TOP FIVE STUDIES MISUSED BY SYRINGE EXCHANGE OPPONENTS

EXTREMISTS DRAW STINGING REBUKES FROM RESEARCHERS

Ideological extremists commonly refer to the following five studies to “support” their claim that syringe exchange programs (SEPs) are counterproductive and actually contribute to the spread of blood-borne disease.

The sad reality is that these extremists have distorted and misused the results of the following studies to advance their self-serving agenda to impose personal moral views on the public without regard for existing science. The editors of the Washington Post agree. In a February 2005 editorial, they accused the Bush Administration and Rep. Mark Souder (R-IN) of distorting the results of three of the studies presented below. “The Bush Administration is quietly extending a policy that undermines the global battle against AIDS” asserted the editorial board, and this policy “(is) almost certain to kill people.”

There is broad consensus among the medical, scientific and public health communities that SEPs are an essential part of preventing the spread of HIV/AIDS and other infectious diseases without encouraging drug use. Seven government studies completed by agencies that include the Centers for Disease Control and Prevention, National Academy of Sciences and Government Accountability Office have concluded that SEPs are effective. Three former U.S. Surgeon Generals, the American Medical Association and the American Public Health Association support SEPs.

#1

THE MONTREAL STUDY
Bruneau J, Francois L, Franco E, et al., American Journal of Epidemiology, 1997; 146(12); 994-1002

The CLAIM

The Montreal study is a universal favorite for extremists to cite when falsely claiming that SEPs increase the spread of HIV/AIDS. The U.S. Senate Republican Policy Committee and certain Republican House members offer their assessment of the study as being that “drug users enrolled in needle exchange programs are 2.2 times more likely to become infected with the AIDS virus than those not in such programs.” The GOP also tends to draw relationships between this assessment and the esteemed British medical journal the Lancet. Opponents commonly cite the Lancet as having reported this finding in 1996 and inappropriately suggest that the Lancet somehow endorses or agrees with this finding. In truth, the Lancet published several articles in 1996 and more recent years that decry the lack of public funding for needle exchange programs and reaffirm existing scientific knowledge that SEPs are essential to HIV prevention among injection drug users (IDUs).
The TRUTH
The authors of the Montreal study conclude that the higher rate of HIV infection among SEP users in Montreal does not establish a causal relationship between SEP attendance and HIV infection. The authors discuss how the Montreal SEP “appears to have attracted subpopulations of IDUs with a higher baseline rate of HIV...Consistent SEP (participants) also have a higher profile of high risk behaviors than other IDUs.” This same subgroup is likely composed of marginalized and high risk individuals who cannot afford to purchase sterile, over-the-counter syringes in neighborhood pharmacies and may have already contracted HIV from behaviors other than injection drug use. Other researchers agree with this assessment. In fact, the researchers warn that this study was “not specifically designed to evaluate the efficacy of SEP in preventing HIV infection,” and the study design contained too many weaknesses to enable the authors to “generalize its findings to other IDU populations in Montreal or elsewhere.” In 2000, the authors of the Montreal study revealed the results of a three-year follow-up examination of the seroconversion (the onset of hepatitis infection) rates of injection drug users who participate in SEPs. The researchers subsequently determined that “needle exchange programs participation was not associated with new HIV infections.” A review of the two studies by independent researchers concluded that the latest finding nullifies the results of the earlier Montreal study. In 2005, the head author of this study, Dr. Julie Bruneau, responded to knowledge that Republicans including the Bush Administration are using her study as a mantle piece for their anti-SEP agenda when she told Washington Post editors that “in the vast majority of cases needle exchange programs drive HIV incidence lower” and that she favored the expansion of SEPs to countries such as Russia.

#2
THE VANCOUVER STUDY
Strathdee S, Patrick M, Currie S et al., AIDS, 1997; 11(8); F59-65

The CLAIM
Opponents of needle exchange point to the Vancouver study when claiming that SEPs do nothing to reduce the transmission of HIV/AIDS, and may actually contribute to the spread of HIV/AIDS. Opponents contend that SEPs are responsible for causing HIV infection among its participants since this study found that “HIV-positive IDUs were more likely to have attended SEP and to attend SEP on a more regular basis compared with HIV-negative IDUs.”

