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NEEDLE EXCHANGE PROGRAMS: SENDING THE RIGHT MESSAGE

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The Problem: Dirty Needles Are Dangerous

Few images of drug use are more potent than that of the needle—the needle in the shaky hand of a junkie searching the tracks on his arm or leg for a vein still able to receive one more injection; the needle hanging from the arm of an addict unconscious or dead from an overdose; the contaminated needle passing its deadly load of HIV or hepatitis to the next user and, through him, to his wife or lover and their unborn child. Small wonder, then, that a prominent and persistent goal of U.S. drug policy, from the federal to the local level, has been to deny drug users easy access to needles and to punish them whenever they are found with one.

The illegal drugs that users most commonly inject are heroin, cocaine, and methamphetamines, although each of these can be taken by other means, such as snorting, smoking, or ingesting orally. Obviously, using these drugs, particularly in the corrupted state in which they typically reach the retail market, is risky business. This inherent risk is substantially increased when users share needles contaminated by blood-borne diseases, most notably HIV/AIDS and hepatitis A, B, and C. The actual result is stunning. Informed estimates of the number of injecting drug users (IDUs) range from a quite conservative one million to a more common figure of approximately 1.2 million. By 2002, according to the Centers for Disease Control and Prevention (CDC), 36 percent (270,721) of AIDS cases in the United States had occurred among IDUs, their sexual partners and their offspring; 28 percent of new cases were traceable to IDUs.¹ The proportion appears to be shrinking somewhat; in 2006, approximately 20 percent of new cases were attributable to IDUs. Hepatitis C, the most dangerous variant of that disease, is also rampant among IDUs in this country; surveys consistently find that between half and 80 percent of injectors contract the virus within the first year of needle use and that it is found in the blood of all adult IDUs in even higher proportions (70–90 percent).

A contaminated needle is an extremely efficient transmitter of a blood-borne disease, and the virus can live on a needle for as long as four days. Further, since the CDC estimates that at least a quarter of the people infected with HIV were unaware of it until they were diagnosed, and since the rapidity of infection with hepatitis C surely results in an even greater percentage of unsuspecting carriers, needle users are key agents in the spread of these deadly epidemics.

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The Economic Burden of Blood-Borne Disease

It is possible to regard such statistics as a matter of just deserts, or at least as a regrettable effect of an avoidable cause. People should know that if they use dangerous drugs in the company of dangerous people, bad things are likely to happen. Their sexual partners, though perhaps not drug users themselves, should confine themselves to more wholesome companions. It is troubling when children born with AIDS are the offspring of IDUs or their sexual partners, but hardly news that the sins of fathers and mothers are often visited upon their progeny.

Even those who subscribe to such views, however, should pause in the face of the enormous economic costs of treating people infected with HIV or already suffering from AIDS. A study published in the November 2006 issue of *Medical Care* estimates that the current cost of lifetime treatment for a person with HIV with newer antiretroviral drugs is \$618,900, though that number has been projected to drop to \$385,200. The same report estimates that the net savings for each case prevented is \$303,100.² Precise estimates are difficult to determine and subject to change. Lowered cost of drugs may reduce the annual cost of treatment, but increased success of drugs will mean longer periods of treatment. In any case, treating just the more than 200,000 people infected with HIV in the last five years would cost, using the lower estimate, \$60 billion.

