An Overview of Harm Reduction Programs and Policies around the World: *Rationale, Key Features and Examples of Best Practice*

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EXECUTIVE SUMMARY

Injection drug use has become a primary factor driving the HIV/AIDS epidemic in many parts of the world; in the absence of preventive measures, the number of people infected with HIV can rise very rapidly once the virus has spread among drug users. Reducing HIV infection related to drug use is therefore a priority for many governments and communities. This paper gives an overview of strategies for reducing drug-related harms, including HIV infection, along with examples of best practices in policies and programs from around the world. The limits of and barriers to harm reduction are also explored.

Harm reduction is based on pragmatism and humanistic values and focuses on the harms of drug use rather than the drug use itself; it aims first to reduce the negative consequences of drug use, recognizing that abstinence may be neither a realistic nor a desirable goal for some users, especially in the short term. Harm reduction involves setting up a hierarchy of goals, with more immediate and realistic goals to be achieved in steps on the way to risk-free drug use or, if appropriate, abstinence. It also involves setting priorities and focusing resources on them by identifying, measuring and assessing the relative importance of drug-related problems, their associated harms, and the costs and benefits of intervention.

Among the harm reduction approaches Dr. Riley explores are strategies to reduce the prevalence and frequency of injection as the preferred route of drug administration and to prevent epidemics among injection drug users (IDUs) through substitution treatment (including but not limited to methadone); community programs (needle exchange, equipment cleaning, education and outreach); law enforcement; and tolerance areas (including facilities where users can obtain clean injection equipment, condoms, advice and medical attention). Cities where these strategies have proved successful in avoiding an HIV epidemic among drug users have three features in common: the use of community outreach or peer education to reach and educate drug users; cheap and easy access to sterile syringes; and early action on prevention, before HIV prevalence reached a critical point.

The paper demonstrates the urgent need to prevent HIV infection among drug users, their sexual partners and their potential children. Implementing programs among IDUs is difficult, however, because IDUs are both literally and figuratively hard to read. Marginalized by laws and societal attitudes, many distrust services, while HIV prevention ranks low in their daily struggle to find food and safe shelter. Notwithstanding the difficulties, evidence from around the world suggests that effective strategies can be mounted given the political will to do so. The paper reviews a number of country responses as examples of best practices and distils the lessons learned from their experience in policy development, community mobilization, and development of a national strategy.

Based on this experience, an effective harm reduction policy – that is, the guiding principles for the harm reduction process – must be developed using the best available information and with the participation and support of as many stakeholders as possible. It is characterized by flexibility, a health promotion approach, non-repressive legislation, and law enforcement based on community policing. It also ensures adequate coverage of the population and sustainability of efforts. To implement the policy, countries need a comprehensive and multifaceted strategic

plan, which might include primary health care, AIDS education, life skills training, distribution of safer sex information and condoms, voluntary and confidential counselling and HIV testing, access to clean needles and syringes, referral to treatment and health care options, and education of law enforcement personnel on the risks of punitive responses.

The next step is to translate policy and strategy into effective programs. Depending on needs, the programs developed may include advocacy; surveillance and monitoring; policy and legislative reviews; education and information; training and networking for health and social service professionals and outreach workers; and provision of service to IDUs. Based on lessons learned from the programs reviewed in the paper, effective programs are characterized by an early start, community involvement in all stages, a comprehensive range of well co-ordinated, user-friendly and flexible services, ready access to condoms and sterile injection equipment, geographic and temporal range, gender and ethnic sensitivity, respect for human rights, adequate coverage and sustainability, a supportive environment, and assessment, monitoring and evaluation.

Finally, Dr. Riley reviews best practices in national, regional and international initiatives to strengthen training and networking for policy makers and practitioners. The effectiveness, efficiency and sustainability of harm reduction strategies and interventions are maximized through the dissemination of reliable, objective and evidence-based information, exchanges of lessons learned, and continuous training.

From the evidence presented in the paper, it is clear that harm reduction policies and programs can be cost-effective in reducing HIV transmission and other harms associated with drug use in developed, developing and transitional countries. Yet coverage and capacity remain far too low and implementation far too late. More intensive, multifaceted approaches are needed to deal with the rapid spread of the epidemic among injection drug users, even in countries where prevalence rates are now considered low. Despite the fact that approaches such as supply reduction, legal constraints, detoxification and abstinence have been shown to be much less effective than needle distribution, substitution treatment and peer outreach, the main barrier to implementing harm reduction remains political will. As a result, crucial opportunities to slow the epidemic while rates are still low and interventions cheap are being lost, and the enormous financial and human costs continue to build around the globe.

1. THE RATIONALE FOR PREVENTING HIV/AIDS AMONG INJECTING DRUG USERS

This paper was written as one of a series of background documents for an international meeting on policy development regarding HIV/AIDS and injection drug use. This meeting is to be held in Poland in November of 2003 and is co-hosted by Health Canada, the Open Society Institute and UNAIDS. This meeting, and this paper, is a follow-up to a meeting held in Quebec, Canada in 1999 on policy dilemmas facing governments with respect to HIV/AIDS, which was co-hosted by Health Canada and UNAIDS.

The paper was written with the intention of providing the reader with a background on harm reduction policies and programmes as well as a review of some examples of good practice from all regions of the world within a single document. Following the rationale and background to drug injection practices, harm reduction programmes and polices are described, some evaluation data are presented and the criteria for "best practices" are listed. The second part of this paper contains an overview of good practice with regard to policy, mobilization, and strategy, programme development and implementation, and training and networking.

By the end of 2002, some 110 countries and territories had reported HIV associated with injection drug use, compared with 52 in 1992. Injection drug use is the major mode of HIV transmission in Eastern and Western Europe, Central Asia, East Asia, North Africa, the Middle East, North America, and parts of South America. The most affected regions to date have been Southern and Eastern Europe, Central Asia, East Asia, North America, and Latin America. Explosive epidemics have occurred among injecting drug users in each of these regions. Since injection drug use is among the primary factors driving the HIV/AIDS epidemic in many other parts of the world, one of the main issues for governments and communities is how to reduce HIV infection related to drug use. The purpose of this paper is to offer an overview of strategies for reducing drug-related harm and a directory of resources. The paper's main emphasis is injection drug use, but it touches on other substance use where relevant. The paper also examines the relationship between substance use and sexual practices that put individuals at risk of transmitting or receiving HIV.

Since injection drug use is among the primary factors driving the HIV/AIDS epidemic in many other parts of the world, one of the main issues for governments and communities is how to reduce HIV infection related to drug use.

Drug use and drug injecting can result in a number of problems for the individual, the community and society as a whole. HIV has greatly increased the direct harms associated with drug injecting in particular and the indirect harms associated with drug use in general. HIV and other infections pose a direct risk because they can be transmitted when dirty needles, syringes and other paraphernalia are shared. HIV is also an indirect risk to all drug users because use of alcohol and other psychoactive substances can be associated with an increase in risky behaviours, including unsafe sex and unsafe injecting. The implications of HIV transmission among drug users are profound. In many countries, heterosexual transmission of HIV is fed in part by the epidemic among injecting drug users. The gravity of the situation becomes more apparent in light of the fact that many injecting drug users have non-injecting sexual partners. In addition, women with HIV infection resulting from drug use or sexual activity with an injecting drug user are at risk of bearing HIV-infected children.

Experience in a number of countries has shown that, in the absence of preventive measures, the number of people infected with HIV can increase very rapidly once the virus has spread among drug users. Experts around the world agree that intensive efforts to keep infection rates among injecting drug users below 10% are necessary. If infection rates exceed this level, the epidemic can become explosive, as has been seen in several cities. In Edinburgh, Scotland, seroprevalence in injecting drug users increased from 5% in 1983 to 57% in 1985. In Bangkok, Thailand, rates rose from 1% in 1987 to more than 40% in 1988. In both cities, the main reason for the rapid rise was that clean injection equipment was not available.

There is an urgent need to prevent HIV infection rates among drug users, their sexual partners and unborn children. Preventive measures aimed at these groups should be a priority in all countries. Implementing prevention programs with injecting drug users is, however, extremely difficult. Marginalized by the laws and attitudes of society, injecting drug users are often hard to reach both literally and figuratively. Many tend to distrust services because of a history of unpleasant experiences with authority. For many, preventing AIDS is a low priority in their day-to-day struggle to find food and shelter and escape abuse. To reach these individuals, programs must be sensitive, multifaceted, and innovative in nature.

Data from countries with differing income levels show that drug users can and do try to protect themselves and others from HIV infection. Studies of cities with syringe exchanges and other harm reduction programs show that the spread of HIV among injecting drug users can be slowed or even halted. In many cases, however, current preventive measures are inadequate to reduce the spread of HIV significantly among drug users over the long term. It is important to mobilize drug users, their partners and those who work with them to encourage them to adopt harm reduction practices such as the use of clean needles and condoms. People practise risky behaviours for complex reasons related to attitudes, pressures and barriers. It is only through training, research and co-operation that we will be able to deal adequately and humanely with this complex and compelling problem.

Over the last decade the HIV epidemic among injecting drug users has changed in nature, as has our understanding of it. On one hand it has become clear that although harm reduction efforts are working, more intensive, multifaceted approaches are needed to deal with the rapid spread of the epidemic among injecting drug users. On the other hand, it has also become apparent that the main barrier to implementing necessary prevention measures is political will. The result is a loss of crucial opportunities to slow the epidemic while rates are still low and interventions cheap, and the enormous fiscal and human costs continue to build around the globe.

2. THE PREVENTION AND CESSATION OF INJECTING DRUG USE

2.1 Factors Associated with Injecting

Data from a multi-city study by the World Health Organization suggest that one-third or more of the world's five million or more injectors began to inject after the risk of HIV/AIDS was known. Several factors may help explain the global spread of injecting drug use:[1]

- In some regions, available drug preparations are more suitable for injection than smoking.
- Laws against drugs tend to increase the price and risk to the consumer. The illegal status of drugs like heroin and cocaine provides an incentive to inject, because injecting is more efficient than smoking – most of the drug is delivered quickly to the brain and is not lost in smoke. Smoke is also very detectable, especially in prison environments. Injectable forms of drugs are usually easier to hide than other forms and so are easier to smuggle or carry into prisons. Injection requires less preparation and consumption time than smoking.
- The spread of drug injecting is linked to drug production and distribution: drug producer and transit countries develop local drug problems.
- The use of therapeutic injections in some countries enabled drug users to learn about injecting.
- Through the mixing of cultures, such as foreign soldiers and refugees associated with war, whole populations have been exposed to new patterns of drug use.
- Changes in the availability of traditionally used drugs in countries such as Myanmar, China, Colombia and those of Central Asia have contributed to a shift to the use of injectable drugs.
- New patterns of drug use like injecting are more likely to occur in conditions of rapid social and political change and when barriers to communication are removed.
- Information about drugs spreads through a wide variety of communication channels, and drug use practices are passed on through social networks.
- The spread of injection can be very rapid. In many parts of the world, diffusion took only a few years.

2.2 Reducing Injecting

The rapid transition to injecting as the preferred route of drug administration after people take their first injection is well documented.[2] Even when aggregate numbers of illicit drug users remain constant, significant health and social benefits can be achieved by reducing the prevalence and/or frequency of injecting. Alex Wodak, President of the International Harm Reduction Association, has suggested that shifting people toward non-injecting routes of administration should be the major focus of efforts to control hepatitis C and overdose deaths in Australia.[3] Yet little attention has been paid to date to reducing injecting (rather than drug use) as a policy objective. Hunt and his colleagues reviewed a range of route transition interventions that can be used to reduce injecting and its associated harms.[4] They distinguish between two points for intervention: preventing injecting among existing non-injecting drug users and promoting the transition away from injecting among current injectors. Some strategies, such as selective interdiction in drug markets, have the potential to bridge prevention of initiation and the exit rate from injecting.

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Approaches to preventing injecting among non-injecting drug users operate in two ways. One is to identify at-risk users and intervene with them to reduce the likelihood that they will adopt injecting. The second focuses on the gatekeeper role played by current injectors, seeking to reduce their influence on non-injecting drug users.

There are several ways to promote transition away from injecting. Methadone maintenance at higher daily doses is associated with a greater likelihood of cessation of injecting. Both low- and high-intensity support through counselling are associated with substantially better outcomes (with the greatest benefit from high-intensity). The style of individual therapists working in methadone maintenance programs is a significant influence on the extent to which they are effective. This suggests that there is scope to develop targeted counselling interventions that increase the effectiveness of practitioners who are supporting injecting opiate users in making a transition to oral drug use.

In some countries, such as Sweden, the United Kingdom and Australia, a substantial proportion of the injecting population injects amphetamine. In much of North America, and increasingly in South America, a large proportion of injectors inject cocaine. For these stimulant users, methadone is not suitable. Whereas methadone prescribing has been researched extensively, this is not the case for amphetamine substitution. In the UK, the Advisory Council on the Misuse of Drugs has drawn attention to the lack of research on oral substitution programs for people who inject cocaine, amphetamines and benzodiazepines. The risk of amphetamine psychosis, particularly when the stronger methylamphetamine is used, gives reason for caution in the use of prescribed amphetamine. Some dexamphetamine prescribing does occur, and there is evidence that carefully targeted programs can be delivered.[5] There is increasing evidence that treatment can reduce amphetamine injecting.

Starting in the early 1980s, consumption of heroin by 'chasing the dragon' (inhaling the sublimate of heroin base from heated aluminium foil) became increasingly popular in many countries in Europe, giving rise to suggestions that encouraging injectors to move to smoking heroin might be a way to encourage non-injecting use of opiates. There is little empirical evidence on this, although the data from Spain[6] presented below are encouraging. The pharmacology of non-injecting drug delivery systems is poorly understood. Heroin smoking is not free of risk, but the morbidity associated with heroin smoking is far lower than that associated with opiate injection. Encouraging drug injectors to adopt chasing does not necessarily imply that this behaviour should be promoted among non-injectors. Two main types of intervention can be considered: the prescribing of smokable heroin (reefers) by clinicians and the social marketing of heroin chasing through targeted campaigns.

