appropriate comparison group through which valid inferences about risk reduction reasonably can be made. In deregulation studies, one approach has been to compare risk behaviors and health outcomes in the period prior to the regulation change, compared to the period afterward. This approach is limited by the possibility that other secular changes may have occurred during this period which may bias results. National studies using multiple data sets over time may help to uncover trends, but this type of ecological approach cannot be used to make inferences at the individual level.

Even in cases where virtually all IDUs in a given setting have utilized a given syringe source, it is still possible to undertake process evaluation to determine which combination of services or components of SEPs are most or least effective. This is especially needed since SEPs vary enormously in the range of services they provide, hours of operation, and local regulations, including factors governed by their legal status. The lack of comparability across programs has hampered evaluation studies and limited the ability to generalize about specific findings.

Unfortunately, very few studies have evaluated programmatic characteristics of SEPs. This research can help to determine which kinds of services will maximize sterile syringe coverage in a community.¹⁶³ One such example is the finding that mobile SEPs are likely to attract higher risk IDUs than fixed site programs.¹⁶⁴ Without taking into account the various components of SEPs and their direct and in-

162. Interview with Dr. Dennis Fisher (2001).

163. Bastos & Strathdee, *supra* note 122, at 1772, 1779.

164. Elise D. Riley et al., *Comparing New Participants of a Mobile Versus a Pharmacy-Based Needle Exchange Program*, 24 J. ACQUIRED IMMUNE DEFICIENCY SYNDROMES & HUMAN RETROVIROLOGY 57, 58-59 (2000).

direct effects, observational studies attempting to evaluate SEPs will likely continue to produce conflicting findings.

In light of the selection factors that are inherent in observational studies, there is a need for more sophisticated analyses that take into account these biases, lest they underestimate or mask a protective effect of the intervention, or create spurious associations. In evaluations of SEPs, for example, most studies have merely employed dichotomous categorizations (e.g., SEP attendees versus non-attendees, frequent versus infrequent attendees). This simplistic approach overlooks the fact that non-attendees may have entirely met their need for sterile syringes through other means. A recent analysis of SEP attendees in Amsterdam—a city where sterile syringes are readily available through pharmacies—found that irregular SEP attendees had a higher risk of HIV seroconversion than non- or frequent attendees.¹⁶⁵ These authors concluded that irregular SEP attendees had the least exposure to sterile injection equipment and consistent prevention messages, which placed them at higher risk of infection. Some authors have suggested that propensity scores or hierarchical modeling may offer viable solutions to “adjust” for the selection bias that can compromise the validity of research findings.

Beyond factors relating to frequency of utilization of a specific syringe source and the volume of syringes obtained, program effectiveness can vary depending on the circulation time of contaminated syringes in the community¹⁶⁶ and whether syringes are obtained directly or through intermediaries. In the case of SEPs, this phenomenon is referred to as secondary exchange. While secondary exchange provides extended coverage of SEPs to IDUs in the broader community, its recipients typically do not receive HIV/AIDS education, counseling, or referrals to drug treatment that could have been received had they attended the SEP themselves.¹⁶⁷ To date, research is lacking on these indirect effects of SEPs, which could prove to be just as important as the direct effect on SEP attendees. Furthermore, pharmacies may serve as an excellent venue for providing health education to IDUs; however, thus far they appear to have been grossly under-utilized in this regard.

165. See van Ameijden & Coutinho, *supra* note 121, at 630.

166. Edward H. Kaplan, *Probability Models of Needle Exchange*, 43 OPERATIONS RES. 558, 561–562 (1995); E.H. Kaplan, *A Method for Evaluating Needle Exchange Programmes*, 13 STAT. MED. 2179, 2181 (1994).

167. Valente et al., *supra* note 73, at 91.

No matter what method is used to study syringe access, it is crucial to devote more attention to the social context of risk. This context includes elements ranging from IDUs' sexual relationships,¹⁶⁸ to the socioeconomic characteristics of the communities where they live.¹⁶⁹ Of particular importance, as our review of the data has illustrated, is the role of law and law enforcement practices on IDU behavior and the risk of disease. Ethnographic research clearly shows that IDUs' ability to obtain sterile injection equipment, to carry it, and to inject in a sterile fashion is strongly influenced by the extent to which they fear police interference.¹⁷⁰ Research that fails to address this key determinant of IDU health will not provide an adequate understanding of necessary changes in policy and law enforcement practices, or of effective means for individual IDUs to reduce their risk.

Research on needle access, risk environments, and health among IDUs may also face increasing political barriers in the United States. Because syringe access is a controversial issue, fear of political consequences may deter funders from supporting research studying syringe access and its effects. It has been reported in the press that staff at the National Institutes of Health, the nation's largest funder of health research, have been warning applicants to avoid using terms such as "needle exchange" in grant applications. It is said this is necessary to reduce the risk of unwanted scrutiny from congressional staffers who regularly search NIH data-bases for politically sensitive projects.¹⁷¹ Stories like these can deter researchers from undertaking work in the area.

Summary. The available data is sufficient to justify a public policy of greater syringe access for IDUs, but the literature has limitations, at least some of which can be addressed in future research. One correctable deficiency is the lack of data on measures other than SEPs, which will be remedied as current studies on the implementation of recent

168. See generally Tim Rhodes, *The 'Risk Environment': A Framework for Understanding and Reducing Drug-Related Harm*, 13 INT'L J. DRUG POL'Y 85 (2002); see also Tim Rhodes et al., *Sex, Drugs, Intervention, and Research: From the Individual to the Social*, 31 SUBSTANCE USE & MISUSE 375 (1996).

169. See Robert Sampson & Jeffrey Morenoff, *Public Health and Safety in Context: Lessons from Community-Level Theory on Social Capital*, in PROMOTING HEALTH: INTERVENTION STRATEGIES FROM SOCIAL AND BEHAVIORAL RESEARCH 366, 367 (Brian D. Smedley & S. Leonard Syme eds., 2000).

170. Koester, *supra* note 103, at 292; Bourgois, *supra* note 103, at 2336; see Kim Blankenship & Stephen Koester, *Criminal Law, Policing Policy, and HIV Risk in Female Street Sex Workers and Injection Drug Users*, 30 J. L. MED. & ETHICS 548, 551-52 (2002).