Many people infected with these diseases receive little or no medical treatment, but of those who do, Medicaid or other public funds bear a high proportion of the cost. For example, from 2001 to 2005, Texas State Medicaid costs for HIV/AIDS services totaled \$316.5 million—and that did not include outlays by private payers, insurance companies, or government programs such as Medicare and Veterans Affairs.³ Treatment for hepatitis C, which affects a population six times larger than HIV and AIDs, can run to \$20,000 to \$30,000 per year, with lifetime costs of more than \$300,000. Of those whose hepatitis C progresses to end-stage liver disease later in life, Medicare picks up the \$300,000 or so for the one in four fortunate enough to receive a transplant. Preventing just one case of either disease would save far more than the annual cost of a first-rate needle-exchange program. A 2006 CDC report estimated that preventing just 3,430 cases of HIV infection—fewer than 10 percent—would produce a net cost savings to society.⁴

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Thus, whether driven by compassion, fiscal prudence, or self-defense, rational public policy will seek to reduce the incidence of HIV/AIDS, hepatitis, and other blood-borne diseases that are spread by the behavior of IDUs. Fortunately, the means to such a reduction are well known and thoroughly proven.

Other Countries Have Demonstrated the Benefits of Needle Exchange Programs

Recognizing that HIV and hepatitis were both spreading at alarming rates among IDUs, public health officials in both the Netherlands and Australia began experimenting in the mid-1980s with programs to supply addicts with clean needles in exchange for their used ones. In addition, the participants were assured that they would run no risk of arrest or harassment by police in the course of making these exchanges. While opposed by some on the grounds that it seemed to be condoning drug use, needle exchange programs (NEPs) quickly proved to be an effective means of reducing the incidence of blood-borne diseases in both countries and have been widely recognized as a valid part of good public health policy and practice in many other parts of the world. In such programs, addicts receive a clean needle for every used one they turn in, thus limiting careless or dangerous disposal of needles. In some locales, syringes can also be easily obtained from pharmacies, at police stations, or even from vending machines. These are not only more convenient, but encourage the use of clean needles by IDUs who may be reluctant to signal their addiction by going to an NEP.

In October 2002, Maj. Brian Watters, chairman of the Australian National Council on Drugs, also known as Australia's Drug Czar, and Chris Puplick, chairman of the Australian National Council of AIDS and Hepatitis Related Diseases, co-issued a report assessing the ten-year "Return on Investment in Needle Exchange and Syringe Programs" in that country. The report estimated that NEPs had resulted in the avoidance of 25,000 cases of HIV and 21,000 cases of hepatitis C over the decade of the 1990s. The financial return was equally impressive. An investment of more than \$130 million (Australian) in such programs would result in a savings of somewhere between \$2.4 and \$7.7 billion. (At the time, the Australian dollar was valued at approximately \$0.55 U.S., for converted figures of approximately \$71.8 million and \$1.3 to \$4.1 billion.)

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Going beyond Australia, researchers for the report examined data from 103 cities worldwide, amounting to an aggregate of 778 years of experience with NEPs. Their findings: cities with NEPs experienced an average annual decrease in HIV cases of 18.6 percent; cities without such programs had an average 8.1 percent increase. The contrast between Australia and the United States is particularly striking. Alex Wodak, M.D., a participant in the April 2002 Baker Institute conference, “Moving Beyond the War on Drugs,” has been a key figure in persuading the Australian government to support NEPs and other methods of making clean needles available to users. According to Dr. Wodak, “In the year 2000, there were 14.7 new AIDS cases for every 100,000 Americans compared to just 1.1 new AIDS case for every 100,000 Australians. The proportion of new AIDS cases attributed directly or indirectly to injecting drug use in the United States is estimated as between one third to one half—compared to just 5 percent in Australia.”⁵ Even more dramatically, in Southern Australia, where 55 NEPs served about 1.2 million drug users, no new HIV infections were reported for three consecutive years.⁶

Awareness of such experience and research findings has led authorities in numerous European countries and cities to follow suit. Hundreds of NEPs operate in Great Britain, Germany, Spain, and other parts of Europe, and vending machines dispense clean needles in dozens of European cities. The Canadian government also began funding NEPs in 1989, as part of a comprehensive effort to reduce HIV infection. More recently, NEPs have been launched in various Asian and Latin American countries, as well as in several countries in the developing world.