Prescribing heroin reefers: Heroin reefers have occasionally been prescribed to drug users in the UK. They have also been used to deliver other drugs such as methadone hydrochloride, cocaine hydrochloride and amphetamine. The British Pharmaceutical Society has drawn up a protocol for reefer preparation and distribution. No data have been published that would allow this technique to be assessed adequately, and it warrants further research.

The chasing campaign: A campaign has been developed in the UK to promote heroin chasing as an alternative to injecting. The campaign arose from users' dissatisfaction with methadone maintenance and awareness of transitions that have occurred in drug-using communities in the Netherlands. A social marketing approach has been incorporated in the campaign, which includes display posters at syringe exchange services and a handbook for injectors.

Other possibilities for non-injecting include anal insertion, which gives very rapid absorption through rectal mucosa and provides an effect that is only marginally less intense than the intravenous route; crack smoking or piping as an alternative to crack cocaine injecting; and heroin sniffing as an alternative to injecting. Some obvious concerns arise with respect to such strategies. The harms from the alternative routes are not fully understood, and there is a need to evaluate such campaigns carefully.

Attempts to control injecting by controlling drug markets remain poorly examined. It is not certain whether illicit use of injected drugs is price-elastic in a similar way to alcohol and tobacco. Clearly, illicit drug markets are not within the direct influence of governments. One interesting approach proposed recently involves deliberate concentration of criminal justice efforts on sectors of the black market dealing with injectable drugs while paying less attention to sectors of the market dealing with smokable forms.

It may be possible to reduce injecting by increasing cultural disapproval of injecting among relevant groups. Some work aimed at generating cultural change away from injecting has emerged from agencies with strong traditions of community development, such as Mainline in Amsterdam and the Healthy Options Team in London, as well as drug user organizations in Europe and Australia. To date, however, there have been no evaluated interventions with the explicit aim of increasing disapproval of injecting. We also need to heed Wodak's warning about the risks of further marginalizing an already marginalized group by targeting injecting. Other avenues for reducing injecting remain poorly explored. For example, even with widely used treatments such as methadone maintenance, there has been relatively little detailed consideration of approaches specialist workers can use to minimize injecting. As Dorn and Murji discuss, good process studies are necessary before outcome data can be sought.[7] There is also a pressing need to consider appropriate ways to discourage injecting in countries that cannot afford some of the more expensive options available in the industrialized world.

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2.3 Preventing Epidemics among Drug Injectors

"There is a growing body of scientific evidence that the HIV epidemic associated with injecting drug use can be prevented, slowed, stopped and even reversed."[8] The fact that extremely rapid spread of HIV has occurred under certain circumstances but not others, along with the demonstrated ability of many injecting drug users (IDUs) in developed, developing and transitional countries to modify their HIV risk behaviour, raises the question of whether it is possible to prevent epidemics of HIV among IDUs. There is now substantial evidence that the course of epidemics can be changed by public health interventions. The WHO multi-city study shed important light on what happens once HIV seroprevalence reaches certain levels in an IDU population. Cities with low, medium and high seroprevalence have correspondingly low, medium and high seroconversion rates. A strong relationship between background HIV seroprevalence among IDUs and current HIV seroconversion was also observed in a study of 15 U.S. cities from 1988 to 1992. Cities can be clustered in terms of epidemic status using the Des Jarlais classification: prevented epidemics, intermediate patterns and established epidemics.[9]

Marked differences can be seen between cities that took early and vigorous action on prevention (and mainly low HIV prevalence) and those with less prevention and greater emphasis on law enforcement as a drug policy strategy (often with higher prevalence).[10] The greatest spread of the epidemic occurred in situations characterized by multiple interactions between people from different cultural, ethnic, social or geographic backgrounds. Among IDUs, interaction occurred in the common use of injecting equipment in the penal system, in shooting galleries or through dealers, and by the use of professional injectors in Southeast Asia.[11]

Understanding the factors that account for the differences between areas where HIV among IDUs has remained low and those where it has spread very rapidly is one of the most important questions facing HIV epidemiology.[12] Timely and appropriate responses to the HIV epidemic in the early 1980s occurred in countries with a long established tradition of public health policies. A network of existing resources was often used in prevention, through co-operation with NGOs and the public sector. Among the countries that participated in the WHO multi-city study, Australia can be considered the best model of a prevented epidemic among IDUs. Its response to the spread of HIV among IDUs has been described as enlightened pragmatism. Australia introduced an integrated set of diverse preventive strategies when levels of seroprevalence among IDUs were still low. These strategies continue and include expansion of methadone programs and needle exchange programs. Another component, also seen in Germany, was federal financial support for advocacy groups of IDUs to develop prevention programs. By avoiding the common stereotype of IDUs as dysfunctional, it was possible to identify and contact people who did not fit the typical IDU profile and to promote safe behaviour and practices through peer education. Sydney has structural characteristics in common with other cities that have maintained low HIV seroprevalence among IDUs (less than 5% with no increasing trend for less than 5 years) – Glasgow, Scotland; Tacoma, Washington; Toronto, Canada; and Lund, Sweden.[13] The characteristics include a steady population of IDUs and a stable drug use scene; good media coverage of local preventive strategies; and significant behavioural changes by IDUs in response to being informed of risk.

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In Asia, Hong Kong has retained low prevalence rates while HIV has increased rapidly in many other countries. Comparing Hong Kong (with very few cases of HIV among IDUs) and Thailand (where HIV levels among IDUs increased rapidly and stabilized at about 35-40%) highlights some important differences in treatment of IDUs. Injection drug use has been common in Hong Kong since the 1950s and in Thailand since the 1960s. Methadone clinics have been in operation Hong Kong since 1972, while there have been very few methadone facilities in Thailand until recently. Very few IDUs in Hong Kong report a history of needle sharing. Needle sharing in Thailand is much more common; one study found that more than 50% of IDUs in Bangkok had shared needles or syringes in the past 6 months.[14]

The low-prevalence cities show that rapid transmission of HIV is not inevitable among IDUs. Stable low HIV seroprevalence can be maintained even when a substantial proportion of IDUs still engage in some injection risk behaviour. This finding in itself has important policy implications. A comparison of cities with high and low prevalence showed that those that were successful in avoiding an epidemic among drug users had three features in common:[15]

- They used community outreach or peer education to reach and educate drug users, including those who would not otherwise receive such information or be in touch with treatment and prevention programs.
- They ensured that drug users had cheap and easy access to sterile syringes through pharmacies or needle exchange programs.
- They started prevention programs early, before HIV prevalence had risen beyond a critical point. Mathematical modeling shows that once more than 10% of the drug-injecting population is infected with HIV, prevalence almost invariably rises to 40% or 50% within a few years. In cities such as Glasgow, Tacoma and Toronto, where prevention activities started very early and before 5% of drug users were infected with HIV, rates of HIV transmission have been consistently low.

Whether these three prevention components are necessary or sufficient to avert rapid transmission of HIV among IDUs in other areas remains to be determined, but "the potential consequences of permitting rapid transmission of HIV among injecting drug users are such that responsible public health policy would seem to require, at the very least, utilizing the common prevention components wherever possible."[16] Effective preventive strategies are reviewed in the following sections.

3. REDUCING DRUG-RELATED HARM

3.1 The Nature of Harm Reduction

The surest way to avoid drug-related harm is to prevent drug misuse. As discussed earlier, however, primary prevention of drug misuse has limited efficacy. Once an individual has begun to use drugs, the safest way to avoid HIV infection from drug injection is to stop injecting. Some countries have responded to the HIV epidemic by expanding drug treatment services, some of it compulsory. Not all drug users are willing or able to give up drugs. In such cases the urgent need to reduce HIV risks associated with injecting remains. Comprehensive prevention programs based on the principles of harm reduction or secondary prevention provide a means of intervention in such cases.[17]

Harm reduction is a relatively new social policy with respect to drugs that has gained popularity in recent years, especially in Australia, the United Kingdom, Germany and the Netherlands, as a response to the spread of HIV among injecting drug users. Although harm reduction can be used as a framework for all drugs, including alcohol and tobacco, it has been applied mainly to injection drug use because of the pressing nature of the harm associated with this activity. Harm reduction has as its first priority a decrease in the negative consequences of drug use. This approach can be contrasted with abstentionism, the dominant policy in much of the world, which emphasizes a decrease in the prevalence of drug use. A harm reduction approach takes the view that strategies aimed exclusively at decreasing the prevalence of drug use may serve only to increase various drug-related harms. Harm reduction tries to reduce problems associated with drug use and recognizes that abstinence may be neither a realistic nor a desirable goal for some, especially in the short term. This is not to say that harm reduction and abstinence are mutually exclusive, but only that

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abstinence is not the only acceptable or important goal. Harm reduction is an approach characterized by pragmatism. It attempts to identify, measure and minimize the adverse consequences of drug use at a number of levels: individual, community and societal.

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The roots of harm reduction as we now know it are in the United Kingdom, the Netherlands and North America, as detailed below. A number of countries or regions have adopted harm reduction as both policy and practice. For example, the British Advisory Council on the Misuse of Drugs has stated: "we have no hesitation in concluding that the spread of HIV is a greater danger to individual and public health than drug misuse. Accordingly, services which aim to minimize HIV risk behaviour by all available means should take precedence in developmental plans".[18] The World Health Organization has expressed a similar opinion, stating that policies aimed at reducing drug use must not be allowed to compromise measures against the spread of HIV/AIDS.[19]

The harm reduction approach is based on the following principles:

- Pragmatism – acceptance that some level of drug use in society is inevitable and acceptance of an individual's use of drugs as a fact. However, a harm reduction approach in the short term does not rule out abstinence in the longer term.
- Humanistic values – respect for the dignity and rights of the drug user and avoidance of condemnation or support for the use of drugs.
- Focus on harms – primary importance attached to the harms resulting from drug use rather than the drug use itself. This means priority is given to reducing the negative consequences of drug use.
- Hierarchy of goals – start by trying to achieve more immediate and realistic goals, in steps on the way to risk-free drug use or, if appropriate, abstinence.
- Balancing costs and benefits – identifying, measuring and assessing the relative importance of drug-related problems, their associated harms, and the costs and benefits of intervention, in order to focus resources on priority issues.[20]

3.2 Harm Reduction Programs and Policies

Syringe exchange and availability

The rationale for these programs is that many IDUs are unable or unwilling to stop injecting, so providing sterile needles and syringes is a simple, inexpensive way to reduce their risk of HIV infection and the risk of transmission to others.

For many people, needle and syringe exchange programs (NSEPs) are synonymous with the harm reduction approach. The rationale for these programs is that many IDUs are unable or unwilling to stop injecting, so providing sterile needles and syringes is a simple, inexpensive way to reduce their risk of HIV infection and the risk of transmission to others. Distribution of bleach kits (containing bleach and instructions for cleaning equipment) is another way to reduce the risks of injecting. The feasibility of establishing NSEPs has now been shown in a number of lower-

income countries, including Brazil, India, Vietnam and Thailand. Programs have also been established in countries of Central and Eastern Europe, including the Czech Republic and the Russian Federation.

NSEPs have used a range of strategies, including outreach services, automated vending machines and exchange at police stations and pharmacies. In Brazil exchange programs are run through private drugstores. One advantage of outreach programs is that they can provide other services and facilitate contact between drug users and health care workers. In Canada, for instance, exchanges often attract users who engage in the riskiest behaviours and who are therefore most vulnerable to HIV and most in need of comprehensive services.[21] There is now clear evidence that attendance at exchanges and increased needle and syringe availability are associated with a decline in both risk (decreased sharing) and harm (lower levels of HIV infection). One study of HIV among IDUs in 81 cities in North America, Europe, Asia and the South Pacific found that in the 52 cities without needle exchange programs, HIV increased by 5.9% on average, while it declined by 5.8% in the 29 cities that had such programs.[22]

> Numerous studies have shown that syringe exchange programs reach and serve the most disenfranchised populations at high risk for HIV infection. In this regard, syringe exchange programs play a unique role in facilitating the engagement of these populations in meaningful prevention interventions and treatment opportunities, when implemented as part of a comprehensive HIV prevention and substance abuse strategy.[23]

Young and newly initiated injectors tend not to access traditional services; they may need their own exchange or secondary exchange (distribution of injecting equipment by IDUs attending an exchange to other IDUs who do not attend). Research in the United States, Canada, Australia and Europe shows that secondary exchange does occur and that IDUs are highly motivated to limit HIV spread within their drug-using networks and to protect themselves and their peers by providing injecting equipment and risk-reduction information to those of their peers who are hardest to reach and most vulnerable.[24]

Cleaning Injecting Equipment

In most communities, especially in low-income countries, sterile syringes and needles are not readily available, making sharing of equipment likely. Here strategies for cleaning equipment need to be introduced. Methods include boiling needles and syringes, cleaning with bleach or other decontaminants, and rinsing with water. Bleach distribution programs have been used most widely in the United States, where syringe exchange programs have been restricted for legal and political reasons. Bleach distribution and information on cleaning techniques have been used in prison systems, including those in Canada and Australia. This approach has also been used in lower-income countries such as Malaysia, Vietnam, India and Thailand.

The effectiveness of bleach and disinfection programs in reducing HIV risk has been questioned, and bleach programs are considered ineffective in deactivating hepatitis B and C. Several factors have limited the efficacy of such programs: messages have been confusing, with different decontaminants and concentrations being recommended; IDUs often do not have the time or

opportunity to carry out the recommended procedures; and boiling reduces the life of the equipment. Bleach is often unavailable in many areas, but where it is, many IDUs are concerned about the effect of injecting bleach residue, while others reject it because of its smell.

In their favour, bleach programs can provide a link between health care workers and IDUs that may facilitate other HIV prevention efforts. They are useful in the absence of needle/syringe exchange programs and pharmacy sales of injection equipment. At the same time, other effective, simple and affordable decontaminants need to be identified.