171. See Erica Goode, *Certain Words Can Trip Up AIDS Grants, Scientists Say*, N.Y. Times, Apr. 18, 2003, at A10.

interventions are completed.¹⁷² Enhancing the use of biologic outcome measures can reduce the distortions of self-reported behavior. Because randomized controlled studies, often referred to as the gold-standard in other areas of biomedical research, are difficult and arguably unethical to use in the syringe access context, observational studies will continue to be the main method of studying syringe access. These may be improved by, among other steps, incorporating more scrutiny of program factors (such as hours of operation, location, etc.) and by the development of more sophisticated analytic approaches. It will be important to ensure, as much as reasonably possible, that research decisions are not subject to political interference.

V. Analysis of Public Opinion, Ethics, and Politics

Lawfulness and effectiveness are only part of the syringe access policy problem. It remains critically important to address at least three additional, and inter-related, questions: 1) does enhanced syringe access have an adequate level of public support, 2) is the policy ethically appropriate, and 3) is the policy politically feasible.

A. Public Opinion

Public policy is influenced by public opinion. Public support for a given policy, however, does not always produce immediate action by policy-makers. This disconnect between public opinion and public policy may be more likely to occur where, as with syringe access policies, public opinion is relatively malleable. Also, opponents of a given public health policy sometimes feel more strongly about the issue than do supporters. There are many other examples of this phenomenon. For example, solid majorities of the American public have long supported making it more difficult to obtain and carry handguns.¹⁷³ Yet progress in enacting gun violence prevention laws has been relatively slow.¹⁷⁴

172. See G.S. Birkhead et al., *New York State's Expanded Syringe Access Demonstration Program (ESAP): A Statewide Intervention to Prevent HIV/AIDS*, Paper presented at *XIV International AIDS Conference* (Barcelona, Spain, 2002); S.J. Klein et al., *What Do Pharmacists Think About New York State's New Nonprescription Syringe Sale Program? Results of a Survey*, 78 J. URB. HEALTH 679 (2001).

173. See Stephen P. Teret et al., *Support for New Policies to Regulate Firearms: Results of Two National Surveys*, 339 NEW ENG. J. MED. 813, 815-816 (1998).

174. See generally Jon S. Vernick & Stephen P. Teret, *A Public Health Approach to Regulating Firearms as Consumer Products*, 148 U. PA. L. REV. 1193 (2000).

To assess the possible role of public opinion in shaping present and future syringe access policies, we undertook a systematic search for all reported national surveys. Several different methods were employed. The Roper Center for Public Opinion Research at the University of Connecticut acts as a repository for public opinion polls on all topics. We performed a search of its database for any survey question with the words “needle,” “syringe,” or “drug paraphernalia.” We reviewed each question and eliminated those that: 1) were unrelated to syringe access programs, 2) were from polls that were not national in scope, or 3) were tangential to basic support or opposition to these policies. A total of 21 different questions from 11 different polls conducted from 1987 to 1999 were identified in this manner. These are summarized in Table XI.¹⁷⁵ To allow the reader to better assess how question wording can influence poll results, we have included the full text of each question in Table XI.

In addition, we conducted a Lexis/Nexis search of newspaper articles for references to national polls since 1995. This search yielded one additional poll, conducted by the Kaiser Family Foundation in late 2000, and released to the public in June 2001.¹⁷⁶ As the most recent poll we identified, its findings are summarized here. That poll included 4 questions relevant to syringe access by IDUs. Fifty-eight percent of respondents reported that “to help stop the spread of HIV” they would favor “needle exchange programs which offer clean needles to IV drug users in exchange for used needles.” Nearly identical proportions also supported changing federal law to permit “state and local governments [to] decide for themselves whether to use their federal funds for needle exchange programs” (60%), “allowing IV drug users to purchase clean needles from a licensed pharmacist” (61%), and “allowing doctors and physicians to provide IV drug users with a prescription for clean needles” (60%).¹⁷⁷ For each of these questions, there were only modest, if any, differences in support or opposition among various gender, race, or age groups.

As Table XI demonstrates, there is no clear national consensus on the desirability of syringe access programs. Over time, support has ranged from 29% to 73%. We were able to identify just two additional

175. Roper Center for Public Opinion Research, On-line Database of Poll Questions, at <http://library.dialog.com/bluesheets/html/bl0468.html>.

176. HENRY J. KAISER FAMILY FOUNDATION, THE AIDS EPIDEMIC AT 20 YEARS: THE VIEW FROM AMERICA, at http://www.kff.org/content/2001/3026/aids20_rpt.pdf (last accessed December 14, 2001).

177. *Id.*

Table XI: Public Support for Syringe Access Policies or Programs in U.S. National Surveys

Year	Sponsor	Question Wording	Results
1999	Family Research Council	"I am now going to read to you the opinions of two voters. Please tell me which comes closest to your own. Voter A says that needle exchange programs reduce the spread of the HIV virus and do not contribute to more drug use. Federal funds should be used to give syringes to drug addicts. Voter B says that the science supporting needle exchange programs is uncertain and that giving needles to addicts would increase drug use as well as send pro-drug messages to vulnerable teens. With whom do you agree most?"	Voter A, agree or somewhat agree: 34% Voter B, agree or somewhat agree: 59%
1999	Family Research Council	"Would you support or oppose giving clean needles to drug addicts to slow the spread of the AIDS virus if you knew that this might increase illicit drug use among America's youth?"	Strongly or somewhat support: 29% Strongly or somewhat oppose: 65%
1999	Family Research Council	"The latest studies of needle exchange programs have found that people who are not enrolled in needle exchange programs were less likely to become HIV infected than those who were enrolled in needle exchange programs. Knowing this, do you support or oppose federal funding of needle exchange programs?"	Strongly or somewhat support: 28% Strongly or somewhat oppose: 63%
1998	Family Research Council	"I am now going to read to you the opinions of two voters. Please tell me which comes closest to your own. Voter A says that needle exchange programs reduce the spread of the HIV virus and do not contribute to more drug use. Federal funds should be used to give syringes to those addicted to illegal drugs. Voter B says that the science supporting needle exchange programs is uncertain and giving needles to addicts sends pro-drug messages to drug-use vulnerable teens. With whom do you agree most? Voter A or Voter B?"	Voter A, agree or somewhat agree: 43% Voter B, agree or somewhat agree: 53%
1998	Family Research Council	"Would you support or oppose the creation of a needle exchange program in your neighborhood?"	Strongly or somewhat support: 36% Strongly or somewhat oppose: 59%
1997	Kaiser Family Foundation	"Do you favor or oppose needle exchange programs, which offer clean needles to IV (intravenous) drug users in exchange for used needles, to help stop the spread of HIV?"	Favor: 64% Oppose: 30%

