

Evidence for Harm Reduction

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International Harm Reduction Development Program

What Is Harm Reduction?

Injection drug use is the main method of HIV transmission in Central and Eastern Europe. Drug use is widespread; The United Nations Office for Drug Control and Crime Prevention estimates that worldwide, 185 million people each year consumed illicit drugs from 1998-2000.¹

Yet according to the World Health Organization, effective interventions which could prevent illicit drug use **do not exist**.² Drug use occurs, in every country and every culture, despite attempts to prevent use and crack down on trade. Programs that only aim to prevent drug use are thus, by nature, inefficient at curbing the spread of HIV.

Instead, Harm Reduction focuses on achievable goals. By focusing on reducing the **harms** related to drug use rather than only eliminating drug use itself, Harm Reduction can prevent the spread of infections including HIV/AIDS and Hepatitis; reduce the risk of overdose and other drug-related fatalities; and lessen the negative effects drug use may have on individuals and communities including poverty and crime.

Harm Reduction approaches drug use from a realistic and pragmatic public health perspective and focuses on feasible goals. Further, by preventing the spread of blood-borne infection among IDUs, Harm Reduction helps to prevent the spread of HIV/AIDS among the entire population.

Harm Reduction programs are often a drug user's only connection to social care and health sectors. Harm Reduction programs can thus increase referrals to health services.

Key Harm Reduction strategies include:

- Needle and Syringe Exchange Programs (NSPs)
Providing clean needles and syringes in exchange for used injecting equipment.
- Substitution Treatment (opioid maintenance treatment)
Using a synthetic drug, usually methadone or buprenorphine, to treat patients who are dependent on "street" opioids (like heroin and morphine). Substitution treatment keeps patients from going into withdrawal, prevents cravings for street opioids, and blocks the effect of street opioids. Methadone works like morphine or heroin but is longer-lasting. It is not associated with euphoria (getting high) and is ingested orally rather than injected.
- Counseling and Education

Person-to-person counseling or printed educational materials can help drug users to understand their own behaviors and learn ways to reduce their risk when using drugs. Printed materials do not promote drug use but do teach safer injecting techniques such as sterilization, and instruct on condom use.

- Referrals for Health care
Drug users often do not seek health care because they fear legal consequences or are separated from mainstream society. Harm Reduction urges drug users to seek adequate care, and urges health care providers to provide adequate and comprehensive care without discrimination or judgment.
- Safer Injecting Rooms
Sterile, monitored locations for injecting so that drug users need not inject on the street or alone (risking overdose). Also teach safer injecting techniques and thus prevent physical harms such as abscesses.
- Depenalization of drug-related offenses
Lessening the severity of punishments for drug possession for personal use.

Harm Reduction measures are effective.

Needle and Syringe Exchange Programs (NSPs)

In their 2001 review of 42 studies on NSPs, Gibson et al found “substantial evidence that syringe exchange programs are effective in preventing HIV risk behavior and HIV seroconversion among IDUs.”³ The World Health Organization reports that, as the result of NSP establishment in one US city, new HIV infections dropped by 75% in the first six years of the program.⁴

NSPs also encourage contact between outreach workers and IDUs. As Coyle et al’s 1999 review of 36 publications showed, NSPs are associated with⁵:

- stopping injecting
- reduced injecting frequency
- stopped/reduced reuse of needles and syringes and other injecting equipment
- reduction/stopping crack use
- increased needle disinfection
- increased referrals for and participation in drug treatment
- increased condom use/reduction in unprotected sex

Substitution treatment

Randomized control trials, studies, textbooks, reports and peer-reviewed publications have all concluded that substitution treatment is beneficial and effective. Some of the outcomes from research in the USA, Sweden, Hong Kong and Thailand show that^{6,7,8,9,10,11,12,13}:

- Substitution treatment reduces heroin use
- Substitution treatment reduces crime

- Substitution treatment reduces HIV risk behaviors
- Patients in substitution treatment-based programs are more likely to stay in treatment than those in detox, placebo, or drug-free programs,
- Clinics based on substitution treatment have better outcomes than those that promote only abstinence
- Longer stays in substitution treatment are associated with better outcomes.