Drug substitution treatment

Treatment programs have been demonstrated effective in helping drug users reduce or stop injecting, especially where substitution drug treatments are used. Oral methadone is the most widely used substitution drug treatment, but others include injectable methadone, injectable heroin, sublingual buprenorphine, pethidine, oral morphine sulphate, and heroin reefers for opioid users, and oral dexamphetamine for amphetamine users. Harm reduction approaches in several high-income countries – notably the UK, Switzerland, Germany and the Netherlands – include drug prescribing by physicians, drug dependency clinics and community drug teams. The aim of such programs is to get users off injectable street drugs and steer them toward clean, non-injectable drugs. Prescribing regimes range from short-term detoxification to long-term maintenance. Effective approaches being used in countries such as Bolivia include prescribing coca leaf and tinctures, which allows stabilization and rehabilitation of users.[25]

Methadone programs

Methadone maintenance has been used in many high-income countries, with methadone prescribed through clinics, general practitioners and, in some European cities, mobile clinics and methadone buses that deliver services to drug users. Successful programs can reduce rates of illness and death, reduce involvement in crime, prevent the spread of HIV, and enable users to take control of their lives. A key factor in the success of methadone as a harm reduction measure is that it brings users back into the community rather than treating them as outsiders or criminals. Experience suggests that methadone programs work best if they are accessible and flexible and provide effective coverage through a range of channels. In the Netherlands, for example, methadone maintenance is used to contact, stabilize, and detoxify and treat heroin users. By providing methadone without too many impediments, contact can be made with large sections of the heroin-using population. Problems have also been associated with methadone programs, however, including maintenance on levels too low to prevent continued use of heroin. To overcome this problem, some countries are experimenting with programs providing both methadone and heroin.

Successful programs can reduce rates of illness and death, reduce involvement in crime, prevent the spread of HIV, and enable users to take control of their lives. A key factor in the success of methadone as a harm reduction measure is that it brings users back into the community rather than treating them as outsiders or criminals.

The goals, design, delivery and effectiveness of methadone maintenance programs vary considerably. Measures of effectiveness include reductions in illicit opioid use and risky

practices, reduced criminal activity, greater retention in treatment, and improved health status. Studies evaluating effectiveness have shown that more effective programs are characterized by the prescription of higher doses of methadone (above 50-60mg/day); a treatment goal of long-term maintenance as opposed to detoxification leading to abstinence; better supportive services (including counselling, social and medical services); and better staff-client relationships.

Other less widely used and evaluated opioid agonist drugs include levo-alpha-acetylmethadol (LAAM), a long-acting synthetic opioid taken orally; buprenorphine, an opioid agonist and antagonist taken sublingually; tincture of opium, an opium suspension taken orally; ethylmorphine, a morphine analogue taken orally; and pentazocine, an opioid agonist and antagonist taken orally. To date, agonist pharmacotherapy programs have been located mainly in high-income countries, and it has been argued that such treatment approaches are not appropriate, feasible or affordable for low-income countries. Some agonist pharmacotherapy programs have been established in Asia, Latin America, and Eastern Europe. Sublingual buprenorphine programs have been established in India. Methadone maintenance programs are being implemented in Nepal, in various regions of Thailand, and in Latvia, Lithuania, Poland and Macedonia. Tincture of opium is used for detoxification and substitute maintenance in northern Thailand. An ethylmorphine prescription program has been established to treat heroin users in the Czech Republic.

Most of the agonist pharmacotherapy programs in Asia have been developed in the communities where drug users live, often without government support or formal approval. These programs are very different from those in high-income countries. Principles of community involvement and integration with primary health care services have made them feasible, acceptable and affordable, even in slum communities and remote tribal villages. Such programs still need to be thoroughly evaluated, however. A significant number of clients continue to inject drugs while in a pharmacotherapy program; when they do inject, clients need access to sterile equipment and HIV information, either through the program or through referrals.[26]

Education and outreach programs

Drug education materials with a harm reduction focus aimed at high-risk populations are readily available in some countries, while in others they are extremely controversial and often unavailable. These materials do not promote drug use but tell users how to reduce the risks associated with using drugs, especially transmission of HIV and other blood-borne diseases. In many countries, outreach workers contact IDUs, distribute educational material, syringes, condoms and bleach kits, and help users contact other services. In the UK, nurses teach safer injecting practices at clinics.

Outreach services help create supportive environments by delivering information and services to hard-to-reach populations and establishing links between IDUs and health services.

Outreach services help create supportive environments by delivering information and services to hard-to-reach populations and establishing links between IDUs and health services. Peer education programs have been shown to be effective in reducing HIV risk behaviour and HIV infection rates among drug users, while peer-based NSEPs have been demonstrated more effective in reaching new clients than those conducted by non-peers.[27] The

use of ex-IDUs as peer educators also plays an important role in intervention programs in countries such as India and Nepal. In Australia and many European countries, drug users have organized drug users' organizations to advocate on behalf of IDUs and implement HIV prevention programs. Peers can help change group norms by demonstrating change in their own behaviour.

Outreach work is usually needed to identify networks of IDUs, introduce them to the program's services, build up trust between program staff and IDUs, (in some cases) distribute sterile injecting equipment and educational materials, and/or carry out research on the needs of IDUs. However, outreach work is unlikely to reach sufficient numbers of IDUs across a wide range of social networks in a short enough period to prevent fast-moving HIV epidemics. Social norms of injecting will change only with the active involvement of IDUs themselves.[28] This involvement can take many forms, but at outreach programs it most commonly involves peer education and/or peer support. In peer education, IDUs are trained to educate other IDUs about HIV risks, safer injecting and safe sex practices.[29] A study of Australian NSEPs found that peer education was regarded as an essential element in their work.[30] A European study of 2,554 IDUs in Greece, France, Italy, Portugal and Spain found that IDUs accepted educational materials much better when they were distributed by 'friendly contact' from another IDU, rather than by a counsellor or other professional.[31]

In addition to risks from sharing needles and syringes, there are HIV transmission risks in drug preparation, manufacture and purchase. NSEPs and educational programs need to address these risks, as well as those associated with sexual behaviour, using prevention education and condom distribution. Focus groups, in-depth interviewing, and the use of ethnographic methods such as observation (and the use of video to record drug preparation and manufacture) can identify HIV transmission points and improve understanding of the social nature of drug users' lives. Education programs can then use this information to develop appropriate prevention strategies. The goal of such strategies must be to change the social norms surrounding drug injecting and sexual behaviour. By encouraging a large percentage of injectors to switch to safer behaviours, HIV prevention becomes the norm. But as Burrows points out, in addition to this change in social norms, each individual drug user must decide to protect his/her health: many IDUs do not worry about HIV infection, despite the realization that it will cause serious physical problems and will likely lead to death. This appears to be the result of internalization of negative attitudes toward drug users expressed by parents, media, health care workers, and the general community.[32]

In peer support, IDUs are involved in all aspects of defining the issues to be addressed and the types of educational and other strategies that should be employed, as well as carrying out the education and other processes and, in some cases, evaluating and reporting on their work.[33] Peer support programs began in the 1980s in the Netherlands and quickly spread to Germany, the UK, Norway, Denmark, France, Belgium, Italy, Spain, Australia and New Zealand.[34] More recently, peer support groups are being established in countries such as India, Brazil, Bangladesh, Slovenia and the Russian Federation.[35] Fostering peer support is regarded increasingly as an important part of effective NSEP practice.

Finally, there is a strong need to reach IDUs at highest risk for acquiring HIV. Specific programs may be needed to target women IDUs; gay and lesbian IDUs; street youth; and IDUs of certain ethnic groups who are often marginalized. Women IDUs who are also sex workers are regarded increasingly as the main nexus of injecting-related and sexually transmitted HIV epidemics. This group should be at least as high a priority as male IDUs, especially in countries where a significant proportion of female IDUs are also sex workers.

Before the AIDS epidemic there were sizeable drug users' organizations only in the Netherlands. Despite the hostility facing drug injectors and their lack of resources, drug users' organizations have emerged as important players in the fight against AIDS. There have been two distinct patterns of development: drug users organizing on their own, and interventions organized by outsiders to assist IDUs. The European users' groups have organized a coalition, the European Interest Group of Drug Users; an international group, the International Drug Users Network, was formed in 1992. These networks strive to increase recognition of IDUs' basic human rights, to keep the various drug users' groups aware of each other's activities, to encourage the growth of new groups, to represent users' views in public forums, and to influence public and private policies that affect drug users.[36] To date there have been no formal studies of the impact of drug users' organizations on risk behaviours of local drug-injecting communities and networks, or of how the different strategic choices made by these organizations might affect the extent of risk reduction among IDUs. Such research is difficult to conduct and fund.

Law enforcement

Harm reduction approaches have been adopted by law enforcement agencies in some countries. In the UK, for example, some police authorities are focusing on enforcement of laws against drug trafficking while using a cautioning policy toward users. The strategy aims to avoid imprisonment or prosecution of users and to refer arrested drug offenders to treatment services and syringe exchanges. Similarly, in the Netherlands, police have long been supportive of harm reduction programs, concentrating enforcement efforts on large-scale traffickers and on ensuring a safe and peaceful environment. In Hamburg, Germany, a recent policy shift to harm reduction is reflected in co-operation between police, health officials and drug user groups to help drug users obtain access to social services.

Tolerance Areas

Another approach, implemented in several European cities and in Sydney, Australia, includes the provision of facilities – tolerance zones, injection rooms, health rooms or contact centres – where drug users can obtain clean injection equipment, condoms, advice and medical attention anonymously. In addition to allowing users to take drugs in a comparatively safe environment, tolerance areas are considered preferable to open injection of illicit drugs in public places or in unhygienic shooting galleries controlled by drug dealers. Where it has been evaluated, this approach appears to reduce the risk of HIV infection and of drug overdose, but more controlled study and rigorous analysis are needed before definitive conclusions can be drawn about the efficacy of safe injecting sites (injection rooms and legal issues are discussed further below). Open tolerance zones – usually in central areas near train stations, parks and commercial areas – have had mixed success, working well in Rotterdam, in the Netherlands, but less well in

Switzerland and Germany. It is clear, however, that public health and social service workers find it easier to provide services when drug users are readily accessible.

3.3 Limits of and Barriers to Harm Reduction

While there have been significant reductions in injection-related risks among users, efforts to reduce risky sexual practices have, for the most part, been much less promising. There is still uncertainty about the extent of sexual transmission among injectors relative to injection-related transmission. The relationship between the use of specific psychoactive substances and sexual behaviour remains unclear; the data on cocaine are particularly confusing. More research is required, especially in low-income countries, to investigate the relationships between substance use, sexual behaviour and HIV infection. The dramatic increase in the promotion and consumption of alcohol in lower-income countries may have significant implications for sexual transmission of HIV, especially in areas such as Africa where HIV prevalence in some communities is already high.

Because IDUs are diverse, a wide range of interventions is needed, with an emphasis on mobilizing primary health care services and drug user networks. Research is needed on the context and design of programs and how affordable programs can be developed for lower-income countries. For example, alternatives to methadone need to be considered to reduce costs, to attract under-served populations, and to involve IDUs whose primary drug is not an opioid. The experience of community-based substitution programs in low-income countries may help in reorienting programs in high-income countries. These community-based programs, established in response to community-identified needs, have been designed, implemented and managed by the communities themselves.

NGOs, especially those that are inclusive of drug users, have been the most successful in working with injecting drug users and promoting harm reduction, probably because these organizations are best able to step beyond the confines of governmental policies and laws that can exacerbate harms, especially among the marginalized. Tremendous success has been achieved at the country, regional and international levels by harm reduction networks, which together form the International Harm Reduction Network.[37] Despite their successes, the efficacy of these organizations and networks is seriously impeded by political opposition and lack of financial support.

Information and education programs on HIV and injecting drug use need to be delivered to the general population to increase their knowledge and reduce the marginalization of drug users. Such marginalization compromises the effectiveness of programs. If we are to reduce drug-related harms, including HIV infection, significantly in both the short and the long term, it is imperative that we stop marginalizing illicit drug users and recognize that they too are citizens, even if they use a drug that is not currently socially acceptable.

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Some measures for reducing drug-related harm, such as needle exchange in correctional facilities and safer injecting sites, have faced legal and political barriers, despite being ethical and humane. Legal challenges have generally been successful in these cases, providing some hope for the future of such crucial interventions. On the broader issue of drug laws and international treaties, further discussion and change are needed urgently to avert health and social crises on a national and international scale.

A number of common barriers to reducing drug-related harm have been identified.[38] Experience around the world has shown the importance of the following barriers and facilitators in preventing HIV among drug-using populations:

- The critical role of NGOs and networks, including technical resource networks at the global, regional and national levels.
- Centrality of community initiatives, including the role of drug users and people living with HIV/AIDS.
- A pragmatic attitude toward drug problems.
- An established public health tradition, with drug use being regarded as a public health rather than a criminal justice issue.
- Policy that is driven by science.
- Recognition of the severity of HIV/AIDS and its long-term consequences.
- A combined AIDS/drug use strategy at local and national levels.
- Adequate social and health care resources, including universal health care.
- Recognition that prevention is far more cost-effective than alternatives such as HIV infection or resorting to the criminal justice system.
- Presence of a social safety net and a broad range of social and health programs for the entire community.
- Political champion(s) and political will.
- Absent or flexible paraphernalia laws.
- Acceptance by religious communities (or at least willingness not to prohibit prevention efforts).
- Willingness of organizations to accept ‘damage reduction’ as an aim of policies and programs, either implicitly or explicitly.
- Comprehensiveness: strategies for overcoming barriers must be comprehensive and take into account contextual factors. For example, HIV/AIDS is often not the most urgent problem in resource-poor settings; basic health care, education and information for all help in solving many different health-related problems. Social or economic inequalities make people vulnerable to HIV. Issues of gender, access to health care, education, work and economic resources, differences in power and wealth are not easily addressed. Indeed, some people may not want them addressed. The most effective strategies involve health, education and law enforcement working together.

Although a considerable amount can be done to reduce drug-related harm within the existing framework of international drug treaties, narrow interpretations of these treaties and a failure to use the non-criminal options set out in them has limited the scope for action. Education of lawyers, judges and advocates and action by NGOs and drug user groups, including those working in the area of health and human rights, are possible strategies to counter this. Other

strategies include examining how current national drugs laws conflict with national and international human rights law and policies. Legal action has been taken against prison authorities in some countries, for example, using health and human rights law. Organizations such as UNAIDS also have an important role in educating member organizations and states on the urgent need to treat drug issues as matters of health and human rights and in encouraging a constructive, open and informed debate about the changes in policy and practice needed to reduce drug-related harms.