Table XI (continued)

Year	Sponsor	Question Wording	Results
1997	Kaiser Family Foundation	<i>Asked of those opposed above:</i> "Several different government agencies and independent scientific organizations, including the National Academy of Sciences, have concluded that needle exchange programs are effective at reducing HIV infections among IV (intravenous) drug users without increasing their drug use. Knowing this, would you now favor or oppose needle exchange programs?"	Favor initially: 64% Switched to favor: 9% Still oppose: 20%
1997	Kaiser Family Foundation	"Some people favor offering clean needles to IV (intravenous) drug users in exchange for used needles because it helps to reduce the spread of HIV. Others oppose needle exchange programs because they feel these programs send the message that it's OK to use illegal drugs. Which one come closer to your view?"	Favor: 48% Oppose: 46%
1997	Kaiser Family Foundation	<i>Asked of those opposed above:</i> "Several different government agencies and independent scientific organizations, including the National Academy of Sciences, have concluded that needle exchange programs are effective at reducing HIV infections among IV (intravenous) drug users without increasing their drug use. Knowing this, would you now favor or oppose needle exchange programs?"	Favor initially: 48% Switched to favor: 12% Still Oppose: 32%
1997	Kaiser Family Foundation	"Do you favor or oppose needle exchange programs, which offer clean needles to IV (intravenous) drug users in exchange for used needles, to help stop the spread of HIV?"	Favor: 58% Oppose: 38%
1997	Kaiser Family Foundation	"Some people favor offering clean needles to IV (intravenous) drug users in exchange for used needles because it helps to reduce the spread of HIV. Others oppose needle exchange programs because they feel these programs send the message that it's OK to use illegal drugs. Which one come closer to your view?"	Favor: 43% Oppose: 53%
1997	Harvard School of Public Health	"Do you think drug addicts should be given free, clean needles to prevent the spread of AIDS, or not?"	Should give needles: 44% Should NOT give needles: 53%
1997	The Human Rights Campaign	"Some local communities have adopted 'needle exchange' programs as a way to curb the spread of AIDS and HIV. 'Needle exchange' programs allow drug users to trade in used needles for clean needles. Generally speaking, do you favor or oppose these kinds of 'needle exchange' programs?"	Strongly or somewhat favor: 55% Strongly or somewhat oppose: 38%

Table XI (continued)

Year	Sponsor	Question Wording	Results
1995	Institute for a Drug-Free Workplace	"I'm going to read some statements. For each statement, please tell me how much you agree or disagree with the statement . . . The government should dispense clean needles for drug addicts."	Strongly agree or agree: 27% Strongly disagree or disagree: 56%
1995	Kaiser Family Foundation	"Do you favor or oppose having clinics make clean needles available to IV (intravenous) drug users to help stop the spread of AIDS?"	Favor: 66% Oppose: 30%
1994	Drug Strategies	"I am going to read you several proposals that have been suggested as ways of controlling the damage that is done to society's health and that of drug users themselves, because of illegal drugs. For each one that I read, please tell me if you would favor or oppose the proposal . . . Implementing needle exchange programs to reduce the spread of diseases such as AIDS."	Favor: 55% Oppose: 40%
1994	Drug Strategies	[<i>Same introduction as above</i>] . . . Allowing Drug Users to buy clean needles without prescriptions from pharmacies."	Favor: 37% Oppose: 59%
1994	Drug Strategies	[<i>Same introduction as above</i>] . . . Removing criminal penalties for the simple possession of needles and syringes."	Favor: 40% Oppose: 53%
1992	Gallup	"I will read a list of things some people say the government should do to prevent the spread of AIDS. Please tell me whether you approve or disapprove of each . . . Dispense free needles and syringes to IV (intravenous) drug users to cut down on shared needles."	Approve: 41% Disapprove: 55%
1989	Associated Press	"If giving intravenous drug abusers free needles would slow down the spread of AIDS (Acquired Immune Deficiency Syndrome), would you favor or oppose giving addicts sterilized needles for free?"	Favor: 50% Oppose: 43%
1987	Metropolitan Life	"Do you think drug addicts should be given free, clean needles to prevent the spread of AIDS (Acquired Immune Deficiency Syndrome) or not?"	Yes, should: 52% No, should not: 46%

questions querying public support for other syringe access policies, both in a 1994 poll sponsored by an organization called Drug Strategies. In that poll, just 37% of respondents favored “allowing drug users to buy clean needles without prescriptions from pharmacies”; 40% favored “removing criminal penalties for the simple possession of needles and syringes.”

As is often the case with public opinion polls, however, precise wording of the question can strongly affect observed public support or opposition. For example, in both 1998 and 1999, the Family Research Council asked questions about support for syringe exchange programs. In the 1998 question, users of SEPs were referred to as “those addicted to illegal drugs.” In 1999, the question was identical, except that users of SEPs were now described as “drug addicts.” Support in 1998 was 43%; in 1999, it had fallen to 34%. In an earlier 1997 poll sponsored by the Kaiser Family Foundation, the phrase “IV (intravenous) drug users” was employed, and 64% of respondents favored SEPs.

Other differences in question design can also be important. For example, in the same Kaiser poll, a separate question using what are called “permissive statements” was asked of a different subset of respondents. Respondents were told that “some people favor offering clean needles . . . to reduce the spread of HIV; others oppose exchange programs because they . . . send the message that it’s OK to use illegal drugs.” With these permissive statements, support was substantially lower, just 48%. However, even from this lower baseline of support, when respondents are then told that scientific evidence suggests that SEPs are effective, support again increases to a total of 60%. Clearly, levels of national support for SEPs are not very stable.