Safer Injecting Rooms

A review by Nadelmann et al (1999) summarized evidence that consumption rooms may be effective for¹⁴:

- Contacting hard to reach or vulnerable drug users including people with HIV, HCV, the homeless and foreign nationals
- Promoting safer injecting (preventing infection, abscesses)
- Reducing overdose
- Preventing HIV infection
- Decreasing discarded needles and syringes in public areas
- Reducing crime
- Reducing public drug use

A “medically supervised injecting room” opened in Sydney, Australia in May 2001. Early analysis by Mattick et al (2001) reveals that during the first six months, over 1500 people registered to use the facility, totaling 11,237 visits. About 1 out of every 18 visits led to the provision of further assistance including drug dependence treatment (42%), primary health care (33%) and social welfare services (25%).¹⁵

Depenalization

Criminological research overwhelmingly shows that penalty severity has little impact on deterring drug use.¹⁶ In other words, harsh penalties for drug prevention do not actually deter more people from using drugs; lesser penalties work just as well. This was shown as early as the 1970s in the US, where an analysis of 11 states showed that the removal of criminal penalties for personal drug use did not result in higher rates of drug use.^{17,18,19} The same non-effect was seen in Australia after lessening punishments for drug use.^{20,21}

A cross-national comparison between the Netherlands, other European states and the USA, shows that despite the introduction of cannabis coffee shops the Dutch do not have higher rates of cannabis use than the other countries.²²

Thus, depenalization does not lead to increased drug use. Instead, it may allow drug users to seek help, find jobs and remain integrated in society. Lenton et al’s 2000 study compared the impact of a drug-related conviction under criminal penalties to that under civil penalties and found that civil penalties are no worse at deterring drug use than criminal penalties. They do, however, result in fewer adverse social effects.²³

Harm Reduction measures are cost-effective.

Not only do harm reduction measures save human life and improve its quality by allowing drug users to remain integrated in society, but they also economically benefit communities.

NSPs were shown to be cost-effective in a number of studies, including Gold et al 1997, Lurie and Drucker 1997, Holtgrave et al 1998, and Laufner 2001.^{24,25,26,27}

Ward and Sutton (1998) reviewed three studies of substitution treatment and concluded that it is cost-beneficial because of the substantial reductions in crime and drug use that occur.²⁸

Safer injecting rooms and depenalization provide similar community benefits, as they result in fewer injecting activities in public and maintain fewer individuals in prisons.

Harm Reduction does not increase drug use or adversely affect communities.

Evidence proves that NSPs **do not**:

- Increase drug use^{29,30,31}
- Negatively impact drug treatment^{32,33,34,35,36,37}
- Increase rates of equipment in the street^{38,39,40,41,42}

Most objections to substitution treatment are based on moralizations that dependence on heroin is being replaced by dependence on another substance. However, a drug user in substitution treatment has a better chance of rehabilitation, medical attention, and effective psychotherapy **and** a decreased risk of contracting or spreading HIV/AIDS, Hepatitis, and other infections. Denying drug users substitution treatment cuts them off from their best chance at treatment and health and misses the opportunity to stop the spread of HIV.

Civil penalties for drug use have been found to be no less effective than criminal punishments at deterring drug use. Thus shifting from a criminal to civil consideration for drug offenses will not result in higher rates of drug use.

Further, advocating depenalization and Harm Reduction need not neglect prevention efforts. Programs to discourage the use of drugs by young people have remained a feature of the drug policy of countries that have been most strongly associated with harm reduction such as The Netherlands, Australia, Canada, Germany, Switzerland and the United Kingdom. The two are not mutually exclusive.

Harm Reduction is legal.

NSPs are legal and operating in every country in the Central and Eastern Europe/former Soviet Union region. Substitution treatment is legal and operating in Bosnia, Bulgaria, Czech Republic, Croatia, Estonia, Hungary, Kyrgyzstan, Latvia, Lithuania, Macedonia,

Poland, Romania, Serbia, Slovakia, Slovenia and Ukraine. Recently, Russia considerably lessened penalties for personal drug possession.

Harm Reduction has widespread international support.

The United Nations Office on Drug Control (UNODC) recommends “a comprehensive package of prevention and care for IDUs, which could include outreach services, HIV/AIDS education, access to clean needles and syringes, condoms, drug dependency treatment (including substitution treatment and, where appropriate, rehabilitation), voluntary HIV testing/counseling, and psychosocial support.”