Despite the severity of the problem, HIV among injecting drug users is being accorded low national priority. Harm reduction approaches are clearly most effective and cheapest when HIV prevalence is low; after the epidemic has taken hold, responses must be much more intensive and expensive. These experiences have implications for African nations, where HIV among IDUs is still low but where injecting is spreading. In the numerous countries where HIV among injectors is no longer low, harm reduction measures need to be introduced on a wide scale immediately. In countries where harm reduction is becoming the standard approach, as in most counties of the European Union, coverage of programs needs to be improved. Limited approaches achieve very limited results. They also bring the risk of complacency that because we are doing some harm reduction, all will be well. A little harm reduction is not enough. HIV among injecting drug users is also being given low priority internationally. The relative cheapness and ease of using these pragmatic responses to prevent or control epidemics need to be highlighted by governments and international organizations. We cannot afford to be complacent; programs need to have political support, be comprehensive, and be implemented immediately on a large scale to reach as many drug injectors as possible.

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In sum, harm reduction programs and policies have been shown to be extremely cost-effective in reducing HIV transmission and other problems in developed, developing and transitional countries. These approaches include needle/syringe availability, substitution treatment, outreach, and safer injecting sites. They also include changes to the law where the law is found to be exacerbating rather than reducing drug-related harm. Yet despite the proven cost-effectiveness of harm reduction programs and policies, coverage and capacity remain far too low and implementation is far too late.[39] The interventions with the highest impact – needle distribution, substitution treatment and peer outreach – are the least practised. Interventions with the lowest impact – supply reduction, legal constraints, detoxification and abstinence, and awareness programs – are the most often practised.[40]

4. BEST PRACTICES IN HARM REDUCTION POLICIES AND PROGRAMS

4.1 The Meaning of Best Practice

The concept of best practice used in this paper is that used by UNAIDS in its series of booklets on best practices and HIV/AIDS.[41] That is, "best practice means accumulating and applying knowledge about what is working and not working in different situations and contexts. …it is both the lessons learned *and* the continuing process of learning, feedback, reflection and analysis

(what works, how and why, etc.)."[42] In this paper, best practice refers to projects, programs and policies for preventing HIV/AIDS among injecting drug users. The process of best practice is exemplified by:

- exchange of experience, including sharing between individual experts and networks,
- pilot testing, operations research, and other projects and programs, and
- documentation (but not only documentation).

Two approaches can be used in judging what is best practice. The first is based on simply describing the outcomes of the practice. Defined in this way, best practice is anything that works, in full or in part, and that can be useful in providing lessons learned. The second approach is that used by UNAIDS and adopted here. That is, a thorough analysis of the practice is carried out using specific, established criteria that cover strengths and weaknesses as well as successes and failures. Five criteria are applied: effectiveness, efficiency, relevance, ethical soundness, and sustainability. Candidate best practices should meet one or more of the criteria but not necessarily all. It is to be hoped that as time goes by and the number of candidate practices increases, more of them will be able to meet more of the criteria.

The objectives of best practice are to:

- strengthen capacity to identify, document, exchange, promote, use and adapt best practice as lessons learned within a country or region as a means to expand the national response to HIV/AIDS;
- promote the application of the best practice process for policy and strategy definition and formulation; and
- collect, produce, disseminate and promote information on best practice.

The sources for best practices described here include documents from UNAIDS and its cosponsors, journals, project reports, nominations by regional networks, and recommendations of experts in countries around the world. Not all practices nominated are recorded here, whether because of space limitations or insufficient detail. The process is ongoing, and we welcome your comments for modifications and for additions.

As in the case of UNAIDS best practices, some of the practices listed here have been formally evaluated, but most have not. This has to do with the reality of the HIV/AIDS pandemic: the majority of practices detailed here are oriented toward action; they were put in place by front-line workers, and there was neither time nor budget for formal evaluation. Because of this, many of the practices do not include evaluation information. In all cases, however, outcomes and lessons learned provide information on outputs and impacts.

4.2 Examples of Best Practice in Policy, Mobilization and Development of a National Strategy[43]

The lessons learned in the first two decades of the HIV/AIDS epidemic allow us to identify some common features of effective HIV prevention approaches:[44]

- Providing information is not enough.
- Understanding environmental and contextual factors is critical to enabling people to change behaviour.
- Models of behaviour change must include vulnerability as well as risk.
- Effective prevention works at multiple levels:
  - superstructural: large-scale social and political environment,
  - structural: laws and policies,
  - environmental: local environment and norms, and
  - individual: individual's decisions, skills.

Effective prevention programs understand and address people's behaviour, address vulnerability as well as risk, involve and grow out of the community, and involve multiple partners and prevention components.

Effective prevention programs understand and address people's behaviour, address vulnerability as well as risk, involve and grow out of the community, and involve multiple partners and prevention components. Real prevention is complex, effective prevention takes time, prevention efforts must begin before HIV prevalence grows to measurable levels if they hope to prevent an epidemic, and prevention must take a long-term perspective, since the epidemic will be with us for a while. The most effective efforts at HIV prevention have been those designed to meet the needs of a particular community and that address these needs in order of priority. Such policies and strategies are based on input from all relevant members of the community, especially those at most risk. This strategic planning process involves assessment, policy development, planning, implementation and evaluation and has been clearly laid out in a series of documents by UNAIDS.[45]

Effective approaches to HIV/AIDS and injection drug use need to include a range of public health responses, as detailed in The Ottawa Charter of Health Promotion (WHO 1986). It states that five activities must be undertaken together for effective promotion of public health:[46]

- Promoting health through public policy.
- Creating a supportive environment.
- Reorienting health services.
- Strengthening community action.
- Developing personal skills: While the Ottawa Charter places great emphasis on the social and community aspects of public health, individuals also play a major role in looking after their own health. In developing personal skills for HIV prevention among injecting drug users, four main groups need to be targeted:[47]
  - injecting drug users,
  - sexual partners, families and friends of IDUs,

- doctors and other health care workers (psychologists, nurses, social workers, etc.), and
- outreach workers and peer educators.

The United Nations Drug Control Program also notes the importance of public health approaches to drug control, especially in countries seriously affected by HIV/AIDS among drug users.[48] UN agencies and WHO recommend that these public health measures be carried out in a framework of harm reduction policies, strategies and activities that aim to limit or reduce the nature and extent of adverse consequences of drug use, including

- health – including HIV and other communicable disease transmission,
- social – including social effects of (usually) young IDUs dying of AIDS,
- economic – including costs of treating people with HIV/AIDS, and
- legal – including detection, arrest and imprisonment of IDUs.

The harm reduction approach is based on a realistic acknowledgement that no known intervention will completely eliminate drug use or drug-related problems in any city, community or country.[49]

Key features of an effective harm reduction policy include flexibility, a health promotion approach, non-repressive legislation, law enforcement based on community policing, and reflection of the views of the broadest range of local partners.[50] Truly effective approaches also ensure adequate coverage of the population and sustainability of the project. While small, isolated prevention efforts might slow the pace of the epidemic, this does not work for long. For example, needle exchange programs began in Nepal as early as 1991; by 1995, some researchers were claiming that the interventions had averted an HIV epidemic among drug users. But by 1997, almost half the IDUs tested in Kathmandu were HIV-positive. The needle exchange program was too limited and too localized to have a lasting impact. A similar situation has occurred in Vancouver, Canada. Countries that have kept prevalence low among IDUs have wide coverage of needle and syringe availability, as in Australia, England and Wales.

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Policy is a set of guiding principles for the harm reduction process that has been developed using the best available information and the participation and support of as many stakeholders as possible.[51] The way policy is implemented is directed by the strategic plan. A comprehensive and multifaceted strategic plan for HIV prevention among IDUs could include primary health care, AIDS education, life skills training, distribution of condoms and safer sex information, voluntary and confidential counselling and HIV testing, access to clean needles and syringes, education for law enforcement personnel on the risks of punitive responses, and referral of IDUs to a variety of treatment and health care options.

The objectives and desired outcomes of a strategic plan should be achievable, accessible, and affordable. The basic elements of a strategic plan are as follows:[52]

- Mission statement: the policy or overall philosophy, behind the project/plan.
- Aims: the desired effects or impacts of the project/plan.
- Objectives: the tangible, measurable results of the work.
- Strategies: the steps required to achieve the objectives, involving what, how, who, when, how much.

Countries that have introduced harm reduction policies and programs include the poorest as well as the richest, as shown by the examples presented here. Regardless of wealth or 'development' status, nearly all countries saw strong opposition to the introduction and maintenance of harm reduction projects. It has become increasingly difficult in Australia, for example, to find locations for new NSEPs or methadone programs. In the United States, the introduction of NSEPs has been fiercely resisted in many parts of the country. Federal funding for` NSEPs has been prohibited, although such funding is essential if programs are to be provided on a scale commensurate with the growth of HIV infection among IDUs. Consequently, the HIV epidemic in the United States continues to spread among and from IDUs.[53]

Harm reduction policies and programs have received increased support at the international level in the past few years. Several recent reports and consultations have endorsed HIV prevention policies and programs for injecting drug users, thereby adding to the credibility of harm reduction:

- The UN Joint Document on HIV Prevention among Drug Abusers, Annex to the Report of 8th Session of the ACC Subcommittee on Drug Control, 28-29 September 2000, took a harm reduction stance.
- The Declaration of Commitment on HIV/AIDS, United Nations General Assembly Special Session on HIV/AIDS, June 2001, called for harm reduction measures.
- The Asia Pacific Leadership Forum is carrying out a program to improve key decision makers' knowledge and understanding of HIV/AIDS and its impact on different sectors of society.
- Members of the Commonwealth of Independent States have developed a regional program of urgent response to the HIV/AIDS epidemic that government leaders endorsed in May 2002.
- Additional resources are being provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria, which has approved an initial round of US$616 million, about two-thirds of which is for AIDS. The question is how much will be directed to harm reduction.

The examples included here illustrate some common challenges in developing strategies for harm reduction. These include the following:

Legal basis: A national strategy must be built on a legal framework that can be adapted to allow a comprehensive response.
Awareness: A low level of public awareness about the problems of drug use and HIV/AIDS, together with inadequate knowledge about prevention methods, often leads to prejudice against drug users. Misunderstandings and stereotyping about specific preventive interventions, such as syringe exchange, must be overcome. Understanding of drug use as a social phenomenon, not purely a medical phenomenon, must be encouraged and consensus on HIV/AIDS prevention reached among the general population, as well as among professions.

Multisectoral approach: There must be co-operation among all sectors of society with regard to preventing HIV/AIDS infection among drug users. Good collaboration is particularly important between the health and law enforcement sectors.
Local responsibilities: More responsibilities in terms of decision making and funding should be delegated and decentralized to the local level.
Assessment: The extent of drug use and f risk behaviour related to HIV/AIDS is largely unknown in many cases. Research to assess and monitor changes in risk behaviour is needed to inform national strategy development over time.

The five key objectives in overcoming barriers to harm reduction approaches can be summarized as follows:[54]

- Developing and implementing a comprehensive strategy for advocacy for neighbourhoods, cities, states, provinces, counties and regions.
- Raising and maintaining a high level of awareness of HIV/IDU issues and the effectiveness of HIV prevention.
- Developing and resourcing appropriate skills.
- Expanding the range, capacity and quality of drug treatment.
- Clarifying the meaning of harm reduction.

Prevention workers have identified a number of strategies to overcome barriers to HIV prevention among IDUs and to ensure that community support and political support are in place:[55]

- Forge strategic alliances.
- Put a human face on injecting drug use.
- Define economic costs and benefits of alternative responses to control HIV among drug users.
- Develop and implement harm reduction programs, pilot projects and studies.
- Build national capacity.
- Document and disseminate best practice methods and create standards for harm reduction and other treatment programs.
- Identify small and specific groups as targets for advocacy, including politicians, health bureaucrats, neighbours (people living near a harm reduction program), law enforcement.
- Develop specific advocacy tools to influence key players.
- Engage with the media.
- Fundraising.
- Build local, national and regional networks.

In theory, the process of developing a strategy for HIV prevention among drug users should first build on consensus achieved among the various stakeholders, then establish co-operative structures and allocate responsibilities and funds, and finally take steps to increase professional skills and service capacity. In practice, these three areas are often dealt with simultaneously. In particular in countries where local HIV epidemics have developed over a short period, preventive activities were begun while the national strategy was still in preparation. Consequently, the

process of political mobilization, strategy building and policy development at the national level got under way when HIV preventive interventions are already being implemented in some cities. The absence of national policies and relevant legislation can, however, jeopardize and delay local responses.[56]

In countries with high HIV prevalence, the severity of the situation may help to mobilize political and community action. Although high-prevalence situations contribute to persistent HIV incidence, with appropriate policies and programs it still may be possible to avert an epidemic, as demonstrated in cities such as Edinburgh and New York. For this to happen, public policies must support appropriate interventions.[57] The New York data suggest that 50% or greater direct participation in syringe exchange programs may be sufficient, although secondary exchange may also be required. HIV testing and counselling may need to reach a high percentage of HIV-positive IDUs (70% and above) to reduce transmission behaviours substantially on a population level. In high-prevalence settings it is especially important to ensure coverage, access, quality, co-ordination and collaboration, reduction of stigma, and tailoring of services and programs for HIV prevention, as detailed above.

Provision of antiretroviral therapy should also be given high priority, not just as an issue of care but also as a prevention issue, since this reduces detectable virus levels and may therefore reduce the risk of HIV transmission. Provision of treatment should obviously be a key priority in both low- and high-prevalence settings as a matter of good ethical practice as well as care and prevention.

Political mobilization with regard to HIV prevention among IDUs is considerably more difficult to achieve in low-prevalence contexts. In countries with low prevalence, it remains a major challenge to draw attention to the problem of HIV infection among IDUs and to gain consensus and support for measures to prevent it. Yet when prevalence is low is the best time to introduce harm reduction strategies. Some of the most heavily populated countries (China, India, Bangladesh, Indonesia) currently report population prevalence of less than 1%. In China and India, and possibly elsewhere, overall low prevalence masks substantial sub-epidemics. Similarly, in Central and Eastern Europe and Central Asia, HIV prevalence is rising rapidly among IDUs, but overall population prevalence remains low. Several organizations working in low-prevalence countries (UNAIDS, USAID, FHI, Impact) have compiled guidelines for establishing effective prevention strategies in low-prevalence settings.[58] They identify some of the most significant challenges facing low-prevalence countries with regard to policy formulation, planning and implementation, and individual behaviour change:

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- At the policy level, low HIV prevalence typically means that governments assign a low priority to HIV prevention.
- Low HIV prevalence can be taken to support the mistaken claim that risk behaviours do not occur in the country.
- At the prevention planning level, low HIV prevalence often translates into lack of direction in the prevention response; vulnerable sub-populations may be ignored because of negative

societal attitudes. Even with appropriate interventions, changing behaviours in low-prevalence settings is difficult because of individuals' perception that the risk is low.

