The Needle and the Damage Done¹: Needle Exchanges and the AIDS Epidemic

by Grace Schaller

At the beginning of the AIDS crisis in the early 1980s, mainstream America perceived AIDS as a disease affecting only gay men residing in liberal, urban areas. During the eighties and nineties, most Americans viewed AIDS as a fringe gay and minority epidemic, nothing that Caucasian heterosexuals in middle America needed to worry about. Due to this belief, primarily rural states failed to implement adequate policies designed to prevent the spread of HIV through the intravenous drug user population. This left them accordingly unprepared to handle the current opioid crisis. While the demographics of intravenous drug use shifted to include rural, primarily white states with the dawn of the opioid crisis, the AIDS epidemic evolved into a heartland public health crisis. In order to prevent a potential outbreak of new HIV infections due to the opioid crisis, the state of Ohio must acknowledge the vulnerability of rural America to the AIDS epidemic by funding and mandating needle exchange programs in every Ohio county.

During the 1980s and 1990s, the widespread usage of intravenous drugs like heroin and injected crack cocaine devastated communities in America’s urban centers, primarily affecting minority individuals with low socioeconomic status. In 1990, black people comprised half of the country’s intravenous drug users and Hispanics another quarter.² In 1986 in New York City, the crack epidemic primarily affected people living in the poor neighborhoods of Harlem, Washington Heights, Jackson Heights, and Jamaica, according to

research by the New York State Division of Substance Abuse Control. Dr. Arnold M. Washton, the director of research for a national cocaine hotline, conducted a survey of 458 cocaine users that revealed that lower-middle-class working individuals with a yearly income of ten to twenty-five thousand dollars made up the majority of addicts. James Hall, the director of Miami’s Up Front Drug Information Center, characterized the typical demographic profile of crack users as young, inner-city adults. Heroin and injectable crack cocaine predominantly affected already stigmatized and low status societal groups.

The widespread availability and low cost of heroin and crack cocaine in urban centers compounded the problem of addiction. By the early nineties, the cost of a dime bag of heroin had dropped from ten to five dollars. Similarly, crack cost an unprecedented low of seventy-five cents a bag. In Newark, an individual could purchase a vial of cocaine with a can of Sustacal—a nutrient drink commonly prescribed to AIDS patients to fight weight loss—for only five dollars. The low price of street drugs made them easily attainable for the economically deprived individuals who abused them the most. The ready availability of heroin and crack cocaine in the inner city adversely impacted communities as adults and juveniles alike engaged in high-risk behaviors as part of a new drug subculture.

The rise of intravenous drug use in urban centers catalyzed a shift in the demographics of AIDS diagnoses, as AIDS increasingly impacted poor, minority communities. By 1991,

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4 Ibid.
5 Ibid.
7 Ibid.
8 Tierney, INSDA, 1.
only half of all new AIDS cases involved homosexual men.\(^9\) The proportion of IV drug users among AIDS patients rose from seventeen percent in the mid-eighties to 24 percent by 1989.\(^10\) As a result of needle-sharing and high-risk sexual practices among the IV drug user population, AIDS infected these addicts at alarmingly high rates. In 1994, the Federal Centers for Disease Control and Prevention attributed three quarters of the 40,000 new HIV infections to addicts.\(^11\) Homosexual men only composed one quarter of recent infections, while addicts who shared needles made up half of the new cases.\(^12\) In 1988, an estimated 60 percent of intravenous drug users in New York City had HIV.\(^13\) The spread of AIDS particularly affected crack cocaine users. Research conducted in New York City and San Francisco revealed significantly higher HIV infection rates among crack addicts as a result of high injection frequency; because crack produces a shorter high than heroin, people often injected crack several times an hour.\(^14\) In a 1988 study of 623 intravenous drug users in San Francisco, cocaine usage significantly increased the prevalence of HIV.\(^15\) Needle sharing practices caused HIV prevalence to soar in urban areas among IV drug users.

Political and public opposition hampered widespread adoption of needle exchange programs. Opponents of needle exchange programs opined that they condoned and even

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\(^10\) Ibid.


\(^12\) Ibid.


\(^14\) Lambert, ADRFCU, A22.