The TRUTH
The authors of this study determined that “HIV incidence among IDU in Vancouver may have been much higher, much earlier if the SEP had not opened years earlier and that SEP is one critical part of a comprehensive HIV prevention approach. The authors stress that "our results do not argue against the overall effectiveness of SEP as an HIV intervention.” Instead, the researchers argue that the HIV crisis that besieged the city, combined with the legal availability of clean syringes from pharmacies without a prescription, likely shifted the most marginalized and higher risk injection drug users to the SEP. This subgroup of IDUs did not have the financial resources to purchase syringes from pharmacies and were more likely to inject cocaine (which is often injected with a greater frequency than heroin). The authors of the study note that "it has been suggested that SEP attract higher risk IDUs" and the study was undertaken during an "ongoing and serious outbreak of HIV infection among IDUs in Vancouver"; this explains the higher prevalence of HIV in the SEP population. Other researchers who have reviewed this study agree with this assessment. In 2004, Rep. Mark Souder (R-IN) wrote a letter to National Institutes of Health Director Dr. Elias A. Zerhouni that characterized this study as proof of "the failure of harm reduction to control infectious disease." In response, the authors of the Vancouver study wrote Dr. Zerhouni to assert that "Mr. Souder (took) the Vancouver data out of context, (which) is selective and self-serving. One shudders to think what might have occurred in this setting in the absence of harm reduction programs." Moreover, the authors reasoned: “That a lone SEP, with a restrictive policy of point-for-point exchange in the face of a massive cocaine injection epidemic in a setting with inadequate treatment and social support programs, failed to curb an HIV outbreak, cannot be used as an indictment of this intervention as a whole.” One year following this correspondence exchange, the Washington Post reported that Dr. Zerhouni weighed in on SEPs, saying that exchange programs "can be an effective component of a comprehensive community-based HIV prevention effort." In addition, an author of this study, Martin T. Schechter, told editors of the Washington Post that "our research here in Vancouver has been repeatedly used to cast doubt on needle exchange programs. I believe this is a clear misinterpretation of the facts."
#3

## THE AMSTERDAM STUDIES
Van Haastrecht H, van Ameijden E, et al., American Journal of Epidemiology, 1996; 143(4); 380-391
Langendam M, van Brussel G, Coutinho R et al., AIDS, 1999; 13(13); 1711-1716

**The CLAIM**

Opponents point to the 1996 and 1999 Amsterdam studies to back up assertions that making use of needle exchange does nothing to prevent the spread of HIV/AIDS or reduce mortality among injection drug users.

**The TRUTH**

Since SEPs reduce the need for participants to share needles, and sterile syringes do not harbor blood-borne diseases, the Amsterdam studies do more to demonstrate that the exchange of clean needles for tainted ones reduces HIV/AIDS transmission and mortality. Neither Amsterdam study specifically evaluates SEPs. Participants for both studies were recruited from a methadone program and not directly from a SEP. Researchers were focusing on the impact of methadone maintenance programs on HIV/AIDS and mortality, and looking at a large number of risk factors for IDU death, including factors such as overdose and suicide. When both studies are examined, the overarching result is that injection drug use increases the risk for HIV infection and increased needle sharing increases seroconversion.

#4

## THE BALTIMORE STUDY
Strathdee S, Galai N, Safaiean M et al., Archives of Internal Medicine, 2001; 161(10); 203-213

**The CLAIM**

Opponents use the Baltimore study to claim that SEPs do not provide a protective effect against HIV infection for both males and females who exchanged syringes. Opponents also refer to this study to claim that people who inject drugs are in greater danger of becoming infected with HIV “from high-risk sexual behavior rather than sharing needles used to inject drugs.”