Clearly the 'low-prevalence' label is problematic and requires change; all countries have had low prevalence at some point. While current HIV prevalence helps in planning surveillance and interventions efficiently, it does not predict the future of the epidemic. Several factors determine whether a country's low prevalence of HIV will remain low:

- Levels and distribution of risk in a population.
- Sizes of vulnerable sub-populations.
- Timing of the introduction of HIV into vulnerable sub-populations.
- Epidemiological co-factors such as other sexually transmitted infections, frequency and type of behaviours practised, and circumcision.
- Prevention efficacy and coverage in critical at-risk and vulnerable populations.
- Changing behaviours.

FHI and UNAIDS point out that it has been recognized only recently that the design of HIV surveillance systems needs to be tailored to the state of the epidemic. Low-prevalence settings require focused monitoring in key population sub-groups with higher levels of risk, as opposed to extensive coverage of the general population. This advice emerged from the observation that nearly all HIV epidemics in industrialized and developing countries started initially and took hold in one or more particularly vulnerable sub-populations before spreading to the general population. This observation raises several points relevant to policy and planning:

- HIV surveillance alone is insufficient, especially in low-prevalence countries.
- Behavioural data are an essential component of surveillance in low-prevalence countries: data should be used to provide an understanding of behavioural patterns and the distribution of risk in the population and feed into the design, direction and evaluation of prevention activities.
- Behaviour is the primary early warning system in low-prevalence countries.

Work in low-prevalence areas has led to the formulation of a prevention strategy for low-prevalence countries.[59] Where contracting HIV is not yet a risk to the general population, targeted interventions need to be developed and implemented in collaboration with the target community. The essential steps in creating an effective strategy are as follows:

- Determine the distribution of risk in the local setting. To apply the concept of 'focused prevention', identifiable sub-populations – where risk behaviour is most concentrated and that are most vulnerable – need to be identified on a country, state or provincial basis.
- Undertake strategic planning for each key sub-population.
- Advocate for resources and involvement.
- As partners and resources are identified, begin parallel pilot activities in each key sub-population, including lower-risk sub-populations.
- Starting with the more vulnerable sub-populations, build capacity and scale up to get good coverage once the effectiveness of a prevention approach has been demonstrated.

- As parallel prevention efforts in more vulnerable sub-populations obtain good coverage, steadily expand prevention efforts outward to those with lower risk/vulnerability.
- Devote some resources to address more disseminated risk, stigma and discrimination and to promote mainstreaming of HIV/AIDS activities.
- Institute monitoring and evaluation of behaviour change in key sub-populations.
- Work closely with key at-risk and vulnerable sub-populations.
- Build a long-term risk and vulnerability program.
- Start early and work steadily.

In many cases, as shown in several of the examples presented below, the decision to implement innovative HIV prevention strategies was the result of pragmatic considerations in the face of a locally emerging epidemic. Implementation usually depends on the availability of external funding. In many cases starting projects also requires alliances between international bodies and national governments, local structures and international donors. Local experience is a more understandable and more credible form of input for national and regional audiences than is experience from outside the region.

In developing policies on preventing HIV/AIDS among injecting drug users, certain key human rights principles should be followed:[60]

- The right to the highest attainable standard of physical and mental health.
- The right to information and education.
- The right to privacy.
- The right to share in scientific advances and their benefits.

A comprehensive policy for reducing HIV among IDUs involves all the components described above and must still complement national HIV/AIDS and illicit drug policies.[61] Policy must be based on input from current and former IDUs and should integrate supply, demand and harm reduction. Supply reduction has been found to be an effective harm reduction approach only when effective demand reduction measures are in place. HIV prevention strategies among IDUs are developed and implemented in the context of efforts to decrease drug use, including law enforcement, education and drug treatment, while meeting other needs of IDUs, such as primary health and human rights. Effective drug education, both in and out of school, can, with the appropriate approaches, decrease experimentation with drugs, mostly among those least vulnerable or least likely to develop problematic or harmful drug use. At the same time, it can ensure that those who do experiment have the knowledge to prevent many of the harms associated with drugs, especially HIV exposure. Effective drug education approaches are those that are integrated with 'whole-of-life' approaches and that tackle wider social, economic, education, legislation and political issues.[62] People who are most vulnerable to the impact of poverty, poor health, lack of education and employment are also those most vulnerable to harmful drug use.

Law enforcement is an important component of a harm reduction approach. Police and customs can continue to target major drug traffickers while practising a public health approach to drug users. Prevention approaches are most successful when laws and police practices facilitate outreach work and service provision to IDUs.[63] In some countries, including the UK and the

Netherlands, police practise harm reduction by referring drug users to treatment and other services such as needle exchange (as detailed below). The experience of establishing and running harm reduction programs in many countries around the world has confirmed the vital importance of gaining – and maintaining – support from local authorities and communities.[64] Research has shown that such programs are most likely to work effectively if they are well managed, sufficiently financed, free from police harassment, and linked with health and other social services.[65] Many techniques are used to ensure that the local community accepts the program's services and, eventually, supports the program's work.[66] In almost every country, however, there are serious difficulties between the operation of harm reduction programs and law enforcement activities directed to preventing drug selling and buying and, in some cases, drug possession and use. This is an area given little research attention, despite its obvious importance. The research that has been done suggests that hostile police activities can have devastating effects on a program's work: for example, client contacts fell by 40% in an Australian NSEP one month after a sustained police operation targeting drug users in the local area around the fixed-site NSEP.[67] Harm reduction programs can have an important impact on police behaviour toward IDUs. For example, an advocacy project by the SHAKTI NSEP in Dhaka, Bangladesh, distributed orientation and advocacy materials to local police. Before the project, 84% of NSEP clients had been arrested by the police (this fell to 12% after the project), and assaults on clients by police fell from 56% before the project to 30% after.[68]

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Social factors such as housing and employment, which lie outside the usual purview of harm reduction programs, are also being seen as increasingly important.[69] One study of IDUs who stopped injecting in Montreal (almost 20% of the 901 IDUs studied) found that the most important factors in ceasing injecting – either to switch to non-injecting drug use or to cease drug use – were the IDU's belief that he/she could change behaviour, engaging in fewer risky practices (such as needle sharing and unsafe sex), and stable housing. Recent involvement in drug treatment was not associated with ceasing injecting.[70] For a truly effective response to HIV, care and support, involving community participation, should be provided to IDUs living with HIV and to their families, including access to affordable clinical and home-based primary health care, effective HIV prevention interventions, essential legal and social services, psychosocial support and counselling services.[71]

While harm reduction programs often are established to prevent HIV transmission among IDUs, they now play an increasing role in care and support of IDUs living with HIV/AIDS. In areas where a substantial proportion of IDUs are HIV-positive, harm reduction programs are usually the only agencies that IDUs will turn to for care and support to treat HIV and/or other illnesses. In a global review of literature on care and support of IDUs living with HIV/AIDS, Burrows suggests that the Continuum of Care concept developed by World Health Organization and UNAIDS (WHO 1995) to care for people living with HIV/AIDS be adapted to meet the specific needs of IDUs living with HIV/AIDS.[72] This continuum of care would involve existing health and social institutions as well as a group of new services (possibly offered by NGOs) in a comprehensive range of care services, all linked by discharge planning and referral processes. Existing institutions that could be involved in this continuum of care include the following:

- AIDS Centres (where they exist).
- Infectious diseases hospitals, especially AIDS wards (where they exist).
- General hospitals, polyclinics and ambulatory clinics.
- Narcological hospitals and dispensaries.
- Needle and syringe exchange, outreach and peer education programs (where they exist).
- HIV/AIDS-focused NGOs, especially PLWHA groups (where they exist).
- Sexually transmitted infection clinics.
- Social services (such as social services for youth).
- Ambulance services.

The following descriptions, organized by region and country, illustrate best practices in policy, mobilization and development of a national strategy on harm reduction, HIV/AIDS and IDU. They were chosen because they demonstrate how the key features of effective approaches listed above have been incorporated into policies and strategies that are sensitive to the needs of a particular community or culture.

Central and Eastern Europe and Central Asia

Belarus
Co-ordinating HIV/AIDS prevention on a national basis.[73]
Starting year: 1996
Contact person: Valery Filonov, Chairman, Interdepartmental Council on HIV and STI prevention.
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A steering committee, with representatives of the ministries of public health, education, youth, and culture in decision-making positions, co-ordinates the activities of the Interdepartmental Council. The National AIDS Prevention Centre in Belarus, along with UNAIDS, designs and co-ordinates awareness raising campaigns, conducts rapid assessment studies among drug users, and provides training for specialists in intervention projects. Involvement of the NGO sector is promoted by the national strategy, but financial support for the work of NGOs comes mainly from international donors.

Between 1987 and the end of 1995, 113 cases of HIV were registered in Belarus. In 1996 this number jumped to 1,134, with most new infections being among IDUs in Svetlogorsk. An emergency meeting organized by the city and attended by local and national groups and UN representatives was held to determine how to limit the spread of the HIV epidemic. The main results were decisions to implement a strategy to reduce the consequences of the non-medical use of drugs by IDUs; develop a pilot project for Svetlogorsk; and urgently expand co-operation among ministries and other bodies to deal with HIV/AIDS issues on an intersectoral basis. Interdepartmental co-operation built on groundwork laid in the early 1990s, with the adoption of the first national action plan on AIDS prevention in 1993. Expanded co-operation was formalized in 1996 as the Interdepartmental Council on HIV and STI Prevention of Belarus. The

council includes representatives of 13 ministries and meets every six months. Its main task is to co-ordinate implementation of the national HIV/AIDS strategy. Other tasks include studying trends and risks, public information campaigns, improved social protection of people living with HIV/AIDS, and development of international co-operation.

Preliminary results suggest that the approach has increased co-operation between agencies, increased knowledge of risks and prevention, and decreased HIV prevalence among the target group.

Hungary
Addressing HIV/AIDS prevention among injecting drug users within the framework of the national strategy.[74]
Starting year: 2000
Contact person: Jozsef Racz, MD, Budapest
E-mail: racj@mail.matav.hu

In June 2000, the government of Hungary adopted its first National Strategy to Combat the Drug Problem. Preparation involved wide consultation with professionals, civil society and the church. Harm reduction is one of the main principles of the strategy, which calls for substantial development of outreach and low-threshold services, including needle exchange and methadone treatment. This required extensive discussions: because of the low prevalence of HIV, many thought that further action was not needed, despite widespread risk behaviours among IDUs. Increasing levels of hepatitis C infections among IDUs have been found recently, reinforcing the need for harm reduction.

The strategy has provided support for the few services for drug users in Hungary and provides a basis for increasing the number, capacity, accessibility and effectiveness of such services. It also encourages co-operation between health services and law enforcement and ensures that more IDUs will gain access to treatment and care. Two main factors were important in gaining the broad support needed to incorporate harm reduction principles into the new strategy: international support and wide discussion.

Kazakhstan
Developing HIV/AIDS prevention in a Central Asian country: promotion of an effective multisectoral response to HIV/AIDS and drug use in Karaganda oblast and nationwide.
Starting year: 1996
Contact person: Alexander Kosshukin
E-mail: registry@un.almaty or alexander.kosshukin@undp.org

The project is a joint initiative of the government of Kazakhstan and UN agencies. It is implemented by the AIDS centres of Karaganda region and the town of Temirtau. Funding was received from the government, UNDP, UNAIDS, UNDCP, UNFPA, UNESCO and the organization Karmet. The project is aimed at promoting understanding of and the capacity to respond to the HIV epidemic and drug use on the part of authorities, NGOs and the public. The goal is to reverse HIV and drug use trends in the pilot town of Temirtau and to replicate the project throughout the nation.

Rates of HIV were very low until 1996, when explosive spread was registered in Temirtau and surrounding areas, a one-company town in the centre of the country that had been in economic decline since the 1990s. Conditions conducive to the spread of HIV were evident: severe social and economic dislocation, breakdown of health services, denial of the HIV pandemic, rapidly rising STI rates, rapidly increasing injection drug use, punitive measures taken against sex workers and drug users, inadequate political commitment, and lack of financial resources. The main activities undertaken to address this included the following:

- increasing information, education and communication,
- strengthening an effective response,
- monitoring, evaluation and nationwide replication,
- outcome/output and evaluation finding,
- establishment of cross-sectoral collaboration,
- improvement of legislative and regulatory environment,
- increased professional capacities among health professionals,
- better and more education materials for target groups and general population, and
- increased access to health services for IDUs.

As a result, surveillance studies show that the spread of HIV among IDUs in Temirtau has slowed markedly. The main task now is to increase the project's coverage, to ensure sustainability and to establish substitution treatment. The lessons learned from the Temirtau pilot project and their wide dissemination through a sub-regional newsletter were instrumental in motivating policy makers and donor organizations to replicate such interventions not only in Kazakhstan but also in other countries of Central Asia.

Poland
Facilitating access to sterile injecting equipment as part of the national strategy to prevent the spread of infections among injecting drug users.[75]
Starting year: 1989
Contact person: Zenon Kulka and Jacek Moskalewicz
E-mail: mosklaew@ipin.ede.pl

In Poland, the history of drug use as a social problem dates back to the late 1960s. The problem was later fuelled by the introduction of kompot (Polish poppy extract) in the 1970s. In the early 1980s, there were many IDUs in Poland but poor access to sterile equipment. The first case of an IDU infected with HIV was recorded in 1988. Poland was the first country in the region to set up a comprehensive official policy for HIV prevention among IDUs very soon after the registration of this first case. The steps involved in setting up the strategy were as follows:

- Development of a comprehensive policy to prevent the rapid spread of infections among IDUs.
- Implementation of the policy, including establishment of syringe exchange programs.
- Evaluation of the strategy, identification of obstacles and suggestions for change.