Syringes encouraged intravenous drug use. In New York City, law enforcement officials blocked syringe exchanges; further, Sterling Johnson Jr., New York’s special narcotics prosecutor, objected to Portland’s needle exchange clinic on the basis that it would increase drug use.16 Further, prominent politicians argued against the adoption of needle exchanges. The Bush administration vocally opposed needle exchanges on the basis that distributing free needles would encourage addicts to use drugs.17 Former Florida governor Bob Martinez characterized laws decriminalizing syringe exchanges as dangerous and unproven.18 States even passed legislation prohibiting the syringe exchange programs. In 1991, eleven states possessed laws banning the possession or distribution of hypodermic needles without a prescription and nearly all states prohibited the possession or distribution of drug paraphernalia, including syringes.19 In 1992, concerned community members shut down a proposed needle exchange in Alexandria.20 Activists operating a syringe exchange in New Brunswick, New Jersey faced arrest by local officials.21 Many African-American community leaders opposed the idea based on the concern that increased drug use would disproportionately affect black areas.22 The federal government also opposed syringe exchange programs; in 1988, Congress passed a ban on utilizing federal funds for needle exchanges.23 Needle exchanges proved too controversial for thorough, nationwide adoption.

However, the few areas that implemented needle exchange programs experienced

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16 Boodman, CTGDAFN, A1.
18 Ibid.
19 Goldstein, CNPAP, 6.
20 Span, NEICAP, A1.
21 Ibid.
22 Ibid.
23 Ibid.
considerable harm reduction success. In the late eighties and early nineties, some cities established needle exchanges in an attempt to curtail the spread of AIDS. In 1988, Portland, Oregon instituted the first syringe exchange program at the OutsideIn clinic—an inner-city health clinic serving homeless people, teenage runaways, and drug addicts—where 125 IV drug users who visited the clinic received clean needles and syringes, condoms, and AIDS prevention counseling in exchange for old, dirty needles.\textsuperscript{24} The American Foundation for AIDS Research funded the OutsideIn initiative with a $67,000 grant, arguing that people do not stop or start drugs as a result of clean needle availability.\textsuperscript{25} New Haven legislators passed an exemption to a Connecticut state law in order to allow a pilot syringe exchange in their city.\textsuperscript{26} Research verified the harm reduction efficacy of this needle exchange program. A Yale University study released in 1991 estimated that the program reduced the incidence of new HIV infections by 33 percent.\textsuperscript{27} Despite evidence supporting syringe exchanges, adoption remained limited and insufficient.

As contemporary opioid addicts turn to injecting heroin, the demographics of intravenous drug use have shifted to disproportionately impact rural, white areas like Ohio. In Ohio alone, 4,329 drug-related deaths occurred in 2016.\textsuperscript{28} 37.3 people per 100,000, compared to a national average of 19.7 people per 100,000, die of drug-related causes; this makes Ohio the state with the second-highest rate of drug deaths in the country.\textsuperscript{29} The number of people

\textsuperscript{24} Boodman, CTGDAFN, A1.
\textsuperscript{25} Ibid.
\textsuperscript{27} Ybarra, CGWQGCNAFA, B5A.
\textsuperscript{28} “Ohio Opioid Epidemic,” amFAR, \textit{Opioid & Health Indicators Database}.
\textsuperscript{29} Ibid.
per 100,000 dying of drug-related causes climbed from 15.9 in 2010 to 37.3 in 2016.\textsuperscript{30} 2.87 percent of Ohioans ages twelve and over, compared to a national average of 2.7 percent, reported experiencing drug dependence.\textsuperscript{31} Additionally, Ohioans reported non-medical use of pain relievers at a higher rate than the national average: 4.91 vs. 4.31 percent.\textsuperscript{32} In 2012, Ohio had more opioid prescriptions than people, at 100.1 prescriptions per 100 adults.\textsuperscript{33} As rural, heartland towns like those in Ohio experience an increasing number of opioid addictions, illicit drug users turn faster to injecting drugs.\textsuperscript{34} Ricky Blumenthal, a professor at USC’s Keck School of Medicine, explains that prescription opioid users turn to heroin use, creating an intravenous drug use epidemic.\textsuperscript{35} Nationally, white people die of opioid overdose at over twice the rate of African-Americans (7.9 vs. 3.3 deaths per 100,000).\textsuperscript{36} The number of heroin overdoses occurring among white Americans increased 267 percent from 2010 to 2014, more than any other ethnic group.\textsuperscript{37} Since doctors prescribed opioids to black patients thirty-three percent less than white patients, largely due to racial bias, the demographics of opioid addiction skew white.\textsuperscript{38} As a result of the opioid epidemic affecting Middle America, the profile of an intravenous drug user has shifted from a non-white individual of low socioeconomic status living in an urban center to a Caucasian living in a rural, traditionally

\textsuperscript{30} Ibid.
\textsuperscript{31} Ibid.
\textsuperscript{32} Ibid.
\textsuperscript{34} Zen Vuong, “Opioid epidemic may be driving illicit drug users to use needles earlier, USC study finds,” \textit{USC News} (May 2017). https://news.usc.edu/121287/opioid-epidemic-may-be-driving-illicit-drug-users-to-use-needles-sooner-usc-study-finds/
\textsuperscript{35} Ibid.
\textsuperscript{36} Nolan and Amico, HBITOE.
\textsuperscript{37} Ibid.
middle-class area.