The biases of the organizations sponsoring the polls may also affect the outcomes of interest. For example, the Family Research Council describes itself as “champion[ing] marriage and family as the foundation of civilization, the seedbed of virtue, and the wellspring of society.”¹⁷⁸ By comparison, the Kaiser Family Foundation is an “independent philanthropy focusing on the major health care issues facing the nation.”¹⁷⁹ The Family Research Council, therefore is likely to view syringe access interventions through the lens of its “family values” mission, while Kaiser will pose the question as one primarily of health

178. FAMILY RESEARCH COUNCIL, FAMILY RESEARCH COUNCIL MISSION STATEMENT, at <http://www.frc.org/aboutfrc.cfm> (last accessed December 14, 2001).

179. HENRY J. KAISER FAMILY FOUNDATION, ABOUT THE HENRY J. KAISER FAMILY FOUNDATION, at <http://www.kff.org/docs/about> (last accessed December 14, 2001).

policy. These differences may be perceived (perhaps subtly) by respondents. They are also likely to affect the context in which questions about syringe access policies are asked within the larger survey instrument.

It can be very difficult to interpret the policy-impact of survey research findings on topics that most respondents have probably not carefully considered. Weak levels of support may simply mean that many respondents do not fully understand the issue (or its scientific basis), which cannot be explained effectively in a brief telephone interview. Even if levels of national support are malleable, this may be less relevant for some aspects of syringe access policy than for others. Most SEPs are locally designed and implemented. In that sense, local levels of support are probably far more important than national levels. In addition, to the extent that many of these programs are privately funded, governmental or public support may simply not be needed in some places. However, national public opinion can obviously affect willingness to provide state or federal funds for SEPs. Currently, federal funds may not be used to support SEPs.

Our results also suggest possible ways to increase public support for syringe access interventions. It appears that linking syringe access with broader drug policy is associated with lower levels of support. To the extent that the "war on drugs" is seen as a moral crusade by some, and a misguided failure by others, uncoupling syringe access from drug policy has the potential to de-polarize the syringe access debate. Similarly, describing syringe access interventions as health policy, rather than drug control policy, may also increase support. Finally, a public discourse that avoids the use of loaded terms, like "drug addicts" or "junkies," may contribute to a more rational, less stigma-driven assessment of syringe access by the public.

B. Bioethics Literature Regarding Syringe Access Policies

Despite the controversy surrounding syringe access policies, especially SEPs, there has been little scholarly effort devoted to analyzing their bioethical implications. A comprehensive literature review, with the invaluable assistance of the National Reference Center for Bioethics literature at Georgetown University's Kennedy Institute of Ethics, yielded just two journal articles whose primary focus was on the ethics of SEPs. Many other articles include brief discussions of the societal or moral appropriateness of SEPs, often in the discussion section of a more general article, but do not develop an explicit ethical

basis for that conclusion. These are generally excluded from this section.

The most comprehensive published effort to analyze the bioethics of SEPs was by Loue, Lurie, and Lloyd in 1995.¹⁸⁰ That article employs a traditional bioethics framework, popularized by Beauchamp and Childress.¹⁸¹ That framework typically includes an analysis of the following basic components: 1) nonmaleficence; 2) beneficence; 3) respect for persons; and 4) justice. Nonmaleficence refers to the obligation to avoid intentionally harming others, while beneficence includes affirmative actions designed to help others. Respect for persons incorporates concepts of autonomy and informed consent. Justice in this context implies fairness in treatment and an appropriate distribution of benefits and burdens. Loue and colleagues also add a discussion of utilitarianism. Utilitarianism focuses on the consequences of actions in order to assess their "rightness." Right actions or policies will attempt to maximize good outcomes and minimize bad ones.¹⁸²

For Loue et al., the principle of beneficence is easily satisfied by SEPs. SEPs reduce the risk of infection for individuals. For communities, the number of syringes discarded in public places is decreased. Nonmaleficence is also satisfied where the SEP insulates users from targeting by the police. Other potential harms to IDUs participating in SEPs, such as the risk that drug use will be encouraged, can be mitigated by referrals for drug treatment or counseling. SEPs exhibit respect for persons when they encourage healthy decisions, lack any form of compulsion to participate, and ensure the confidentiality of the users. Finally, the principle of justice requires that society accept the costs of SEPs, and not discriminate against IDUs. This is especially important where society has chosen not to provide adequate drug treatment resources in most communities.¹⁸³ For Loue et al., SEPs are also justified on utilitarian grounds. If properly designed and implemented, they minimize harms to IDUs and the community.

The only other effort to systematically assess the ethical implications of SEPs was authored by Maura O'Brien in 1989, just one year

180. Sana Loue et al., *Ethical Issues Raised by Needle Exchange Programs*, 23 J.L. MED. & ETHICS 382 (1995).

181. TOM L. BEAUCHAMP & JAMES F. CHILDRESS, *PRINCIPLES OF BIOMEDICAL ETHICS* (4th ed. 1994).

182. *Id.*

183. Loue et al., *supra* note 180, 382-383.

after the first SEP in the U.S. was instituted.¹⁸⁴ Employing a different framework, O'Brien also concludes that SEPs are ethically justified. The strength of her conclusion was limited, however, by the absence of substantial effectiveness data at that early date.

Loue et al. also briefly discuss the ethics of physician prescription and pharmacy sale of syringes, topics that Lazzarini addresses in substantially more detail.¹⁸⁵ Lazzarini employs a variety of ethical principles and theories, but also focuses on the 4 traditional principles. Regarding physician prescription of syringes, she notes that principles of beneficence and respect for persons might seem to conflict. The notion of autonomy inherent in respect for persons argues for physician prescription of syringes where that is the informed choice of an IDU. But a "beneficent" physician might be concerned about facilitating an IDU's drug habit. Lazzarini concludes, however, that physician prescription of syringes is ethically appropriate. She argues that the principle of beneficence warrants both efforts to convince IDUs to cease their drug use or enter treatment, and efforts to provide sterile syringes for those IDUs who cannot or will not stop injecting drugs.

The few ethical analyses that have been done support the use of SEPs and physician prescribing of syringes. However, based on the relatively scant volume of literature, we wonder if the bioethics community has devoted adequate attention to this issue. This is especially surprising given the high levels of media and policy-maker attention that syringe access policies have received. In particular, it does not appear that bioethicists have devoted nearly as much attention to the ethics of syringe access policy as they have to other aspects of the AIDS epidemic, such as issues of patient screening or contact tracing. From a policy perspective, greater participation by bioethicists and other opinion leaders could affect both public opinion and the political feasibility of some syringe access policies.