The American Experience

By 1990, AIDS activists, public health officials, and IDUs aware of the risk of their behavior had begun NEPs in several cities in the United States—Tacoma and Seattle, Washington; Portland, Oregon; San Francisco, California; New York City; and, the best known and most carefully studied, New Haven, Connecticut.

The New Haven program, aided by strong support from the Mayor’s Task Force on AIDS, given legal status by the Connecticut legislature, and operated by the New Haven Department of Health beginning in November 1990, overcame an anticipated reluctance of addicts to come to a

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government-sponsored program by taking the program to them in a roving van donated by Yale University. To check the effect of needle exchange on disease prevention, needles were numbered and addicts were given fictitious names. Every used needle turned in was replaced by a clean one. In the early stages of the program, while users were still skeptical of official assurances that they need not fear arrest or other trouble with police when coming to the van, only about two of every ten needles distributed were returned. Slightly over two-thirds of these (almost 68 percent) tested positive for the AIDS virus. After the program had been in operation for two years, seven of every ten needles distributed were being returned and only 44 percent were HIV-positive. Researchers familiar with the program conservatively estimated that the HIV transmission rate had dropped by a minimum 33 percent in the first two years of the program's operation, with a similar reduction in hepatitis B infection. Like most NEPs, the New Haven program did more than simply distribute new syringes. Addicts were given instructions about safe injection practices, offered drug treatment if they wanted it, and provided with minimal health care such as flu shots and checkups. At the time of the 1993 assessment, almost 20 percent of participants in the program had begun drug treatment and hundreds of others, including many users who were not injectors, had come to the program for referral to an appropriate treatment facility.⁷

A Johns Hopkins study of the Baltimore City Needle Exchange, launched in 1994 at the urging of Mayor Kurt Schmoke, concluded that, after six years in operation, the incidence of HIV in that city decreased by 35 percent overall and 70 percent among the approximately 10,000 participants in the program. As in New Haven, about 20 percent of participants voluntarily entered drug treatment. The number of used needles collected in the trash fell by almost half, reducing the threat of injury or infection to children and others who might come in contact with them accidentally. Overall drug usage dropped by about 20 percent, 1500 clients had entered treatment—staffers told of having to tell at least 20–30 people every day that no slot was available for them—and the number of used needles collected in the trash fell by almost half. Unlike programs that must operate under the radar in some cities, the Baltimore City Needle Exchange has a Web site that lets users know when its vans will appear at various locations dur-

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ing the week. In winter, when heavy snow makes it impossible for the vans to travel, local radio and TV stations include the Needle Exchange in their listings of school and government-agency closings.⁸

According to a 2007 report by the North American Syringe Exchange Network, a major coordinating body for NEPs, at least 186 exchange programs were operating in 36 states, the District of Columbia, and Puerto Rico, some legally, some not.⁹ Some, in fact, were begun as explicit acts of civil disobedience of laws prohibiting such behavior. Some were funded by state or city governments, some by private foundations and individuals, and some by a combination of sources. Some did little more than exchange needles, while others provided various ancillary services and made significant efforts to link addicts to treatment programs. While it is difficult to establish a direct cause-and-effect relationship, these programs surely figure importantly in the above-noted substantial decline in HIV/AIDS cases traceable to injection drug use since 2002.

The Science Is Clear

With rare exceptions, American medical and public health personnel support making sterile syringe available to IDUs. During the 1990s, the U.S. government funded several studies of NEPs, including an extensive literature review of almost 2,000 U.S. and foreign research reports. Key governmental and professional bodies, including the National Academy of Science, the Centers for Disease Control, the American Medical Association, the Institute of Medicine, the National Institutes of Health, the American Public Health Association, and the American Bar Association have conducted studies and issued reports on the topic of access to clean needles. Without exception, these studies and organizations have endorsed access to clean needles as an effective measure for reducing the incidence of blood-borne diseases and increasing access to treatment for drug users. In addition, they have persuasively documented the important finding that access to sterile needles neither encourages people to start injecting drugs nor increases drug use by those who are already users. To the contrary, as the New Haven and Baltimore programs have demonstrated, NEPs typically facilitate linkages to various forms of treatment, where such treatment is available. Moreover, they take millions of potentially contaminated needles out of circulation instead of leaving them to be passed around or left in parks or public restrooms,