A case study of Scott County, Indiana reveals that rural red states like Ohio remain uniquely at risk for an outbreak of bloodborne diseases like HIV and HCV as a result of inadequate implementation of harm reduction policies. In 2015, nearly two hundred opioid users in the town of Austin in Scott County, Indiana contracted HIV, serving as a case study for how a lack of state-funded needle exchange programs makes an area vulnerable to an HIV outbreak.39 An estimated five hundred needle sharing partners existed in Austin, a town of only 4,200.40 People diagnosed during the outbreak had an average of nine drug or sex partners requiring testing.41 Usage of a drug called oxymorphone, which people crushed and injected up to twenty times a day, catalyzed the outbreak.42 Prior to the outbreak, no permanent harm-reduction or addiction treatment services like needle exchanges or access to PrEP existed.43 The nearest HIV treatment location—a Ryan White HIV/AIDS Foundation Program-funded clinic—was twenty miles away.44 The demographics of the Austin HIV crisis mirrored the demographics of modern opioid addiction; Caucasian individuals accounted for 100 percent of cases, 95 percent of those infected earned less than ten thousand dollars a year, and very few people possessed private health insurance.45 In order to contain the outbreak, public health officials distributed more than twenty-eight thousand clean needles as part of a

41 Ibid.
42 Ibid.
43 Ibid.
44 Ibid.
45 Ibid.
mobile syringe exchange program, as well as one located in a community outreach center.\textsuperscript{46} The needle exchange program proved successful; a study of the first one hundred members revealed the percent sharing needles dropped from 34 to 5 percent in three months.\textsuperscript{47} The Scott County HIV outbreak reveals the important role syringe exchange programs play in preventative care in rural, red America.

The prevalence of opioid abuse, strongly correlated with HIV, paired with a recent spike in Hepatitis C infections suggests the vulnerability of rural Ohio to an HIV outbreak. Currently, the prevalence of new HIV infections per 100,000 in Ohio remains lower than the national average; however, the number of acute Hepatitis C infections far exceeds the national average (22.24 vs. 13.9).\textsuperscript{48} The number of Hepatitis C cases in Ohio spiked significantly to overtake the national average in 2012-2013, just as the number of drug-related deaths in Ohio began to increase sharply (SEE APPENDIX).\textsuperscript{49} The trends displayed in these charts suggest a strong correlation between an increase in drug-related deaths and the prevalence of bloodborne disease. CDC research revealed that from 2004 to 2014 incidence of opioid injection treatment increased 93 percent and hepatitis C prevalence simultaneously increased 133 percent.\textsuperscript{50} A study that used mathematical modeling to study the use of HCV data in predicting HIV epidemic potential among intravenous drug users concluded that Hepatitis C serves as an accurate proxy biomarker of HIV epidemic potential among IV drug users.\textsuperscript{51} Further, both

\textsuperscript{46} Ibid.  
\textsuperscript{47} Ibid.  
\textsuperscript{48} amfAR, OOE.  
\textsuperscript{49} Ibid.  
\textsuperscript{51} Vahijeh Akbarzadeh, Ghina R. Muntaz, Susanne F. Awad, Helen A. Weiss, Laith J. Abu-Raddad, “HCV prevalence can predict HIV epidemic potential among people who inject drugs: mathematical modeling
HIV and Hepatitis C spread through contact with the blood of an infected person, often through sharing needles.\textsuperscript{52} Therefore, the high prevalence of Hepatitis C infections suggests the potential for an HIV outbreak in rural Ohio.