Regions with higher rates of syringe distribution were found to have lower rates of HIV infection, even when the number of drug users was taken into account. The impact of the strategy went beyond prevalence, however, in that it demonstrated that the distribution of sterile equipment might prevent marginalization of drug users, provide opportunities for direct contacts and education, and increase the likelihood of treatment. The relative success of the Polish policy can be attributed to:

- decentralization of action and funds,
- involvement of public health agencies and NGOs, and
- co-operation with other sectors, such as police and municipalities.

Ukraine
Community mobilization to bring about HIV/AIDS prevention among injecting drug users.[76]
Starting year: 1996
Contact person: Lidia Andrushchak, Lev Khodakevich, Yuri Kobyshcha
E-mail: landr@un.kiev.ua

In 1995, multiple HIV epidemics among IDUs in the Ukraine were detected in the southern regions and in the Crimea; one year later, outbreaks were reported in all regions. A major challenge at the time was that national legislation did not allow programs adequately to address the spread of HIV among IDUs. Following a workshop in 1995 to share international experience, a process to amend the legislation was started, resulting in a change in the law in 1998. This created favourable conditions for a more comprehensive harm reduction strategy (see also Belarus and Brazil). Funding for these initial projects came from the Open Society Institute, UNAIDS, the government of Germany and others.

A pilot project on HIV prevention among IDUs was started in Odessa in 1996 and later expanded to deal with epidemics in other parts of the country. At a meeting of all regions in 1997, strategies to prevent the spread of HIV were discussed, and harm reduction was endorsed. Six other cities began harm reduction projects with local partners after the meeting. As a result, a harm reduction strategy has been integrated into local plans for AIDS prevention. Police are important partners in this process. UNAIDS worked with government and NGOs to broaden advocacy and to provide information on international experience, for example with substitution therapy. In 1997, a prevention program for HIV/AIDS in prison was begun. One success of the strategy was that the epidemic came to be viewed as a multifaceted social problem. Law reform was key to achieving attitudinal change. A network of services has now been established in 17 cities. The concern for the future is adequate coverage and sustainability.

Kyrgystan[77]
Kyrgystan is likely to become the first of the former Soviet republics to scale up a variety of harm reduction services, including methadone maintenance and needle exchange. The need to do so is underlined by the fact that 99% of the 389 registered cases of HIV infection are among IDUs. Kyrgystan may become one of the few countries to have made harm reduction part of national policy early enough in the epidemic to keep prevalence low. Kyrgystan has successfully piloted needle exchange and substitution treatment, making it a model for other countries in the region and beyond. With funding from a recently approved Global Fund proposal and from the

UK Department for International Development, these will be scaled up throughout the country. Kyrgyz officials aim to offer harm reduction services to a minimum of 60% of the drug-using population.

One of the first steps that Kyrgystan took toward changing policy on HIV and drug use was to create a multisectoral committee with representatives from various government ministries. A peer education approach was applied to influencing policy makers. The approach focuses on evidence and evaluation. The decision to scale up harm reduction is a result of the combination of bottom-up NGO efforts and a top-down centralized government approach. International organizations and donors have expressed interest in supporting east-east exchange with countries such as Kyrgystan as an example.

Western Europe

United Kingdom
Averting an HIV/AIDS epidemic among injecting drug users at the local and national level.
Starting year: 1985

The UK approach focuses on a combination of needle and syringe exchange programs, prescribing of drugs – including stimulants, oral and injectable methadone, injectable heroin and heroin reefers for those who have been able to give up injecting but cannot switch immediately to oral prescriptions[78] – education and outreach programs, and collaboration between the police and health care providers. The Mersey model of harm reduction, discussed below, is an example of the application of this approach. Physicians in the UK have been permitted by law since the 1920s to prescribe any drug except opium, following the conclusion of a committee of physicians that "When...every effort possible in the circumstances has been made, and made unsuccessfully, to bring the patient to a condition in which he is independent of the drug, it may...become justifiable in certain cases to order regularly the minimum dose which has been found necessary, either in order to avoid serious withdrawal symptoms, or to keep the patient in a condition in which he can lead a useful life."[79] More recently, the British Advisory Council on the Misuse of Drugs stated: "We have no hesitation in concluding that the spread of HIV is a greater danger to individual and public health than drug misuse."[80] The Council advised drug services to modify their policies to make contact with the maximum number of drug users in order to minimize HIV risk behaviour, and to proceed according to the hierarchy of objectives for behaviour change, starting with the cessation of sharing of injection equipment, followed by a switch to non-injection drug use, a reduction in drug use and, ultimately, cessation of drug use.[81]

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The Mersey region has the second highest rate of notified addicts of any Regional Health Authority in the UK. It was possible to establish the Mersey model of harm reduction because of three important factors: the ability of physicians to prescribe drugs, including heroin; the early establishment of syringe exchanges; and the co-operation of the local police. The model is based on the principle that even if you can't 'cure' dependence, you can still care for drug users, providing information about safe injecting, injecting equipment, injectable opiates and other

drugs to registered users. Most clients receive oral methadone, but some receive injectable methadone, others injectable heroin and a few receive stimulants such as amphetamine or cocaine. The available evidence suggests that this approach has been very effective, with extremely low levels of HIV infection among IDUs in Merseyside – less than 1%. There have also been significant decreases in property crime. Although no experimental trials or controlled studies have been conducted in Merseyside, and the data are considered too unreliable for purposes of setting policy in other countries, the Mersey model has been applied successfully in many parts of the UK, and average national HIV prevalence levels among IDUs are just 1%.[82]

Switzerland
Development of a national harm reduction policy.
Starting year: 1992

The Swiss approach has included needle and syringe exchange schemes, methadone and heroin maintenance programs, and outdoor and indoor tolerance zones. Until 1992, when the national government took over some responsibility, individual cantons were responsible for drug policy and programs. Current drug policy is based on prevention of drug use and drug-related problems, care of IDUs and control of related crimes, such as trafficking and money laundering. In 1997, the government published the results of a national experiment with prescribing heroin and other drugs to users at eight sites, to determine whether this approach would reduce crime and the risk of acquiring and spreading HIV.[83] A total of 16 treatment centres and 1,146 patients were studied and the following conclusions were drawn: Heroin-assisted treatment is useful for the designated target group and can be carried out with sufficient safety. As a result of retention rates that are above average, significant improvements can be obtained in terms of health and lifestyle. These persist beyond the end of the treatment. There was a significant decrease in illegal drug use and criminal activities. Because heroin was one part of a comprehensive program that included health care, therapy and social assistance, the actual contribution of heroin to the overall outcome cannot be determined from the Swiss experiment.[84] (Studies in the Netherlands and other countries are expected to address this specific question better.) Following this success, the Swiss government extended the heroin prescribing program.

Expanding methadone programs, information campaigns, and needle and syringe exchanges (through pharmacies, dispensing machines and in all prisons) also appears to have had a positive impact on HIV risk behaviour among IDUs. In Geneva there has been a decrease in the incidence and prevalence of HIV, hepatitis B and hepatitis C infection among drug users on methadone maintenance over the past eight years. The prevalence of HIV infection among subjects who entered treatment before 1988 was 38%, compared with 4.5% among those who entered treatment after 1993.[85] Similarly, the prevalence of HBV and HCV declined from 80.5% to 20.1% and 91.6% to 29.8% respectively during the same period. Figures for HIV infection in IDUs continue to decline overall, and new injectors are rarely infected with HIV. The incidence of new HIV infections among drug users has decreased significantly (from more than 60% in 1986 to 15% in 1997). The current prevalence among those entering treatment is less than 2%. However, this may change with the new cocaine epidemic. For example, after a decrease in the number of people attending needle exchange schemes in the last 2-3 years, an increase has been observed since the beginning of 1999, linked with a rapid rise in injection of cocaine.

The first Swiss attempt to establish an open tolerance zone, Needle Park in Zurich, became unmanageable, as the area attracted large numbers of users from outside the city, as well as from outside the country. Drug-related harms increased, and the zone was closed in 1992. More recently, 'drug rooms' have been established in several cities. Evaluation of the first three of these facilities after one year of operation showed that they had been effective in reducing the risk of HIV and drug overdose.[86] Further and more thorough evaluation is needed before definite conclusions can be drawn about the efficacy of the sites.

The Netherlands
A multifaceted approach to reducing drug-related harms.
Starting year: 1984

The Netherlands was one of the first countries to implement harm reduction programs, recognizing that reducing harm means providing medical and social care in order to avoid some of the more harmful consequences of injection drug use. The Dutch approach is pragmatic and non-moralistic, encompassing needle exchange, information and education, a law enforcement focus on traffickers rather than users, methadone prescribing, and a tolerance area policy. Needle exchange began in 1984 and has been widely adopted. Police stations in Amsterdam provide clean needles on an exchange basis – this is possible because of police support for harm reduction. Agencies began methadone prescribing programs in the 1970s, expanding and liberalizing them in the 1980s to deal with hepatitis, HIV, drug-related crime and other harms. This 'low threshold program' approach aims to contact heroin users and to regulate or stabilize heroin use.[87] One innovative approach is the methadone bus project in Amsterdam, where mobile methadone clinics cruise the city, stopping at different locations daily. Oral methadone is consumed on the spot, and clean needles and condoms are also available.[88] The Amsterdam Municipal Health Service has a small number of registered users on injectable methadone or morphine.[89] The number of people entering drug-free treatment and resocialization programs in Amsterdam has more than doubled since the introduction of the methadone bus project and needle exchange schemes; one of the main reasons for success is that they do not require users to provide urine samples or to have contact with counsellors.

Like Switzerland, the Netherlands has experimented with heroin prescribing. The Netherlands study had the advantage of being run as a randomized trial, producing results that are more scientifically robust. The trial – a multi-centre study with eight treatment units in six cities – began in July 1998 and was run in two phases. The aim was to determine the efficacy of methadone alone versus methadone plus heroin. In the trial, 625 chronic treatment-resistant heroin users then enrolled in methadone maintenance programs were offered injectable or inhalable heroin (in combination with oral methadone) three times a day, seven days a week, for a period of six to twelve months. Few medical complications were observed, and study participants were very compliant with the treatment regimen and research requirements. The trial showed the benefits of heroin as a prescribing option.[90] The Dutch approach has reduced the risks and harms both to users and to the community. The average age of injection drug users has risen, and the incidence of HIV has declined since the mid-1980s.[91]

Germany
Moving policy change from the city to the national level.
Starting date: 1992

Most large German cities follow a policy of harm reduction. This covers law enforcement, methadone maintenance, needle exchange and, more recently, the establishment of 'safe injection rooms'. Several cities are involved in trials of heroin prescription to users; the trials have the support of the majority of the country's police chiefs.[92] The Frankfurt Resolution concludes that the attempt to eliminate drug consumption has failed, that criminal prosecution should focus on illegal drug traffic, and that harm reduction policies should be pursued to permit drug users to live a life of dignity.[93] In Hamburg, for example, local authorities have adopted a policy of *de facto* decriminalization of possession of small amounts of cocaine (up to 5 g) and heroin (up to 1 g).[94] The policy shift to harm reduction is reflected in co-operation between police, health officials and drug user groups working together to help drugs users obtain access to social services. The first pilot methadone scheme was launched in 1987 and later expanded from five cities to eight. Assessment after five years showed a dramatic drop in heroin use (over 90% of patients totally discontinued illicit narcotic consumption), a reduction in prostitution, a decrease in fatalities and improvements in health.[95] Methadone treatment has expanded to cover over 5,000 clients, and more than 2,000 physicians have received approval to prescribe methadone.[96]

Frankfurt is an example of a city with a comprehensive harm reduction approach.[97] Since 1992, it has had an accessible network of services for drug users, including day or night rest areas, needle exchange programs, and safe injection rooms or 'health rooms' where heroin users can inject themselves in a clean, stress-free environment.[98] Frankfurt, like Amsterdam, also distributes methadone through mobile clinics. The police, city officials and administrators, and doctors collaborate through weekly meetings and, although the police have maintained their policy of apprehending dealers, they have initiated a new policy of tolerating an open scene within a clearly defined area of one of the parks. This policy makes drug scenes more accessible and relatively static, enabling health and social workers to reach users with other services. While not all problems have been resolved, the Frankfurt approach has led to a significant reduction in the number of homeless drug users, drug-related crime and violence, and drug-related deaths.[99] The prevalence and incidence of HIV have declined in a number of cities since the introduction of harm reduction measures.[100] The approach has succeeded in redressing the imbalance between repression and health and social measures and in improving the delivery and uptake of services.[101]

Latin America

Brazil
Changing drug laws to ensure effective prevention of HIV/AIDS among drug users.
Starting year: 1989

Brazilian narcotics law makes any assistance program dealing with drugs a crime. Despite the law and the government's war on drugs policy, the Brazilian Harm Reduction Association, with support from the Latin American Harm Reduction Network, has been able to mobilize support for legislation allowing harm reduction measures by

- ensuring public and political awareness of the extent of the problem of drug-related HIV through effective use of sound epidemiological data;
- having a clear understanding of existing legislation and obtaining support from influential legal professionals;
- promoting harm reduction as a public health strategy;
- identifying potential allies in influencing public opinion, such as AIDS NGOs; and
- educating and lobbying decision makers.