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where they could injure or infect children and others, including health workers and police who might receive needle-stick injuries in their contact with addicts.¹⁰

Advocates for NEPs typically support making it possible for users to obtain clean needles from physicians, from pharmacies, with or without a prescription, from the police, or even from vending machines (with provision for discarding used needles safely) such as those found in many locales in Europe and Australia, including the restrooms in the Australian national parliament building. These outlets can serve addicts in rural, small-town, and suburban areas that might be unable or unwilling to support NEPs and can, as noted above, reach some users who may wish to avoid being labeled as drug addicts. That such measures can extend the benefits offered by NEPs seems clear. For example, one study found that diabetic IDUs who were able to obtain syringes legally at pharmacies had HIV infection rates of only 9.8 percent, compared to 24.3 percent for nondiabetic injectors, even when their history and pattern of drug use were similar.¹¹

These Findings Are Well Known

These findings are well known and have been accepted by key U.S. government officials charged with oversight of the nation's health.

Dr. C. Everett Koop, who played a central role in rallying evangelical Christians to oppose abortion before Ronald Reagan appointed him surgeon general, applied his pro-life convictions to this issue as well. “When we are dealing with something as devastating as the AIDS epidemic,” he declared, “it doesn’t matter what we do to reach people that have to be reached, we have to do it. ... [I]f clean needles will do anything to contain a part of the epidemic, we should not have any foolish inhibitions about doing so.”¹²

Dr. Harold Varmus, then director of the National Institutes of Health, declared in 1998 that, “An exhaustive review of the science in this area indicates that NEPs can be an effective component in the global effort to end the epidemic of HIV disease. Recent findings have strengthened the scientific evidence that NEPs do not encourage the use of illegal drugs.”¹³

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Donna Shalala, secretary of Health and Human Services during the Clinton administration, sounded a similar note: “A meticulous scientific review has now proven that NEPs can reduce the transmission of HIV and save lives without losing ground in the battle against illegal drugs. It offers communities that decide to pursue NEPs yet another weapon in their fight against AIDS.”¹⁴

And, in 2000, Dr. David Satcher, then surgeon general of the United States, wrote that,

“[W]ell designed and implemented syringe exchange programs have demonstrated efficacy in engaging populations at severe risk for HIV and reducing the further spread of HIV among injection drug users, their sexual partners and children ... after reviewing the research to date, the senior scientists of the department and I have unanimously agreed that there is conclusive scientific evidence that syringe exchange programs, as part of a comprehensive strategy, are an effective public health intervention that reduces the transmission of HIV and does not encourage the use of illegal drugs.”¹⁵

Given this near unanimity among relevant professionals, it is peculiar that policymakers from the White House to City Hall have shown such resistance to the notion of providing IDUs with easier access to clean needles, for their own sake and that of the larger society.

After HIV/AIDS attained crisis status in the mid-1980s and under the terms of a 1988 amendment sponsored by the late Senator Jesse Helms, Congress responded by forbidding use of federal funds for NEPs, reflecting the view expressed by President George H.W. Bush’s drug czar, Robert Martinez, that providing needles to IDUs “undercuts the credibility of society’s message that drug use is illegal and morally wrong.”¹⁶

In 1997, Congress maintained its stance, enacting Public Law 105-78, which prohibits federal funding of “any program of distributing sterile needles or syringes for the hypodermic injection of any illegal drug.” This echoed earlier bills, but contained the qualification that, if the secretary of Health and Human Services were to determine that NEPs were effective in preventing the

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spread of AIDS and did not encourage illicit drug use, the ban could be lifted. Less than six months later, Secretary Shalala and NIH Director Varmus issued their statements, carefully worded to speak directly to this provision. Not wishing to appear vulnerable on a sensitive moral issue, however, the Clinton administration chose not to lift the ban. Subsequently, congressional supporters of hard-line drug policies have repeatedly declared their determination never to “spend a dime on needles for drug addicts.”

