



Factors in Risky Syringe Discard among Injection Drug Users

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SAUD Project Field Notes: We found the first two syringes [S1] and [S2] under a tree at the south side of ... the front yard [of the abandoned building]. S1 was bigger than S2—neither had legible numbers and we couldn't tell if they were allergy or insulin...Both had needle caps but not plunger caps, and both needles were bent. Glenn ... Suggested that people may pull into the driveway in their cars, inject in the cars, throw the syringe out the window, and drive away.



Key Issues in IDU Syringe Discard

- Injection drug users are known to be a significant source of syringe discard outside of the health care system
- Short & Bell (1993) report that HIV is transmitted in 3/1000 hospital needle sticks; with HCV 20/1000; HBV 200/1000
- Research by Heimer has demonstrated that HIV in syringes can be viable for over 2 weeks; 80% of syringes with HIV+ blood left standing for up to 24 hours cultured virus

Public Health Issues in Syringe Discard Outside the Healthcare System

- Unsafe disposal in public trash that could result in needle sticks to sanitation workers
- Unsafe disposal in public access areas (e.g. parks, pharmacy shelves) that could result in needle sticks to the public
- Unsafe disposal in illicit drug use sites that could result in re-use by another IDU



Syringe Volume



- In a moderate sized city like Hartford, it is estimated that there are 5-9,000 drug injectors (based on treatment and HIV surveillance data)
- IDUs in Hartford have a mean injection rate of 4 times per day (SAUD findings)
- They report using a syringe on average 4 times before discarding it; also report use of 24 different syringes per month (SAUD)
- Thus, IDUs in Hartford dispose of 1.4 - 3.3 million syringes a year

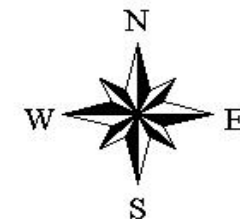
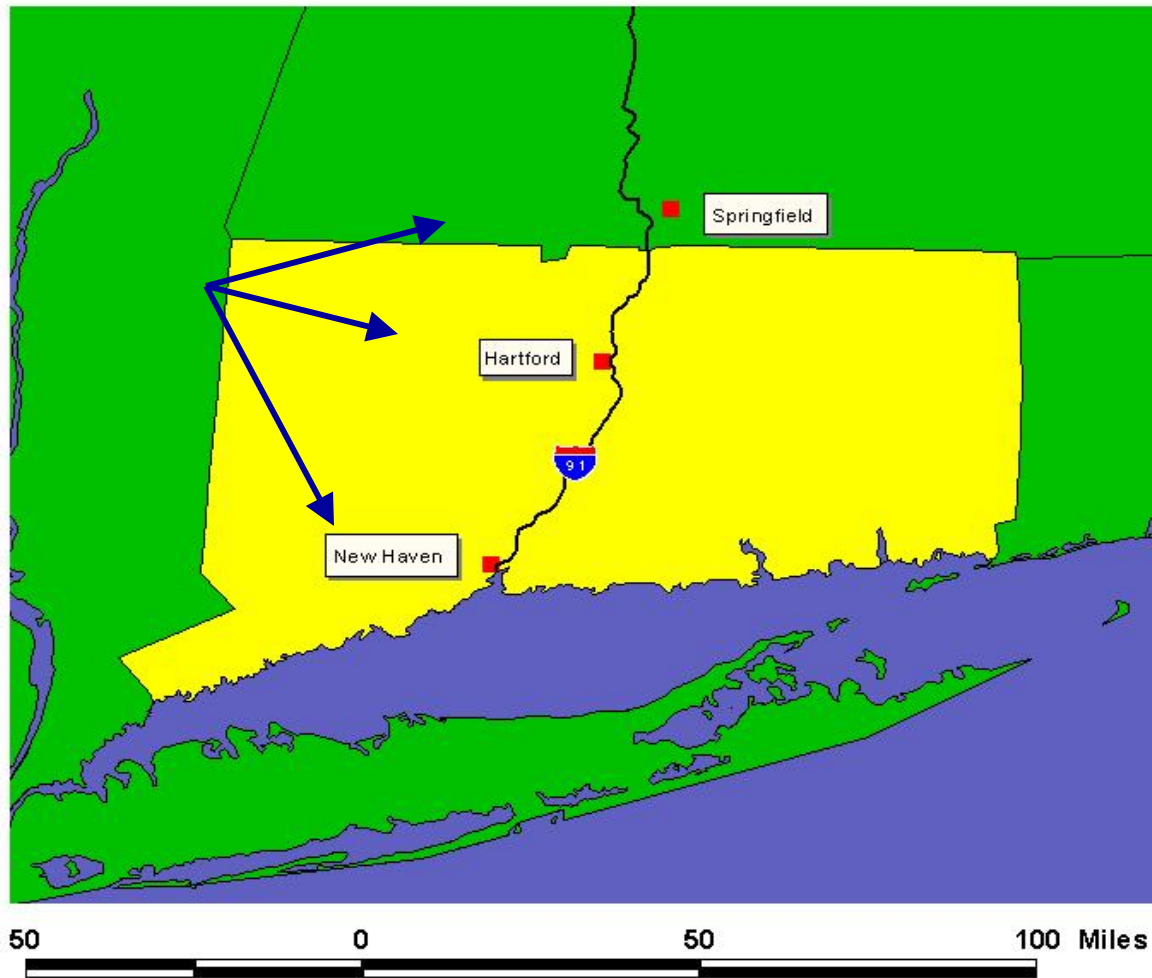
Public Fear of Discard Syringes can be a Barrier to HIV Prevention