Another interesting feature of the SEP literature concerns research ethics. A randomized, controlled trial of IDUs assigned to SEP participation or non-participation has been deemed by many to be ethically problematic. The concern is that, given the magnitude of research suggesting that SEPs are beneficial, the research community no longer has the necessary equipoise that would allow randomly excluding some IDUs from SEP participation. However, if one were per-

184. Maura O'Brien, *Needle Exchange Programs: Ethical and Policy Issues*, 4 AIDS & PUB. POL'Y J. 75, 78 (1989).

185. Zita Lazzarini, *An Analysis of Ethical Issues in Prescribing and Dispensing Syringes to Injection Drug Users*, 11 HEALTH MATRIX 85, 95, 127 (2001).

sued by recent research suggesting that, at least in some circumstances SEPs may not reduce seroconversion rates, this could alter the bioethics landscape. Under those circumstances, randomized, controlled trials might be ethically permissible provided that the control group had some other form of access to clean syringes. Whether additional research, even some "gold-standard" clinical trial, would affect the positions of opponents is a separate question.

C. Politics

We have previously described the history of SEPs in the United States. This history has also been presented in greater detail by others.¹⁸⁶ But there have been only limited efforts in the political science or public health literature to systematically explore the politics of syringe access policy.¹⁸⁷ Nevertheless, in our view, some features of the structure of the political debate are apparent. We identify three major themes in that debate: 1) disagreements about science, 2) concerns about symbolism, and 3) differences in how the problem is framed.

The available research is interpreted differently by syringe access proponents and opponents. For example, SEP opponent Robert Maginnis writes: "Two compelling studies, published in 1997, found that NEP participants were more likely to contract HIV than addicts who don't use NEPs."¹⁸⁸ SEP proponents argue that these same studies may have been influenced by selection bias. Proponents are also more likely to consider the totality of the scientific evidence supportive of the benefits of SEPs. Disagreements about SEP science may also reflect different views about the appropriate course of action if there is *any* scientific uncertainty. Some opponents of SEPs may believe that SEPs should not be implemented if there is any doubt that they may promote drug use. In addition, because SEPs have not been instituted in all communities, opponents may be uncertain about the overall effect SEPs would have if more widely implemented. Unfortunately, the absence of federal funding for both SEPs and SEP research creates a feedback mechanism. The absence of federal funding makes large-scale, well-designed studies much more difficult to conduct. And the

186. See Vlahov et al, *supra* note 17.

187. See, e.g., Moss, *supra* note 133; Coutinho, *supra* note 133.

188. R.L. Maginnis, *Injecting Drug Use: A 2000 Overview*, THE FAMILY RESEARCH COUNCIL at <http://www.frc.org> (last accessed December 14, 2001) (copy on file with the University of San Francisco Law Review).

lack of the kind of effectiveness data that such studies might produce helps to perpetuate and even reinforce the funding ban.

Other arguments are based not on disputes over science, but over the symbolism of SEPs or other syringe access policies. Opponents argue that SEPs send a message that drug use is condoned, and undermine other anti-drug messages. Proponents generally respond with some variation on the theme of harm reduction—that some IDUs will not stop injecting illegal drugs despite anti-drug messages and that, therefore, SEPs are an appropriate response. Interestingly, at least one public opinion poll has sought to indirectly assess the persuasiveness of this argument. In a 1998 poll sponsored by the SEP opponents, The Family Research Council, a plurality of respondents (46%) thought that “government funded needle exchange programs” did not “represent an official endorsement of drug use by the government.” Forty-one percent thought that SEPs would represent such an endorsement.

Perhaps most important to understanding the politics of SEPs, however, are differences in how opponents and proponents define and frame the problem. Consistent with their concern about science and symbolism, opponents view SEPs primarily through the lens of drug policy, while proponents of SEPs generally define the problem as one of disease prevention. Interestingly, this latter view may be gaining currency with the public. In a 2001 poll sponsored by the Pew Research Center, 1500 United States adults were asked a series of questions about drug policy. When asked: “All in all, should drug use be treated more like a crime or more like a disease?” 35% said “crime” and 52% “disease.” Attitudes were similarly divided in an analysis of community responses to a 2000 California law making it easier for localities to sponsor SEPs. Among key stakeholders, police were most likely to be opposed to SEPs, often describing them as likely to increase crime by “facilitating drug use.” By comparison, local public health officials provided epidemiological data to policy-makers and SEP advocates, suggesting a health perspective on the issue. Changing police attitudes proved important to the ultimate success of SEPs in some communities.¹⁸⁹

Resolving this problem-framing disjunction may be the most significant challenge for SEP proponents. One possible strategy, already

189. Chris Collins et al., *Syringe Exchange and AB 136: The Dynamics of Local Consideration in 6 California Communities* (2002) THE HENRY J. KAISER FAMILY FOUNDATION at <http://www.kff.org/content/2002/6018/AB136%20Report.pdf> (last accessed December 14, 2001).

employed by scientists and some policy-makers, uses research to demonstrate that SEPs do not harm drug control efforts. Another strategy may be to argue that, in general, health issues should outweigh or trump possible drug control issues. The persuasiveness of both arguments might be bolstered by reference to the experience of European countries that have instituted SEPs without an increase in drug use.

Of course, for some opponents, the decision is probably a simple political one. They represent, or are influenced by, a constituent group that has a particular cluster of positions, including opposition to SEPs.¹⁹⁰ For those whose position is based on realpolitik, it is unlikely that polling or other data will change minds.

VII. Recommendations for Policy

Were public health policy dictated purely by behavioral research and cost-benefit analysis, unfettered syringe access would be part of the response to prevent the spread of blood borne disease throughout the United States and elsewhere. While the existing research base has its limitations, the strong preponderance of the data and the experience of other countries leave little doubt that making sure IDUs can obtain, carry, and use a sterile syringe for as many injections as possible can make a valuable contribution to controlling HIV among IDUs.

In considering this “ideal” policy, it is not particularly problematic that the research supporting syringe access has limitations of both methodology and scope. Nor is it significant that the goal of having every IDU use a new sterile syringe for every injection is not likely to be achieved anytime soon, even with completely unfettered syringe access. Policy frequently proceeds faster than prevention science, and necessarily so: perfect information is a luxury policy makers cannot afford. Throughout public health and governance generally, policy-makers must make reasoned judgments in response to problems before all questions can be answered.