Leading medical organizations and public health officials have grown increasingly worried that the opioid crisis has created the possibility of a spike in new HIV infections. The Infectious Disease Society of America, the HIV Medicine Association, and the Pediatric Infectious Diseases Society expressed concern about rising incidence of new HIV infections tied to the opioid crisis.\textsuperscript{53} The three medical societies published a policy brief, Infectious Diseases and Opioid Use Disorder, tying increased incidence in bloodborne diseases like Hepatitis C and HIV to the opioid crisis.\textsuperscript{54} They urged the public to view infectious diseases spread through opioid usage as a pressing public health threat and respond by increasing prevention and treatment resources.\textsuperscript{55} Hiram Polk, the Kentucky State Health Commissioner, expressed skepticism about HIV statistics, stating he believes them to reflect a lack of diagnoses due to inadequate screening rather than a true decrease in the number of people with HIV.\textsuperscript{56} As a result, HIV statistics mislead and cause underassessment of the risk posed.\textsuperscript{57}

Public health officials and organizations have determined a clear risk of an HIV outbreak in heartland America.

\textsuperscript{53} Richard Wolitski and Corinna Dan, “Three Medical Societies Identify Specific Infections of Concern in Relation to the Opioid Crisis,” (June 2018).
\textsuperscript{54} Ibid.
\textsuperscript{55} Ibid.
\textsuperscript{56} Ehley, FOHPHTTC.
\textsuperscript{57} Ibid.
Many politicians in rural, red states remain reluctant to promote needle exchange programs. The resistance extends from facts to policies proven to control the spread of HIV through needle sharing. For instance, the city of Charleston, West Virginia closed its syringe exchange program in March 2018 as a result of concerns over improperly disposed syringes and concerns over condoning drug abuse.\textsuperscript{58} In Indiana, Curtis Hill, the attorney general, denounced needle exchange programs in Indiana as needle giveaways promoting intravenous drug use.\textsuperscript{59} On a local level, in Indiana counties Lawrence and Madison, council members ended the needle exchange programs, expressing unsubstantiated concern that funding them promoted drug use rather than controlling the spread of bloodborne diseases promulgated by needle sharing.\textsuperscript{60} Resistance at civic and grassroots levels continued, despite evidence deeming needle exchange programs effective at controlling the advance of bloodborne diseases like HIV and Hepatitis C. Even in areas with legal needle exchanges, both literal and legal barriers to access remain. In the entire state of Ohio, only seven syringe exchanges exist.\textsuperscript{61} In Trumbull County, Ohio, which lacks needle exchange programs, the Trumbull County prosecutor warned that Ohio state law fails to protect counties from civil lawsuits for providing the needles for illicit drug use.\textsuperscript{62} Concerns over liability further increase the reluctance of counties to implement needle exchanges. Jonathan Entin, a Case Western Reserve University Law Professor, expressed that while Ohio counties remain civilly liable for

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\textsuperscript{59} Ehley, FOHPHTTC.

\textsuperscript{60} Ibid.

\textsuperscript{61} amFAR, OOE.

illegal drug use taking place with county-provided needles, he supports the exchanges as a public health policy. 63 He perceives the harm reduction benefits of needle exchange programs as outweighing the threat of potential civil lawsuits. 64 The reticence of counties and states to put in place policies to ensure widespread access to needle exchange programs leaves individuals living in rural, Heartland areas vulnerable to HIV infection.

In order to prevent a potential outbreak of HIV tied to the opioid epidemic, Ohio must learn from the public health failures of the crack and heroin epidemics of the eighties and nineties and mandate and fund syringe exchange programs in every county. This will reduce the incidence of needle sharing, an extremely high-risk activity. Further, it will provide a point of contact for healthcare professionals to interact with addicts to provide condoms, education regarding AIDS and safer sex, and information about available treatment options. The establishment of needle exchanges will acknowledge the reality of intravenous drug use in rural, predominantly Caucasian areas, forcing communities to have a conversation about addiction. In order to accomplish this objective, the Ohio state legislature must pass a law absolving counties and local municipalities of all criminal and civil liability related to syringe exchange programs. As the opioid crisis shifted the demographics of IV drug use and HIV, so too must the state of Ohio alter its perspective on needle exchange programs. While there exist unmistakable near term costs to the state in acknowledging uncomfortable realities and budgeting significant outlays to fund potentially unpopular measures, the threat of an HIV outbreak tied to Ohio’s opioid crisis is real. If Ohio continues to refuse to accept and make extensive efforts to mitigate the bloodborne disease risk, the long-term costs—both financial

63 Ibid.
64 Ibid.
and human—will be significant.
APPENDIX

Drug Related Deaths and HCV Incidence in Ohio Per 100,000, 2010-2016

65 amFAR, OOE.
Bibliography