**The TRUTH**

In actuality, the Baltimore study did find that “factors consistent with high-risk heterosexual activities were the main predictors (of HIV seroconversion) among women.” Meanwhile, “needle-sharing and homosexual activity” was the most important predictors of HIV seroconversion among men. Since needle sharing behavior is discouraged and reduced by SEPs, and men who reduce needle sharing are less likely to transmit blood-borne diseases to female partners, then it can be deduced that SEPs play a critical role in reducing HIV infection for both male and female IDUs. The authors of the study agree with this assessment: “based on our findings, we feel that SEPs...should be supported as a cornerstone of HIV prevention and linkages to primary care among drug using populations.” Dr. Steffanie A. Strathdee, the lead author of this study responded to repeated efforts by SEP opponents like Rep. Souder to highlight the Baltimore study as evidence that SEPs are ineffective by telling Washington Post editors that her research “supports the expansion of needle exchange programs, not the opposite.”

In a letter to the Director of the National Institutes of Health, Rep. Mark Souder (R-IN) refers to this study as evidence that needle exchange programs are ineffective at reducing HIV/AIDS because they “focus almost exclusively upon a single mode of transmission among IDUs – sharing of contaminated needles...” Souder and other opponents claim that this study suggests that SEPs are ineffective because they do not address high-risk sexual behavior, which is responsible for more HIV seroconversion “for both male and female IDUS.” The authors of this study strongly disagree. In a response to his letter to the director of NIH, they criticized Souder for “draw(ing) his conclusions in the absence of a complete review of the peer-reviewed literature.” The authors countered that Souder’s views “do a grave disservice to the community in attempting to refute international research that supports the effectiveness of needle exchange programs...”
#5

THE SEATTLE STUDY
Hagan H, McGough J, Thiede H et al., American Journal of Epidemiology, 1999; 149(3); 203-213

The CLAIM

Needle exchange programs do nothing to stop the spread of hepatitis C and hepatitis B virus among populations of people who inject drugs as the authors of the Seattle study found that rates of HCV and HBV were higher among IDUs who utilized the SEP.

The TRUTH

Numerous studies (including the Vancouver and Montreal studies above) confirm the authors’ observation that SEPs draw individuals who are more likely to carry blood-borne infections as a direct result of risky behavior such as unprotected sexual intercourse, needle sharing and the sharing of implements used to inject drugs. In addition, the chief author of this study, Holly Hagan, wrote in 1999 that “needle exchange programs have a tendency to attract and retain a disproportionate number of high-risk drug injectors.” This study recognizes that hepatitis can be transmitted through the sharing of cookers, cottons and other implements, and these sharing activities could be responsible for a number of the hepatitis infections that appeared during the course of this study. The authors of this study concede that people who use needle exchange programs are often part of a subgroup of IDUs who are marginalized and exhibit the riskiest behavior. This study notes that the subgroup who used the Seattle SEP the most - and had the highest infection rates - were often the youngest participants, had recent sexual contact and “were more likely to report sharing injection and drug preparation equipment during the follow-up period.” All of these activities represent risk factors for contracting hepatitis infection that are independent of the distribution of clean syringes by the SEP.

Although the Seattle SEP may not have distributed sterile implements at the time this study was conducted, many SEPs currently distribute these items to help reduce the spread of hepatitis and HIV/AIDS. The results of this study reflect the reality that SEP participants are often those in the most dire straits in terms of being at risk of exposure to hepatitis infection. It would be inhumane to deny this subgroup of IDUs access to the SEP when this population of users is in most need of help. The authors do not suggest that SEPs are harmful or counterproductive. This study does nothing to prove that the subgroup of SEP participants who are at highest risk of contracting hepatitis would be better off if they did not use the SEP. Nor would the closure of the SEP have any impact on reducing the spread of hepatitis and other blood-borne infections. If nothing else, the Seattle study reaffirms existing consensus among scientists that policymakers must do more to provide funding and support to SEPs so that they may continue to innovate and expand their programming and outreach capabilities to fit the needs of the IDU population. The authors of this study note the results of an earlier study that was conducted in neighboring Tacoma, Washington on hepatitis incidence among injection drug users who did not use the local SEP. The results of that study concluded that “the use of the syringe exchange would have led to a 61% reduction in hepatitis B and a 65% reduction in hepatitis C among local injection drug users.”