Syringe access is important, probably even necessary, but it is not a panacea for the prevention of blood borne disease among IDUs and their surrounding communities. In the ideal policy, formed and continuously updated based on new data, syringe access would be part of a comprehensive set of medical and social interventions aimed at increasing the uptake and success of drug treatment while reducing the

190. See Linda Rosenstock & Lore J. Lee, *Attacks on Science: The Risks to Evidence-Based Policy*, 92 AM. J. PUB. HEALTH 14, 17 (2002).

harmful health consequences of continuing drug use. For syringe access to work for public health, it need not be 100 percent successful; it just needs to increase the marginal use sufficiently to either cost effectively reduce cases or create a sufficient level of safe use to reverse the trend of the epidemic. In the ideal world, the effects and best practices of unfettered syringe access would continue to be studied, and policy would be adapted accordingly.

In our distinctly non-Platonic world, health policy is not made purely on the basis of science and expert reflection. Syringe access is a contentious political issue and the public reaction to enhanced access is mixed, even if not deeply felt. In this real world, the essential challenge for policy makers who credit the information public health professionals provide is to decide where to draw the line between effectiveness and political feasibility. Experience shows that the location of this line can vary from state to state and even city to city. Our review suggests the following conclusions.

1. Syringe Access Should Be Deregulated

Complete deregulation is the most desirable model to maximize access to sterile syringes. Syringes are standard medical devices used by millions of people on a daily basis. Apart from quality control, they have been regulated only in so far as they are susceptible for use with illegal drugs. Compared with other syringe access options, deregulation allows distribution by the widest variety of means and outlets. With restrictions repealed, syringes could be sold not only in pharmacies, but also convenience stores, groceries, and other accessible locations,¹⁹¹ or could be handed out without cost by public health and community organizations. By removing all restrictions on syringe distribution, deregulation also eliminates legal barriers to syringe exchange. Deregulation takes possession almost entirely out of the purview of law enforcement, making it legally safe for IDUs to have sterile syringes at hand when they need them, and removing an important legal barrier to safe syringe disposal. It is a market-driven solution that leaves sellers and buyers free to make their own choices. From the political point of view, it eliminates syringe access as a debating issue and gives public health agencies a free hand in crafting distribution programs that best serve the goal of disease prevention. There is no evidence that unfettered access to sterile injection equip-

191. See Yolanda Obadia et al., *Syringe Vending Machines for Injection Drug Users: An Experiment in Marseille, France*, 89 AM. J. PUB. HEALTH 1852 (1999).

ment causes people to begin or increase drug use, or an increase in the improper disposal of used syringes.

2. IDUs Should Not Be Subject to Arrest or Prosecution for Possession of the Residue of Drugs Left in the Barrel of a Used Syringe

The ability to obtain a syringe is not sufficient to minimize unsafe syringe use among IDUs. IDUs must also be comfortable carrying the syringe. Although not optimal, re-use of one's own syringe is preferable to sharing, and it is necessary to retain a used syringe for proper disposal at a syringe exchange or elsewhere. As the federal judge concluded in *Doe v. Bridgeport Police Department*,¹⁹² arresting drug users for possessing a residual, trace amount of an illegal drug in the barrel of a syringe is antithetical to a public policy favoring sterile injection and proper disposal of used syringes. It is unlikely that state drug possession laws would be rendered ineffective by raising the minimum quantity of drugs necessary to ground a conviction. Although the ability to make a stop or arrest based on probable cause to believe that a used syringe contains drugs may be a tool of street law enforcement, a health perspective suggests society pays a high price for its use. States should revisit this issue. Regardless of the need for de minimis thresholds for general drug control, it is possible to exempt such amounts within syringes, or for law enforcement authorities to develop standard operating procedures that avoid stops, arrests, or prosecutions based on drug residues in syringes.

3. Laws Governing SEPs Should Place a Minimum of Restrictions on Their Manner of Operation

Deregulation does not eliminate the need for the SEP as a public health program. SEPs can provide a range of health and social services that pharmacies and other retail outlets ordinarily cannot. With or without deregulation, however, the best laws authorizing SEPs will be those that set minimal restrictions on the manner in which the intervention is conducted. Syringe exchange is a work in progress for public health. Assessment data and day-to-day experience should continue to be collected and digested into best practices, which SEPs should be free to adopt as they become known. Rigid one-for-one exchange requirements or caps on the number of syringes to be exchanged are not consistent with research evidence even today, and restrictions gen-

192. 198 F.R.D. 325, 345 (D. Conn. 2001).

erally are not consistent with the development of optimal practices. In fact, limitations on SEP operations may inadvertently “stack the deck” against the ability of these programs to prevent blood borne disease transmission among IDUs.

4. The United States Should Develop a National Policy on the Disposal of Household Sharps

Although there is no compelling reason to continue to regulate distribution and possession of syringes, there is an unmistakable need for a national policy for the disposal of medical sharps used outside the health care system. An effective system could be developed and funded within the private sector, or conducted by government, but leadership and probably a legal mandate and some funding will be required from government. In 2002, a Coalition for Safe Community Needle Disposal was founded to spearhead development of disposal solutions at the local, state, and national levels.¹⁹³

5. Syringe Access Should Be Integrated into a Comprehensive Approach to Reducing Drug Use and Its Health Consequences

Improved access to sterile syringes can substantially reduce IDUs' risks of acquiring and transmitting blood borne viral infections. It should not, however, be seen as a free-standing intervention or strategy. This review has focused on the role of syringe access in the behavior of IDUs and the spread of blood borne disease, but syringe access is only one factor in this complex social equation. Taking a broader view of the spread of disease among IDUs, and the resources for preventing it, the Centers for Disease Control and Prevention (CDC) and other leaders in HIV-prevention recommend a comprehensive approach to prevention of blood borne infections among IDUs, their sex partners and children.¹⁹⁴ Syringe access is an important component of a comprehensive approach, but should be supported by other interventions including substance abuse treatment, effective community outreach to IDUs, drug and health services in correctional facilities, strategies to prevent sexual transmission of disease, HIV counseling, testing and referral services for IDUs living with HIV, and primary drug prevention.¹⁹⁵ CDC's recommendation is consistent with the data we have reviewed on syringe access policies, both from a

193. See at <http://www.safeneedledisposal.org/>.

194. ACADEMY FOR EDUCATIONAL DEVELOPMENT, *supra* note 1.

195. *Id.*

public health and a policy point of view. In health terms, it is clear that many factors influence IDU risk behavior, and that better syringe access can significantly reduce but not alone prevent the continued spread of HIV. In political terms, an approach that places syringe access in a larger effort to get people off drugs and to prevent them from starting drug use in the first place emphasizes that harm reduction measures are not aimed at promoting drug use.