- The 1993 University of California, S.F. report The Public Health Impact of Needle Exchange Programs (Lurie et al) warned that adverse community response to syringe exchange is likely to be centered on the issue of syringe discard
- Public concern about the public discard of syringes was an important factor in the state closure of the Williamantic syringe exchange program

The Syringe Access, Use and Discard (SAUD) Study

In 1999, the Hispanic Health Council in collaboration with researchers at the Yale University School of Public Health and the University of Massachusetts School of Public Health were funded by the National Institute on Drug Abuse for an ongoing CIRA-affiliated study of *factors HIV risk associated with syringe access, use and discard* in 3 Northeast cities along highway I-91.

SAUD Study Sites



The Research Sample

Gender

Male	694 (70.0)
Female	295 (30.0)

Age Categories

18-34	44 (33.0)
35-44	237 (24.0)
45-54	459 (46.0)
>54	20 (2.0)

Ethnicity

Black	328 (33.0)
White	198 (20.0)
Hispanic	453 (46.0)
Others	10 (1.0)

Findings: Discard

- The primary reason for the discard of a syringe is that it is too dull (80%/time), followed by being clogged and the plunger is broken
- Most participants (over 90%) reported they did not give away or sell syringes they no longer use to a friend or associate; with homeless IDUs in Springfield (14%) being the most likely to do so.
- 7% of IDUs report flushing syringes down a toilet; most frequently in Springfield (11%)



Findings: Discard

- 13% reported discard on a street/alley: 19% of homeless compared to 10% of housed IDUs; in Springfield 29% of homeless
- 53% reported throwing used syringes in the garbage; in Springfield this was reported by 64% vs. 48% in Connecticut sites;
 - 71% reported wrapping/capping before throwing syringe in trash
 - 73% reported breaking off the needle
 - About 1/2 reported they were concerned about others being stuck by their discarded syringes



Findings: Discard



- Disposal of syringes at an SEP site was: 52% in Hartford, 32% in New Haven and 1% in Springfield; homeless IDUs were somewhat more like to do so (38% in New Haven)
- Disposal of syringes in a sharps container or non-SEP collection site was rare, as was lose of syringes, confiscation by police
- Homeless drug user (42%) reported disposing of syringes quickly because of the presence of police

Conclusions

- Public syringe discard is a reasonable public health concern, however:
 - Syringe exchange (1 for 1+) can significantly reduce public discard
 - Fear of arrest promotes public discard
- Public discard is more common among the homeless
- In other words, structural factors are a primary cause of public syringe discard
- Opportunities for legally safe/publicly safe discard is needed



References:

- Robert Heimer. Syringe Exchange Programs: Lowering Transmission of Syringe-Borne Diseases and Beyond. Public Health Reports 113 (Sup 1):67-74, 1998
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- Lurie, Peter, A. Reingold, B. Bowsver, D. Chen, J. Foley, J. Guydish, S. Kahn, S. Lane and J. Sorensen The Public Health Impact of Needle Exchange Programs in the United States and Aboard. U. Calif, S.F., 1993

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