The Centers for Disease Control and Prevention has unequivocally concluded that “based on the findings of multiple studies, syringe and needle exchange programs can be an effective part of a comprehensive strategy to reduce the incidence of bloodborne virus transmission and do not encourage the risk of illegal drugs. Therefore, to reduce the risk for HCV infection among injecting-drug users, local communities can consider implementing syringe and needle-exchange programs.”


Heimer R. Syringe Exchange Programs: Lowering the Transmission of Syringe-Borne Diseases and Beyond, Public Health Reports, Department of Epidemiology and Public Health, Yale University School of Medicine, 1998; 113(1); 67-74; Vlahow D. The Role of Epidemiology in Needle Exchange Programs, American Journal of Public Health, 2000; 90(9); 1390-1392; Gibson D, Flynn N, Perales D. Effectiveness of syringe exchange programs in reducing HIV risk behavior and HIV seroconversion among injecting drug users, AIDS, 2001; 15(11); 1329-1341; Strathdee S, Galai N, Safaiean M et al. Sex Differences in Risk Factors for HIV Seroconversion Among Injection Drug Users: A 10-Year Perspective, Archive of Internal Medicine, 2001; 161(10); 1281-1288

Gibson D, Flynn N, Perales D. Effectiveness of syringe exchange programs in reducing HIV risk behavior and HIV seroconversion among injecting drug users, AIDS, 2001; 15(11); 1329-1341

Editorial. Deadly Ignorance, Washington Post, 2005 Feb 27; B6

Heimer R. Syringe Exchange Programs: Lowering the Transmission of Syringe-Borne Diseases and Beyond, Public Health Reports, Department of Epidemiology and Public Health, Yale University School of Medicine, 1998; 113(1); 67-74; Vlahow D. The Role of Epidemiology in Needle Exchange Programs, American Journal of Public Health, 2000; 90(9); 1390-1392; Gibson D, Flynn N, Perales D. Effectiveness of syringe exchange programs in reducing HIV risk behavior and HIV seroconversion among injecting drug users, AIDS, 2001; 15(11); 1329-1341; Strathdee S, Galai N, Safaiean M et al. Sex Differences in Risk Factors for HIV Seroconversion Among Injection Drug Users: A 10-Year Perspective, Archive of Internal Medicine, 2001; 161(10); 1281-1288

Souder M, Correspondence to Dr. Elias A. Zerhouni, M.D., Director, National Institutes of Health. 2004 April 27; Accessed via the Internet: [http://www.lindesmith.com/library/05_06_04souder.cfm](http://www.lindesmith.com/library/05_06_04souder.cfm)

Schechter M, Strathdee S. Correspondence to Dr. Elias A. Zerhouni, M.D., Director, National Institutes of Health. 2004 April 30; Accessed via the Internet: [http://www.drugpolicy.org/library/05_08_04strathdee.cfm](http://www.drugpolicy.org/library/05_08_04strathdee.cfm)

Editorial. Deadly Ignorance, Washington Post, 2005 Feb 27; B6

Souder M, Correspondence to Dr. Elias A. Zerhouni, M.D., Director, National Institutes of Health. 2004 April 27; Accessed via the Internet: [http://www.lindesmith.com/library/05_06_04souder.cfm](http://www.lindesmith.com/library/05_06_04souder.cfm)

Souder M, Correspondence to Dr. Elias A. Zerhouni, M.D., Director, National Institutes of Health. 2004 April 27; Accessed via the Internet: [http://www.lindesmith.com/library/05_06_04souder.cfm](http://www.lindesmith.com/library/05_06_04souder.cfm)

Strathdee S, Vlahov D, Celentano D et al. Correspondence from ALIVE Team to Dr. Elias A. Zerhouni, M.D., Director, National Institutes of Health. 2004 April 30; Accessed via the Internet: [http://www.drugpolicy.org/library/05_08_04alive.cfm](http://www.drugpolicy.org/library/05_08_04alive.cfm)


U.S. Centers for Disease Control and Prevention, Recommendations for Prevention and Control of Hepatitis C Virus (HCV) Infection and HCV-Related Chronic Disease: Primary Prevention Recommendations, 1998 Oct 16