6. The Critical Importance of Properly Implementing Syringe Access Policies Should Be Recognized and Addressed

There is frequently a gap between the way policies are intended to work and the way they actually operate in practice.¹⁹⁶ This implementation gap typically reflects a variety of factors, including unanticipated barriers, confusion about the policy's details, and often most important, resistance to the policy among those who are intended to be influenced by it or who must carry it out. In the case of syringe access, the ultimate goal is to facilitate safe behavior among IDUs, but a necessary precondition is participation in syringe exchange, pharmacy access, physician prescription, or safe disposal schemes. Likewise, as the *Doe v. Bridgeport* and *Roe v. City of New York* cases dramatically illustrate, the understanding and support of police and prosecutors can be indispensable to the actual implementation of policies that enhance syringe access on paper. It is therefore not sufficient to merely pass a syringe access law. Policy-makers should require and fund an implementation support and evaluation process that includes education directed at consumers, pharmacists, other sellers, and law enforcement officials, so that all the key players understand the value of syringe access and their role in disease prevention. Research on the impact of the new policy on attitudes and behaviors among all the stakeholders is also crucial.

Conclusion

The data plainly support the view that syringe access and drug possession laws and law enforcement practices influence how drug users inject, whether they do so with a new syringe or not, and how

196. See, e.g., JEFFREY L. PRESSMAN & AARON B. WILDAVSKY, IMPLEMENTATION (1973); JEFFREY PRESSMAN, FEDERAL PROGRAMS AND CITY POLITICS (1975); Donald S. Van Meter & Carl E. Van Horn, *The Policy Implementation Process: a Conceptual Framework*, 6 ADMIN. & SOC'Y 445, 446 (1975); CHRISTOPHER C. HOOD, THE LIMITS OF ADMINISTRATION (1976); EUGENE BARDACH, THE IMPLEMENTATION GAME: WHAT HAPPENS AFTER A BILL BECOMES LAW (1977); EFFECTIVE POLICY IMPLEMENTATION (Daniel Mazmanian & Peter A. Sabatier eds., 1981).

they dispose of used syringes. These laws, and the police practices flowing from them, may be understood to be structural factors influencing the health of IDUs.¹⁹⁷ There is a growing recognition in public health that such structural factors are important targets for public health intervention.¹⁹⁸

The challenge for research is to further define how substance abuse policies create health effects, and to suggest how policies and practices may be changed to improve public health. Recognizing substance abuse policy and its implementation as significant factors in health has at least two implications for research.

First, if substance abuse policy is a structural factor in health, then it is a topic that merits more study from all researchers working on HIV, AIDS, and other diseases linked to drug use. For epidemiologists, for example, policies and practices at the state and local levels should be more thoroughly investigated along with the usual individual demographic and risk factors.¹⁹⁹ Behavioral research among IDUs should pay more attention to the effects of policy and policy implementation on IDUs' behavioral options and choices. Analyses of syringe sharing, for example, that ignore the role of laws and police behavior are certainly incomplete. The same may be said of health services research and program evaluation; police attitudes and practices should be considered as important factors in SEP utilization, for example. The point is not to ignore non-policy factors, or to make such factors secondary, but to include policy as one of many important factors.

Second, policy data of the sort primarily summarized here—specifying the kinds of laws that exist on the books across the country—is important, but incomplete. Law as actually implemented can and often does differ significantly from the law as written by legislatures or interpreted by judges. For most people outside the legal system, and particularly for people like IDUs who are subject to legal intervention, it is the law on the streets—the law as applied by police officers and prosecutors—that has the greatest effect on their behavior and daily

197. Kim M. Blankenship et al., *Structural Interventions in Public Health*, 14 AIDS S11, S17 (Supp. 1 2000); Esther Sumartojo, *Structural Factors in HIV Prevention: Concepts, Examples, and Implications for Research*, 14 AIDS S3, S3-S4 (Supp. 1 2000); Blankenship & Koester, *supra* note 170, at 548, 551; *see generally* Zita Lazzarini & Robert Klitzman, *HIV and the Law: Integrating Law, Policy, and Social Epidemiology*, 30 J.L., MED. & ETHICS 533, 535 (2002); Scott Burris et al., *Integrating Law and Social Epidemiology*, 30 J.L. MED. & ETHICS 510, 511 (2002).

198. *See* Blankenship et al., *supra* note 197, at S19.

199. *See, e.g.*, Friedman et al., *supra* note 93.

lives.²⁰⁰ Important ethnographic studies of IDUs have begun to document and explain these effects,²⁰¹ but much more needs to be done to properly delineate the important role of policy in IDU health and behavior. Ethnography has made and can continue to make an important contribution.²⁰² As suggested above, however, the implementation of policy on the streets is a matter for researchers of all kinds.

The challenge for policymakers is to do something to change the harmful effects of law on health. The scientific evidence, as interpreted by most public health professionals, dictates the elimination of drug policy barriers to safe injection, especially laws and regulations limiting syringe access. Eleven states have deregulated syringe access to some extent, and four more have authorized SEPs, but most states have not acted. The national polling data suggest that public attitudes are malleable on this issue, but the decisions are made at the state level. Evidence alone is not decisive in practical policymaking. Leadership and a willingness to abstain from the practice of symbolic politics are essential ingredients of syringe law reform.

Changing drug possession law, or even instituting law enforcement policies discouraging stops or arrests based on the possession of a possibly tainted, used syringe, could be even more politically problematic than syringe law reform. The very suggestion by syringe access proponents of a change in possession laws may be perceived as ratifying the charge that syringe access generally is merely a political stalking horse for drug legalization. Despite these considerations, however, lawmakers in Maryland and the District of Columbia exempted SEP clients from prosecution for possessing trace amounts of drug in used syringes, and federal courts in *Doe v. Bridgeport Police Department*²⁰³ and *Roe v. City of New York*²⁰⁴ ruled that state legislatures had intended to do so when deregulating syringes and authorizing syringe exchange.