Further, the UN General Assembly Special Session on HIV/AIDS (UNGASS) declaration states that effective prevention, care and treatment strategies require non-discriminatory access to “vaccines, condoms, microbicides, lubricants, sterile injecting equipment, drugs, including antiretroviral therapy, diagnostics and related technologies, as well as increased research and development”; and sets as a goal: “By 2005, [to] ensure: that a wide range of prevention programs which take account of local circumstances, ethics and cultural values, is available in all countries ... including... expanded access to essential commodities, including sterile injecting equipment.” (Paragraphs 23 and 52)

REFERENCES

¹ UNODCCP (2002) Global illicit Drug Trends 2002. New York: United Nations Office for Drug Control and Crime Prevention.

² WHO (2002) Prevention of psychoactive substance use: a selected review of what works in the area of prevention. Geneva: World Health Organization.

³ Gibson DR, Flynn NM and Perales D (2001) Effectiveness of syringe exchange programs in reducing HIV risk behavior and HIV seroconversion among injecting drug users. *AIDS* 15(11), 1329-1341.

⁴ WHO Report on the global HIV/AIDS epidemic June 1998. http://www.who.int/emc-hiv/global_report/rep_html/report5.html

⁵ Coyle SL, Needle RH, Normand J (1999) Outreach-based HIV prevention for injecting drug users: a review of published outcome data. *Public Health*, 113 (Supplement I), 19-30.

⁶ Farrell M, Ward J, Mattick RP, Hall W, Stimson G, Des Jarlais D, Gossop M and Strang J (1994) Methadone maintenance treatment for opiate dependence: A review. *British Medical Journal*, 309, 997-1001.

⁷ Ward J, Mattick RP and Hall W (1998) *Methadone Maintenance Treatment and other Opioid Replacement Therapies*. Amsterdam: Harwood.

⁸ Gerstein DR and Harwood HJ (Eds.) (1990) *Treating drug problems, Vol. 1: A study of the evolution, effectiveness, and financing of public and private drug treatment systems*. Washington: National Academy Press.

⁹ Advisory Council on the Misuse of Drugs (1993). *AIDS and drug misuse update report*. London: HMSO.

¹⁰ Farrell M, Ward J, Mattick RP, Hall W, Stimson G, Des Jarlais D, Gossop M and Strang J (1994) Methadone maintenance treatment for opiate dependence: A review. *British Medical Journal*, 309, 997-1001.

¹¹ Marsch LA (1998) The efficacy of methadone maintenance interventions in reducing illicit opiate use, HIV risk behavior and criminality: a meta-analysis. *Addiction* 93(4), 515-532.

¹² Mattick RP, Breen C, Kimber J, and Davoli M (2003) Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence (Cochrane Review). In: *The Cochrane Library, Issue 1*. Oxford: Update Software.