Despite the scientific evidence, the President’s Emergency Fund for AIDS Relief (PEPFAR) has not funded NEPs, even in countries where IDUs account for a much larger proportion of HIV/AIDS cases than in the United States. In some areas, including Russia and its former satellite countries and significant parts of Asia, injecting drug use is believed to be the primary cause of an explosive growth in HIV infections.

Although they save far more money than they cost, NEPs do cost money—for staff, facilities, utilities, and, of course, for needles and other items dispensed to clients. Lack of federal money and reliance on volunteer staffers makes their existence precarious. In addition, some states prohibit distribution or sale of needles without a prescription and most have paraphernalia laws that make possession of items that can be used to take drugs—needles, pipes, bongs, cookers—a criminal offense. This makes it difficult to persuade addicts to participate in a program sure to be known to police and making NEP staff members and volunteers subject to arrest as well, for knowingly abetting illegal drug use.

Despite overwhelming scientific and economic evidence, politicians and platforms of both major parties consistently rejected NEPs. Some, of course, are either unaware of the evidence or find it hard to accept. Others, though persuaded by the evidence, fear that seeming to be “soft on drugs” might cost them re-election, particularly if they believe their constituents belong to the 40 percent who remain unconvinced. The tide seems to be turning. As the experience of other countries—and, gradually, more states and cities in the United States—confirms that NEPs and other methods of making sterile syringes available to IDUs save lives and money without increasing drug abuse, lawmakers are beginning to consider changes in policy. In 2004, California Governor Arnold Schwarzenegger signed SB 1159, adding California to the growing

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list of states that allow pharmacy sales of up to ten sterile syringes without a prescription.¹⁷ During his 2008 presidential campaign, Barack Obama indicated that he favored lifting the ban on federal funding of NEPs. At the end of 2008, Texas was the only state in the union without some form of legal provision of sterile syringes for injecting drug users. Several bills that would authorize such programs, though with private rather than public funding, were scheduled for action in the 2009 session of the Texas Legislature.

Resistance to funding at federal, state, and local levels has hampered the success of NEPs in some areas, but numerous churches and several major private foundations have shown a willingness to fund these proven ways to reduce disease, suffering, and fiscal waste. A spokesman for the Levi Strauss Foundation, which has been involved with AIDS education and treatment since the early days of the epidemic in the 1980s, explained the foundation's rationale for supporting NEPs. "We didn't pull this out of thin air," he said. "The evidence is very clear, very strong, and incredibly consistent. The cost-benefit is extraordinary, in terms of how much money is saved by not having to access the healthcare system, not having to rely on insurance for medical services because the services are not needed, [not to mention] the social damage that is avoided, people harming themselves, harming their partners—just by providing a clean needle that costs seven cents. With a small amount of money you can make a real difference. You are putting your money into something that is proven."¹⁸

Though some sincerely question the scientific evidence supporting various forms of needle exchange, the major opposing argument continues to be, "It sends the wrong message." Before we accept that rationale, we need to think about the message we currently send: "We know a way to dramatically cut your chances of contracting a deadly disease, then spreading it to others, including your unborn children. It would also dramatically cut the amount of money society is going to have to spend on you and those you infect. But because we believe what you are doing is illegal, immoral, and sinful, we are not going to do what we know works. You are social lepers and, as upright, moral, sincerely religious people, we prefer that you and others in your social orbit die."