The issue of disposal is certainly complex, given the number of existing regulatory systems it touches and the wide range of social actors (from individual consumers to waste processors) involved. Unlike

200. See generally PATRICIA EWICK & SUSAN SILBEY, *THE COMMON PLACE OF LAW: STORIES FROM EVERYDAY LIFE* (1998); Austin Sarat, ". . . *The Law Is All Over*": Power, Resistance and the Legal Consciousness of the Welfare Poor, 2 YALE J.L. & HUMAN. 343, 344-345 (1990) (discussing the effect laws have on everyday life).

201. See, e.g., Blankenship & Koester, *supra* note 170; Bourgois, *supra* note 103; Koester, *supra* note 103.

202. S.K. Koester, *The Context of Risk: Ethnographic Contributions to the Study of Drug Use and HIV*, 143 NIDA RES. MONOGRAPH 202, 213 (1994).

203. 198 F.R.D. 325, 350 (D. Conn. 2001).

204. 232 F. Supp. 2d 240, 257 (S.D. N.Y. 2002).

syringe access, there is a real price tag: someone has to pay for the creation and permanent operation of a disposal system. If the lack of a community disposal system is creating significant costs in injuries, however, developing a system may be a net benefit. We have succeeded in developing disposal systems for other commonly used items, such as batteries and motor oil. Disposal of household sharps can, with leadership, be rationalized.

Given the challenges, does the research indicate any ways to improve the political fortunes of sterile syringe access and the comprehensive approach to drug abuse? There is little written on the political dynamics of syringe access, and much of that takes the view that drug and syringe access policy reflect deep structural inequalities of a sort not likely to be overcome by politics as usual.²⁰⁵ From our experience in drug policy and health, we can suggest some small steps.

Observation of the syringe access debate over time suggests that syringe access is not in fact the divide across which opponents and proponents face each other. The debate, that is, is not about the "answer" but the "problem." The problem syringe access proponents seek to solve is HIV and other blood borne diseases. The problem opponents are concerned about is drug use and its implications for the moral state of society. Syringe access proponents are prepared to take the risk of compromising drug control in order to prevent disease (and are reasonably confident that the risk of needle access harming drug control is very low). People concerned primarily about drug control are far more averse to any risk that syringe access poses to their goals. This is reminiscent of the politics that obtained for most of the first half of the last century in syphilis control. As described by Allen Brandt, a bitter, decades-long battle over syphilis control policy pitted those who saw the "problem" as venereal disease (and who therefore proposed condoms, medical prophylaxis, and education to reduce disease transmission) against those who saw the "problem" as immoral sexuality (and who therefore advocated abstinence and even sometimes opposed health measures that would reduce the negative consequences of negative behavior). In this quite analogous context, advances in STD control depended upon strong leadership from a charismatic Surgeon General, and coalitions between public health agencies and private voluntary associations.²⁰⁶

205. See Friedman et al., *supra* note 93, at 793.

206. See ALLAN M. BRANDT, *NO MAGIC BULLET: A SOCIAL HISTORY OF VENEREAL DISEASE IN THE UNITED STATES SINCE 1980* (1985).

Strong public leadership must articulate the high health costs of drug abuse and how a comprehensive approach including syringe access can and does reduce them. It must explicitly address the fear that a health approach encourages drug use. But it must do more. When Franklin Roosevelt's Surgeon General, Thomas Paron, first wrote candidly about syphilis in *Reader's Digest*, and spoke openly about it on national radio, he was attacking a stigma that was making it practically impossible to undertake widespread public education, screening, and treatment for STDs. When Surgeon General Koop began to speak out openly about HIV/AIDS, he was bringing powerful support to an effort to reduce the stigma of HIV, which has made remarkable progress in the past twenty years. Success in addressing drug abuse and its health consequences requires the same sort of anti-stigma campaign. Until drug users are seen as valuable human beings, and drug abuse as a complex but treatable disorder, stigma will continue to complicate prevention and act as a brooding omnipresence in legislative deliberation.²⁰⁷

Given the challenges, it is important to highlight the many "second best" policies that can be helpful intermediate steps towards a policy of best practices. Retail sales restricted to pharmacies, or to a limited number of syringes, have been authorized in states where the votes were not there for complete deregulation. Research suggests that these measures do improve access. Likewise, SEPs with distribution caps or other requirements, while not optimal, are valuable. In states where state-wide support for SEPs has been absent, local governments have successfully used their inherent health powers to authorize exchange.

There are also important steps to be taken that do not involve legislative change. Our review identified forty-two jurisdictions where it is clearly or arguably legal for pharmacists to sell syringes to IDUs without a prescription, and research shows that many pharmacists are willing to do so. Pharmacists, the gatekeepers for syringe access in the United States and health professionals with the training to play an important health promotion role, are a key audience for educational interventions. A study in Canada concluded:

From a policy perspective, we have found that support from the federal government, regulatory bodies, and professional associations may be an important catalyst to pharmacists' participation in programs [to address substance abuse and its health risks]. Fur-

207. On stigma and the law, see generally S. Burris, *Disease Stigma in Public Health Law and Research*, 30 J.L. MED. & ETHICS 179 (2002).

ther, it does not appear to be possible to implement such policies without professional development and continuing education, and collaboration with the community. . . . Movement forward with expanded preventive and harm-reduction strategies by pharmacies will require careful planning.²⁰⁸

The same may be said of police and prosecutors. Mutual mistrust between health advocates and law enforcement officials is bad for both sides and the public in the middle. Education on health issues and the impact of drug abuse health interventions on drug control can be informative to health and law enforcement professionals alike. Certainly, the day-to-day success of interventions with drug users can be enhanced by support and collaboration with law enforcement. Support from law enforcement is also very helpful, if not indispensable, to political success.

208. Ted Myers et al., *The Role of Policy in Community Pharmacies' Response to Injection-Drug Use: Results of a Nationwide Canadian Survey*, 11 AIDS & PUB. POL'Y J. 78, 87 (1996).