In the state of São Paulo, a law legalizing harm reduction programs was approved in 1997; it is the only state to have reported a reduction in cases of HIV/AIDS. Initial efforts to implement harm reduction programs, which began in 1989 in the city of Santos and were followed by the development of a national harm reduction program, ran into opposition under the Brazilian penal code, because some officials saw harm reduction as encouraging the use of drugs. In 1994, however, the National Narcotic Council, a federal government agency, approved the implementation of a needle exchange project, recognizing the need to reduce HIV among IDUs as a public health issue. The project expanded to 14 other Brazilian cities and was approved by the States Narcotic Council in 1995. Since Narcotic Council decisions are not laws, project staff were threatened with legal challenges to their actions and with imprisonment. As a result, a proposal was made to change the state law, to enable the state government of São Paulo to distribute disposable needles. Public hearings were held at the Justice and Constitution Commission and the Health Commission – with the participation of activists, legal and public health experts, harm reduction specialists and UNAIDS consultants – and many discussions with key political leaders were required to overcome opposition and obtain approval for the new legislation. The new law has led to the establishment of 17 harm reduction projects in the state of São Paulo and a proposal to develop needle exchange schemes throughout the country.[102]

Strategies to promote acceptance of harm reduction by government included raising awareness of the costs of care versus the costs of HIV prevention. Parliamentary opposition was countered by pointing out that the 1976 narcotics law was approved before the emergence of HIV/AIDS and that harm reduction has public health objectives, does not undermine narcotics legislation and aims to change the behaviour of users, not to promote drug use. The participation of civil society, in particular NGOs, was also crucial in bringing the issue to the attention of the media and in campaigning for action by government health and education agencies to respect the human rights of IDUs. Although the issue of condom use is difficult to address in a Catholic country like Brazil, it was possible to argue for needle exchange in view of the Christian principle of defence of life. The media have also played a positive role in initiating and widening debate about new approaches, including harm reduction.[103] In Brazil, and in the rest of Latin America, efforts to establish harm reduction programs have been greatly helped by the NGOs that formed the Latin American Harm Reduction Association (RELARD).

Southern Cone
Drug abuse and HIV/AIDS prevention in the Southern Cone countries.

This project has been conducted jointly by UNAIDS, the national AIDS prevention programs of Argentina, Chile, Paraguay, and Uruguay, and an NGO in each participating country: Intercambios in Argentina, Programa Caleta Sur in Chile, Prever in Paraguay, and IDES in

Uruguay. The project, which developed its activities during 2000 with UNAIDS support, is the first technical co-operation project between UNAIDS and UNDCP in the region. It aims to foster a broader response to HIV/AIDS and drug use in the Southern Cone countries. To this end, the project funds a series of activities in the fields of prevention and care for drug users and vulnerable populations; awareness creation for the general public as well as for specific groups; and research in the four countries under a common approach developed jointly with governmental institutions, NGOs, UNAIDS and UNDCP.

The objectives of the project are to

- formulate a common approach by the Southern Cone countries to deal with the HIV/AIDS epidemic associated with drug use;
- foster a broader response to the problem through the participation of civil society organizations and governmental bodies, including the governmental institutions for HIV/AIDS and drug control; and to
- support activities already under way by further encouraging partnerships and feedback between government institutions, NGOs and international organizations to approach the problem from a global, interdisciplinary and intersectoral perspective.

Asia and the Pacific[104]

Australia
Development and implementation of a comprehensive national strategy on preventing HIV/AIDS among injecting drug users.
Starting year: 1985

Australia rapidly revised its drug policies in response to the threat of HIV/AIDS. National and state advisory committees on AIDS and drug use were set up early, and priority was given to containing HIV and other drug-related harms. A harm reduction approach was adopted in 1985, which included needle exchange, drug information and education programs, and an expansion of methadone programs. These programs developed more flexible criteria for admission, including clients who were not motivated to change their drug-using behaviour. The effectiveness of the Australian response was greatly enhanced by a comprehensive national strategy on HIV/AIDS, first implemented in 1986. The strategy was based on wide consultation with those infected and affected as well as those working in the area. It targets those at high risk of infection because of behaviour and/or social circumstances: men who have sex with men, injecting drug users, sex workers, and people from diverse cultural and linguistic backgrounds. Five priority areas are identified: education and prevention, treatment and care, research, international assistance and co-operation, and legal and ethical matters.

Australia's national strategy stresses the importance of a supportive legal environment to the success of initiatives. A 1991 report by a select committee on HIV, Illegal Drugs and Prostitution concluded that, on the basis of international experience, prohibition policies are not effective in reducing drug supply or use and work actively against health policies seeking to prevent HIV transmission.[105] This report, together with the work of the Australian Drug Law Reform Foundation (made up of parliamentarians, professionals and members of the community

concerned about the damage done by drugs and drug policies),[106] provided an important impetus for consideration of alternatives to prohibition and abstinence policies.

One alternative considered was heroin prescribing, and a trial was designed to provide evidence about the potential benefits of controlled availability of opiates (reduced crime, reduced corruption, prevention of HIV spread, improved health and lifestyle of users) and the potential limitations (leakage of supplies onto the street, failure to address the relationship with crime, since many users are involved in crime before they are involved in heroin, and failure to address other problems of drug users). The committee concluded that the risks can be minimized and are outweighed by potential benefits, and the project was approved in 1997. This coincided with a new government, however, and as a result of external and internal political pressure,[107] the federal cabinet decided not to go ahead with the trial. Currently, the premiers of several states are pressing for the commencement of heroin trials. As a result of the harm reduction measures adopted, Australia has an HIV prevalence among IDUs of less than 5%. Efforts to curb the increase in drug-related crime and overdose deaths have been less successful, indicating that the approach to harm reduction may have focused too narrowly on HIV and not on other harms. This has been reinforced by public and political pressure, leading to the opening of a safe injecting room in Sydney on a trial basis in 2002.

Asia

A review of national responses to HIV/AIDS prevention among injecting drug users in Asian countries leads to the general conclusion that there are few examples of best practice, although countries such as Indonesia appear to be moving toward a harm reduction policy. Rather, policies in the region can best be described as punitive rather than harm reducing.[108] There are, however, a number of examples of good practice in programming and networking, as detailed in the next two sections, and one example of good regional policy in Manipur, India, as detailed below.

At the 14th International Conference on the Reduction of Drug Related Harm in Chiang Mai, Thailand, in April 2003, Mukta Sharma reviewed policies in 11 Asian countries based on literature and key informant interviews.[109] The presentation highlighted the dynamic nature of harm reduction efforts in the region. Sharma pointed to unclear mechanisms for drug policy development, dominated by personal opinions, beliefs and morals rate than evidence. With no overarching HIV/AIDS prevention policy framework to guide policy development, a punitive paradigm, little dialogue between relevant agencies, and little knowledge of research on the part of decision makers, there are few national strategies to limit HIV among IDUs. Drug users are still notably absent from almost every discussion of policy and programs in these countries.

Two dichotomies are clear. One is between IDU-related and HIV-related programs. The second is at the policy level between health and public security ministries. It is often the case that ministries of health or their counterparts may understand and advocate for harm reduction strategies but have less power than public security ministries, which have more control over drug policy formulation. Nick Crofts of the Centre for Harm Reduction in Melbourne, Australia, described the response given to him by a Malaysian bureaucrat in recent years: “HIV and IDU will solve each other.”[110]

One problem is that few Asian countries have large enough NGO sectors to affect policy through more integrated policy efforts. In the last five years, policy has worsened in Vietnam and Malaysia. In Vietnam, which had adopted a harm reduction approach in 1993, effective programming has been obstructed by the "Social Evils" campaign against injection drug use and sex work.[111] Countries such as India, Indonesia and China show signs of a more co-ordinated government response. In India these changes result from the age of the epidemic, advocacy efforts by NGOs and activists, litigation efforts, and pressure from the World Bank. Manipur State remains the first and only state in India and the only jurisdiction in Asia with a clear-cut policy statement based on harm reduction.[112] The policy, introduced in 1996, is based on

- provision of accurate information and education on HIV prevention,
- voluntary participation of people with HIV/AIDS,
- confidentiality,
- respect for privacy, dignity and human rights,
- avoidance of discrimination and stigmatization,
- provision of good medical care,
- provision of social benefits and social support to people with HIV/AIDS, and
- creating a supportive and enabling environment so that people will come forward for voluntary testing.

The policy supports measures such as drug maintenance, needle exchange and bleach programs.

Indonesia appears to be moving toward a national harm reduction policy, but it is too early to tell at what level this will be accepted. The success of the harm reduction movement in Indonesia was highlighted in February 2003 when the Minister of Health announced that provision of sterile syringes to drug users was now a government priority.[113] Such a move is long overdue, with rates of HIV infection among IDUs ranging from 48% in rehabilitation centres to 93% of IDUs undertaking voluntary counselling in Kampung Bali. The initiatives leading to this change of policy were led by FHI and Aksi Stops AIDS and the Indonesia HIV/AIDS Prevention and Care Project from AusAID (see section on Training for more details). Two pilot syringe exchange programs are planned for Kampung Bali and Bali, and a methadone pilot project is planned for Bali. Earlier this year the Indonesian Harm Reduction Network was formed (contact through AHRN, www.ahrn.net), which was followed by a National Police Workshop on Harm Reduction and a planning meeting for advocacy workshops with criminal justice and government officials.

4.3 Examples of Best Practice in Programs

Once national policies and strategies for preventing HIV infection among drug users have been developed, strategies need to be translated into effective programs. The possibilities for intervention are numerous and varied, ranging from those that target individual behaviours to those that focus on national policies and legislation. What is feasible and cost-effective will depend on the local situation, including the political and public setting and the pattern of HIV/AIDS infection. A needs assessment of the local situation is crucial for wise strategy and commitment of resources. Program needs differ according to HIV prevalence and the pattern of spread in such populations as IDUs. Priority setting should include the following (these apply to institutions as well as the community):

- *Advocacy:* Educate the community, especially politicians, police, religious leaders, and other decision makers, about the urgent need to provide targeted programs for IDUs; provide evidence and experience from other relevant cities and countries, including study tours.
- *Situation assessment and monitoring:* Rapid assessment and/or local situation and needs assessments should be carried out; a sentinel surveillance system should be put in place to monitor risk behaviours and HIV prevalence/incidence among IDUs.
- *Policy and legislation:* Conduct a review of existing laws and regulations that act as barriers to effective implementation of HIV prevention strategies; work with local authorities so that IDUs will have real access to the ways and means to reduce risks.
- *Information and education:* Develop targeted information and education programs for IDUs, sex workers and other vulnerable populations; conduct public education to reduce stigma associated with IDU; look for ways to turn barriers into opportunities for education.
- *Training:* Train and maintain (support) outreach workers and other staff skilled in working with IDUs; provide training to relevant professionals and social service workers.
- *Provision of service:* Provide easy access to sterile injecting equipment, condoms, voluntary counselling and HIV testing, and STI prevention and treatment services, including substitution treatments; expand drug treatment services, providing a wide range of options relevant to type of drug, gender and treatment goal; provide access to HIV/AIDS treatment.

Effective programs are characterized by the following features:

- An early start. (It is important to begin programs as soon as possible, or when prevalence is below 5%. When HIV is established in a community, prevention programs can significantly limit further spread.)
- A comprehensive range of well co-ordinated, user-friendly and flexible services.
- Ready access to condoms and sterile injecting equipment.
- Community involvement in all stages.
- Assessment, monitoring and evaluation.
- Geographic and temporal range.
- Gender and ethnic sensitivity.
- Respect for human rights.
- Adequate coverage and sustainability.
- A supportive environment.

The viability and sustainability of programs depends on the extent to which the response to HIV is built into the national development framework – something that only governments can effect.

The viability and sustainability of programs depends on the extent to which the response to HIV is built into the national development framework – something that only governments can effect.[114] Successful harm reduction programs rely heavily on the support and involvement of different sectors of the community, ranging from government leaders to injecting drug users. Without broad community support and involvement, even the best designed and funded programs will struggle to succeed. Ongoing community consultations are also critical to the success of HIV prevention programs targeting IDUs. The mobilizing of resources takes place most effectively when

- all major stakeholders have been involved in some or all of the research, planning, implementation and evaluation processes;
- major determinants of the epidemic have been identified;
- priorities have been agreed and set; and
- scarce resources are channelled to the highest priorities and to the most cost-effective strategies and approaches for a determined objective.[115]

The most effective approach is to include governmental and non-governmental sectors in the response and to make contact with national and regional networks for support and advice.

Assessing the pattern of HIV transmission helps identify target groups, behaviours and intervention sites. The most effective approach is to include governmental and non-governmental sectors in the response and to make contact with national and regional networks for support and advice. Such collaboration and networking is also crucial for obtaining one of the most vital ingredients of all: funding. The key components of an effective program of HIV prevention among IDUs are as follows:

- information, education and communication,
- peer education,
- outreach,
- risk reduction counselling,
- voluntary counselling and HIV testing,
- needle and syringe programs, including disinfection and safe disposal,
- drug treatment services, including pharmacotherapy substitution programs, and
- HIV treatment and care.

The examples of best practice included here demonstrate how these principles have been put into effect. The experiences of countries in Central and Eastern Europe and Central Asia in particular illustrate two key features in developing HIV prevention services for drug users:

- Existing drug treatment services realized the need to reach out to drug users who were not in treatment and to offer a wider range of services, especially with regard to preventing HIV infection.
- Community-based NGOs realized that, particularly because of the absence or severe shortage of adequate treatment services, there was a need to take urgent action to prevent the spread of

HIV among users and to give users the means to limit transmission. They also realized the need to offer broader care to drug users and, in most cases, developed links and referral services to health and social agencies, as well as to drug treatment services. These treatment services remain in most cases sorely underdeveloped.

Asia and the Pacific

Malaysia
Drug User Project, Ikhlas Community Centre, Pink Triangle
Starting year: 1991
Contact person: Julian Jayaseelan, Executive Director
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Pink Triangle was the first NGO in Malaysia to work at the community level on HIV and sexuality issues, starting programs for gay men in Kuala Lumpur in 1987. By the early 1990s it was well established with HIV education and support programs, such as Positive Living. It has 18 staff and 100 volunteers and receives funding from the European Commission and the Malaysian AIDS Council. Pharmaceutical and health care companies contribute supplies, and hotels donate food. The drug user project serves IDUs in a poor community of Kuala Lumpur by providing information on HIV and harm reduction; care and support, including mediation, nutrition, shelter and employment; and advocacy. Created in 1991, it operates through a drop-in at a community centre. Each month, more than 1,000 contacts are made with clients. Evidence suggests that the project has been highly effective in gaining the trust of its target community, in attracting resources, and in its advocacy activities.

An overall lesson learned is that the principle of community mobilization for HIV/AIDS prevention and care can be applied successfully to a group traditionally considered hard to reach. Another lesson is that members of one marginalized community can be very effective in reaching out to another, even more marginalized community if the former have already mobilized.