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No responsible person wants to encourage drug abuse. No fiscally prudent person wants to waste money simply to satisfy a sense of righteous indignation. No compassionate person wants to consign people unnecessarily to death or a living hell. Fortunately, providing IDUs with access to sterile syringes allows us to be responsible, prudent, and compassionate—admirable criteria for good public policy.

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Endnotes

¹ <http://www.cdc.gov/hiv/pubs/facts/idu.htm>.

² “The Lifetime Cost of Current Human Immunodeficiency Virus Care in the United States,” *Medical Care*, November 2006, <http://www.lww-medicalcare.com/pt/re/medcare/abstract.00005650-200611000-00005.htm;jsessionid=JTsr2HLpY27ZGJmzXjcbbj6h8P3GThwLYWpFXT9nn7vfryn3LNyW!-1853705402!181195629!8091!-> .

³ Data furnished by Financial Services Division, Texas Health & Human Services Commission.

⁴ http://www.cdc.gov/hiv/resources/reports/comp_hiv_prev/prev_pays.htm.

⁵ “Needle Schemes Stop Thousands of HIV Cases,” Sydney Morning Herald, October 23, 2002. “25,000 New HIV Cases Prevented via Australia’s Needle Program,” <http://www.jointogether.org/sa/news/summaries/reader/0,1854,554927,00.html>.

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⁶ <http://www.cbc.ca/news/background/drugs/needleexchange.html>.

⁷ E.H. Kaplan, K. Khoshnood, R. Heimer, “A Decline in HIV-Infected Needles Returned to New Haven’s Needle Exchange Program: Client Shift or Needle Exchange?” *American Journal of Public Health* 84, no. 12 (December 1994).

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⁸ "Needle Exchange Programs: Is Baltimore a Bust?" Center for Innovative Public Policies, Inc., April 2001, <http://www.google.com/search?ie=UTF-8&oe=UTF-8&sourceid=navclient&gfns=1&q=www.cipp.org.++Needle+Exchange+Programs%3A+Is+Baltimore+a+Bust%3F>

⁹ <http://www.nasen.org/> (See Survey Results Tables)

¹⁰ K. E. Nelson, D. Vlahov, S. Cohn, A. Lindsay, J.C. Anthony, "Human immunodeficiency virus infection in diabetic intravenous drug users," *Journal of the American Medical Association* (1991): 266:2259-2261.

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American Medical Association

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“HIV Prevention Strategic Plan Through 2005,” CDC, <http://www.cdc.gov/hiv/partners/PSP/AppendixC-1.htm>

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American College of Preventive Medicine

American Society of Addiction Medicine

National Association of Social Workers

American Psychiatric Association

National Association of Boards of Pharmacy

General Accounting Office, Office of Technology Assessment of the U.S. Congress

Association of State and Territorial Health Officials

National Alliance of State and Territorial AIDS Directors

National Association of State Alcohol and Drug Abuse Directors

Texas Sheriffs Association

¹¹ See K. E. Nelson, et al., above, fn. 10.

¹² Koop statement, <http://www.dogwoodcenter.org/science/10science.html>. See also Koop's letter to Dennis Hastert, supporting needle exchange, <http://www.glaa.org/archive/1999/koopneedles0729.shtml>

¹³ Varmus statement, "Research Shows Needle Exchange Programs Reduce HIV Infections Without Increasing Drug Use," Health and Human Services Press Release, April 20, 1998. <http://www.hhs.gov/news/press/1998pres/980420a.html>

¹⁴ Shalala statement.

¹⁵ Satcher statement. <http://www.dogwoodcenter.org/references/satcher00.html>

¹⁶ Eva Bertram, Morris Blachman, Kenneth Sharpe, and Peter Andreas, *Drug War Politics—The Price of Denial*. (Berkeley: University of California Press, 1996), p. 171.

¹⁷ http://www.drugpolicy.org/news/12_14_04casyringe.cfm.

¹⁸ Levi Strauss spokesman. Interview with author.