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- ¹³ Mattick RP, Kimber J, Breen C, and Davoli M (2003) Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence (Cochrane Review). In: *The Cochrane Library, Issue 1*. Oxford: Update Software.
- ¹⁴ Nadelmann EA, Coffin P, Halingby L and Greenshields A (1999) *Safer Injection Rooms*. New York: Open Society Institute.
- ¹⁵ Mattick RP, Kimber J, Kaldor J, MacDonald M, Weatherburn D and Lapsley H (2001) *Six-month process evaluation report on the Medically Supervised Injecting Centre (MSIC)*. Sydney: National Drug and Alcohol Research Centre.
- ¹⁶ MacCoun RJ (1993) Drugs and the law: A psychological analysis of drug prohibition. *Psychological Bulletin* 113, 87-512.
- ¹⁷ Single EW (1989) The impact of marijuana decriminalization: An update. *Journal of Public Health Policy*, 456-466.
- ¹⁸ Theis CF and Register CA (1993) Decriminalization of marijuana and the demand for alcohol, marijuana and cocaine. *The Social Science Journal*, 30 385-399.
- ¹⁹ Single E, Christie P and Ali R (2000) The impact of cannabis decriminalization in Australia and the United States. *Journal of Public Health Policy* 21, 157-186.
- ²⁰ Donnelly N, Hall W and Christie P (1999) *The effects of the CEN scheme on levels and patterns of cannabis use in South Australia: evidence from National Drug Strategy Household Surveys 1985-95*. Commonwealth Department of Health and Family Services, Canberra.
- ²¹ Donnelly N, Hall W and Christie P (2000) The effects of the CEN scheme on levels and patterns of cannabis use in South Australia: evidence from National Drug Strategy Household Surveys 1985-1995. *Drug and Alcohol Review* 19, 265-269.
- ²² MacCoun R and Reuter P (1997) Interpreting Dutch cannabis policy: Reasoning by analogy in the legalization debate. *Science* 278, 47-52.
- ²³ Lenton S, Hummeniuk R, Heale P and Christie P (2000) Infringement versus conviction: The social impact of a minor cannabis offence in SA and WA. *Drug and Alcohol Review* 19, 257-264.
- ²⁴ Gold M, Gafni A, Nelligan P, and Millson P (1997) Needle exchange programs: an economic evaluation of a local experience. *Canadian Medical Association Journal* 157(3), 255-262.
- ²⁵ Lurie P and Drucker E (1997) An opportunity lost: HIV infections associated with lack of a national needle-exchange programme in the USA. *Lancet* 349, 604-608.
- ²⁶ Holtgrave DR, Pinkerton SD, Jones TS, Lurie P, and Vlahov D (1998) Cost and cost-effectiveness of increasing access to sterile syringes and needles as an HIV prevention intervention in the United States. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 18(Supplement 1), 133-138.
- ²⁷ Laufer FN (2001) Cost-effectiveness of syringe exchange as an HIV prevention strategy. *Journal of Acquired Immune Deficiency Syndromes* 28(3), 273-278.
- ²⁸ Ward P and Sutton M (1998) The effectiveness of methadone maintenance treatment: cost effectiveness. In (eds.) Ward J, Mattick RP and Hall W, *Methadone Maintenance Treatment and other Opioid Replacement Therapies*. Amsterdam: Harwood.
- ²⁹ Watters JK, Estilo MJ, Clark GL et al (1994) Syringe and needle exchange as HIV/AIDS prevention for injection drug users. *JAMA* 271:115-120.
- ³⁰ Normand J, Vlahov D, Moses LE, eds. (1995) *Preventing HIV Transmission: The Role of Sterile Needles and Bleach*. Washington DC: National Academy Press:224-226, 248-250.
- ³¹ Paone D, Des Jarlais DC, Gangloff R, Milliken J, and Friedman SR (1995) Syringe Exchange: HIV prevention, key findings, and future directions. *International Journal of the Addictions* 30, 1647-1683.
- ³² Wolk J, Wodak A, Guinan J, Macaskill P, and Simpson JM (1990) The effect of a needle and syringe exchange on a methadone maintenance unit. *British Journal of Addictions* 85, 1445-1450.
- ³³ Hagan H, Des Jarlais DC, Purchase D, Friedman ST, Reid T and Bell TA (1993) An interview study of participants in the Tacoma, Washington syringe exchange. *Addiction* 88, 1694-1695.
- ³⁴ Heimer R and Lopes M (1994). Needle exchange in New Haven reduces HIV risks, promotes entry into drug treatment, and does not create new drug injectors. *JAMA* 271, 1825-1826.
- ³⁵ Heimer R, Kaplan EH, O'Keefe E, Khoshnood K and Altice F (1994) Three years of needle exchange in New Haven: what have we learned? *AIDS and Public Policy Journal* 9, 59-74.
- ³⁶ Heimer R, Eicher A, Eno R, et al (1996) Needle exchange programs as a conduit to drug treatment: the New Haven experience. Paper presented at the 11th International Conference on AIDS, Vancouver, Canada.

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- ³⁷ Brooner R, Kidorf M, King V, Beilenson P, Svikis D and Vlahov D (1998) Drug Abuse Treatment Success Among Needle Exchange Participants. *Public Health Reports* 112 (Supplement 1): 129-139.
- ³⁸ Oliver KJ, Friedman SR, Maynard H, Magnuson L, and Des Jarlais DC (1992) Impact of a needle exchange program on potentially infectious syringes in public places. *Journal of Acquired Immune Deficiency Syndromes* 5: 380.
- ³⁹ Lurie P and Reingold A (1993) *The public health impact of needle exchange programs in the United States and abroad (prepared for the Centers for Disease Control and Prevention)*. Berkeley, CA: University of California, School of Public Health and San Francisco, CA: University of California, Institute for Health Policy Studies, 388.
- ⁴⁰ Normand J, Vlahov D, Moses LE, eds. (1995) *Preventing HIV Transmission: The Role of Sterile Needles and Bleach*. Washington DC: National Academy Press. 224-226, 248-250.
- ⁴¹ Doherty MC, Garfein RS, Vlahov D, et al (1997) Discarded needles do not increase soon after the opening of a needle exchange program. *American journal of Epidemiology* 145:730-737.
- ⁴² Macalino GE, et al (1998) Community based programs for safe disposal of used needles and syringes. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology* 18(Supplement 1): S111-S119.