An overall lesson learned is that the principle of community mobilization for HIV/AIDS prevention and care can be applied successfully to a group traditionally considered hard to reach. Another lesson is that members of one marginalized community can be very effective in reaching out to another, even more marginalized community if the former have already mobilized. Other lessons include the need for programs to be client-centred, the need to show real care and concern for clients, the importance of peer support, the development of good working relations with government and NGOs, the need to deal with stress, the importance of volunteer recruitment, and the need to create a dialogue with key police officials.

Bangladesh
CARE Bangladesh HIV Program
Starting year: 1995
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CARE Bangladesh started its HIV/AIDS Prevention Project, SHAKTI (Stopping HIV/AIDS through knowledge and training initiative), in July 1995. SHAKTI launched intervention

programs to provide information and services to sex workers, IDUs, transgender people, MSM, PLWHA, truckers, and rickshaw pullers with a view to improving their health and hygiene and preventing HIV transmission by promoting safer sex and safer injecting. The Injecting Drug User intervention is a harm reduction program to diminish the spread of HIV and reduce the negative health effects of drug injecting.

To maximize the output of the HIV/AIDS intervention activities of CARE Bangladesh, three projects (SHAKTI, RASTTA BONDOR and Trafficking and HIV+) have been merged with the HIV program. The program is run by 22 staff and 60 volunteers who are current or former drug users. Funding is provided by the UK Department for International Development (DFID) and UNAIDS. Approximately 4,000 IDUs and 2,000 heroin smokers are covered by the Injecting Drug User Intervention on HIV Program, which includes needle exchange, counselling, outreach and mobile programs, safer sex components, services for HIV-positive drug users, social and medical services for IDUs, human rights (advocacy, protections, consulting), policy development, legal/ethical/human rights work, and training for politicians, youth, IDUs, peer educators and pushers. Fourteen drop-in centres have been established in five districts of Bangladesh. The syringe/needle exchange rate is 82%. Condoms distributed: 15,500/month. Peer educators trained: 500. STD clients: 35/month. Abscess cases treated: 250/month. Pushers (professional injectors): 65.Detoxification of IDUs: 150. Self-help groups: three self-help groups have been formed.

DFID has evaluated the IDU Intervention Program, drawing the following conclusions:

- Our overwhelming sense from completing this review is that CARE Bangladesh has significantly decreased the chances of IDUs contracting HIV.
- They have provided IDUs with support in key areas of their lives – harm reduction interventions; compassion for their addiction and the damage it causes themselves, their families and the community; real ways of supporting them to change the behaviours that put them at risk of HIV infection (medical help, peer education programs and awareness raising within the communities where they work); and a safe place for them to begin to reflect on their lives and realize that change is possible, be it small or beyond their wildest dreams.
- CARE Bangladesh is beginning to form partnerships with other organizations, some to provide professional medical support along with medical materials and others in treatment and addiction.
- The use of former and current drug users is of great value to this project. CARE Bangladesh appears to be developing this kind of rigor and real understanding of the areas they work in, as they have comprehensive lists of all IDUs in their catchment areas. CARE Bangladesh realizes they cannot afford to become complacent.
- The reported level of HIV prevalence is still relatively low – 1.4% (1999/2000) within the IDU population. The number of HIV+ IDUs reached by the program is also low.
- The number of women drug users in the program is small and the number reached is also low. Specific interventions for women have yet to be fully researched.
- The distribution of needles and syringes is illegal in Bangladesh and is seen by many as encouraging drug use. CARE Bangladesh has helped develop an environment that allows needle exchange because of the benefits, now understood by some senior government officials and community leaders, for preventing the spread of HIV.

- Within the region the work that CARE Bangladesh is doing is innovative and should be shared. The model of district programs, outreach workers and partnership with NGOs and government offers high potential for sustainability and sharing of skills.

Lessons learned:

- Inclusion of community-based drug treatment programs can play a vital role in reducing resistance to program activities based on harm reduction.
- Involvement of current and former drug users adds value to the program.
- Advocacy at all levels is extremely important to run a needle exchange program.
- Community mobilization through self-help groups can improve the quality of the program.

India
SHARAN, Delhi
Starting year: 1995
Contact person: Luke Samson
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A number of harm reduction programs have been established successfully in India and on the India/Bangladesh border.[116] Reports on them emphasize the importance of targeting outreach to the larger community before targeting IDUs and of including political leaders, the police and members of religious groups. They also point to the need to address the wives and children of users. In New Delhi, SHARAN offers services to the urban poor, including IDUs. There is a comprehensive community-based program for IDUs, with a highly developed prevention component. SHARAN's program is based on harm reduction and 'rehabilitation before detoxification'. This demonstrates how an impressive comprehensive program can be established in a very difficult environment with limited resources. While harm reduction programs are often considered only in terms of their ability to prevent HIV infection, effective harm reduction programs also work on HIV prevention, care and support and, in some cases, treatment. The SHARAN/Sahara group of programs, for example, attempts to address the needs of HIV-positive and -negative IDUs from poor areas of the city. For drug users on the streets, homeless or housed, employed or unemployed, there are outreach services providing sterile injecting equipment and condoms, with peer educators talking to drug injectors about less risky ways to inject and safe sex.

SHARAN's program is based on harm reduction and 'rehabilitation before detoxification'. This demonstrates how an impressive comprehensive program can be established in a very difficult environment with limited resources.

Drug users are invited to the SHARAN Drop-In Centre, where they can access peer education, psychological counselling, first aid and basic medical care, referral to drug treatment, housing and other services, pre- and post-test HIV counselling, needle and syringe exchange, and sublingual buprenorphine (substitution therapy) for those wanting to stop injecting and gain greater control over their drug use. Through any of the drop-in or outreach programs, drug users may be found to be HIV-positive. If they are staff or volunteers of SHARAN/Sahara, or they are at great health risk, HIV-positive men can sleep at a shelter (which includes both drug users and ex-users) called the SHARAN Crisis Care Shelter. The shelter provides assistance to PLWHA in

crisis. It was intended to provide 15 days of shelter to stabilize health, assess needs and then if necessary refer on to appropriate services, but many residents have been too ill to move, so they have stayed for several months. As well as medical care, shelter staff provide support through counselling, personal interaction, information and education sessions. In most cases, the residents return to their previous environments, though they may move on to Sahara House or to Michael's Care Home. When possible, the men are linked with some form of support service, and follow-up is provided.

Drug users and ex-users also meet through a drug users' organization, Beyond Appearances, which tries to give drug users a voice to talk with other users through a newsletter and addresses discrimination issues among users. Recently, Beyond Appearances has started a support group specifically for HIV+ IDUs. There is also a family support group where family members are educated about addiction, processes of treatment, relapse, methods of assisting drug users, and so on, and where family members provide support to each other. If users enter drug treatment apart from Sahara House, SHARAN staff will try to keep track of them and visit them to ensure that they are not mistreated and to encourage them to continue abstaining from drugs. If they enter Sahara House, they usually stay for 3-12 months in treatment. While there, they receive vocational training, often for work within the expanding SHARAN/Sahara organization. If they are ill (especially with HIV-related disease), they are moved from Sahara to Michael's Care Home (or if very ill to a hospital or hospice), from which they can return to Sahara when they are well enough. There is no segregation of HIV-positive and -negative clients, but there is now a separate program and accommodation for women and children (with Sahara accepting only men). All the agencies participate in research projects examining features of drug use and HIV infection among IDUs, evaluating services, and reporting on the care and support needs of users and their families.[117]

Australia
Turning Point Victoria
Starting year: 1995
Website: www.turningpoint.org.au

Turning Point is a specialist alcohol and drug organization. Its approach is multi-dimensional, integrating treatment and support service delivery with research, education and training. Turning Point's mission is to lead and support the community in the development of policy and programs to prevent and reduce the harm caused by alcohol and drugs. It aims to advance the range and quality of treatment and support services for people affected by alcohol and drug use, build the capacity of the professional workforce to provide alcohol and drug services, and support practical and effective policy and service system development.

Central and Eastern Europe and Central Asia

Belarus
Involving young people, NGOs and the target population in preventing HIV/AIDS among IDUs
Starting year: 1999
Contact person: Roman Gailevich, Project Director, Minsk
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Until 1995, only eight cases of HIV infection among drug users were known in Belarus. As of December 1996, 973 new cases of HIV infection among IDUs had been detected, most in a mass screening in Svetlogorsk. In response to the sudden rise in the number of new cases, UNAIDS and WHO offered the city's Executive Committee help to develop a pilot project to prevent the further spread of HIV among IDUs. The NGO Parents for the Future of Children carried out the project in Svetlogorsk in 1997-98. In 1999, within the framework of a project to mobilize and train state and NGO officials, launched by the National AIDS Centre and UNAIDS, HIV prevention activities among IDUs were extended to Minsk, Mogilev, and Vitebsk. In January 2000, Soligorsk and Pinsk were included. The project is administered by the United Nations Development Program (UNDP) office in Belarus and carried out by a consortium of state organizations and NGOs from the six participating cities: Minsk, Mogilev, Pinsk, Soligorsk, Svetlogorsk and Vitebsk. The project obtained financial assistance from UNAIDS and from the International Harm Reduction Development Program of the Open Society Institute (New York), UNDP and UNICEF. Local authorities in all cities make in-kind contributions.

The main goal of the project is to reduce the spread of HIV infection among IDUs by

- assessing drug-use patterns and identifying risky practices related to injecting and sexual behaviour;
- giving drug users information on HIV and STI and how to avoid transmission of HIV, by providing clean syringes and needles, disinfecting materials and condoms;
- achieving political and social acceptance of a strategy to reduce the health and social consequences of drug use;
- carrying out public awareness activities aimed at preventing drug use and HIV infection among young people; and
- ensuring the sustainability of local projects.

The following activities are carried out in each city: rapid assessment of drug situation; consultations with local experts; local awareness campaigns aimed at youth; development and publication of information and educational materials; opening of syringe exchange points; training of personnel; organization of outreach and peer education fieldwork; and continuous project monitoring and epidemiological surveillance. Drug users are actively involved in the development of information and educational materials and in outreach peer education. Local teams have secured considerable support from city authorities (e.g., free provision of premises, no charge for utilities and repairs, and free disposal of used syringes). The local council for HIV and STI prevention – the main policy and decision-making body on HIV/AIDS-related issues in each city – supports the project. Project teams have established active partnerships with other state organizations dealing with prevention of HIV, STI and drug abuse and with youth issues and have involved them in implementing the project. HIV prevention services have been set up in all six cities, complemented by outreach workers and volunteers from the IDU community. The project reaches between 5% and 30% of the estimated number of drug users and thus already covers, in four of the six cities, the projected number of clients. Further expansion is not possible with the resources available, although this is necessary if the further spread of HIV is to be prevented effectively.

Surveys conducted among program participants indicate that they have better knowledge of risk factors and that they have reduced the number of high-risk practices with respect to drug use. In 1999 and 2000, questionnaire surveys were conducted anonymously with 518 program participants in four cities. A comparison of results, conducted at the start of the projects and again after 9 months, showed that a higher percentage of IDUs knew about risk factors for HIV and STI; a lower percentage of IDUs used the same syringe more than once; and a lower percentage of IDUs used a syringe for longer than one day.

In Svetlogorsk in 1997, before the prevention program began, 92% of those surveyed said they shared syringes. By 1999, this percentage had dropped to 35%. While some people did continue to reuse syringes, the proportion that cleaned them before using them again rose to 55%, up from just 16% before the prevention campaign. The prevention project also included distribution of condoms to help reduce HIV transmission from infected drug users to their sex partners. Users appear to be taking advantage of this: by 1999 nearly two-thirds said they sometimes or always used condoms, twice as many as two years earlier. The program, which cost about US$0.36 per disposable syringe distributed, is estimated to have prevented more than 2,000 cases of HIV infection by its second year of operation, at a cost of about US$29 per infection prevented – far below the cost of an AIDS case to a family or a health system. As in São Paulo, Brazil, the Belarus campaign was bolstered by a change in the law, which made it legal to carry syringes. Throughout Central Eastern Europe, efforts to set up harm reduction programs have been supported by the Central Eastern European Harm Reduction Network.

The changes seen among IDUs with regard to safer behaviour depend largely on the continuous provision of services. To increase the sustainability of less risky drug use and safer sexual behaviour, HIV/AIDS education, injecting equipment and condoms must be provided over a longer period of time.

The changes seen among IDUs with regard to safer behaviour depend largely on the continuous provision of services. To increase the sustainability of less risky drug use and safer sexual behaviour, HIV/AIDS education, injecting equipment and condoms must be provided over a longer period of time. The fact that the project is implemented mainly with international resources and that funding is not guaranteed constitutes a risk for the sustainability of behavioural change. Local intersectoral councils support the projects politically and make various in-kind contributions. Although the financial value of this support is at present minimal in relation to expenses, the political commitment of local government is an important factor that might contribute to prospects for sustainability. Further development of the NGO sector must be given high priority. The financial sustainability of each local project will depend largely on the institutional capacities of NGOs. Training of project teams in institutional development and project management is therefore considered vital.

Lessons learned:

- The assessment of local risk factors is essential to planning interventions. Injecting drug use is a recent phenomenon in Belarus, and the practice seems to have developed and spread in less than 3 years. There are, however, important differences in levels of local prevalence. These are possibly related to the different ways in which drugs are processed or sold, prepared for use and consumed.

- There is a need to develop a comprehensive strategy for HIV/AIDS prevention. In Belarus, the majority of those infected with HIV are young people with a short history of injecting. It is therefore considered necessary to integrate HIV/AIDS prevention with programs of primary prevention aimed at drug misuse and with HIV/AIDS prevention services for those who inject.
- There is a need to forge new partnerships for HIV prevention. By means of the project, local authorities learned to appreciate the benefits of NGO involvement in the work undertaken with vulnerable groups and became acquainted with a harm reduction approach.
- The size of the city and the geographical spread of the target population must be taken into account when planning services. It is much easier to start an HIV prevention program in a small city, because local authorities show higher commitment. In larger cities, mobile services are an asset, because IDUs will not visit a stationary centre if they have to travel too far. Outreach work and the involvement of peer educators are both essential in reaching the target population adequately.
- The flexibility and attractiveness of services run by NGOs are assets.
- The number of options for treatment must be increased.
- The involvement of the target group is essential.
- Continuous monitoring of behaviour change among target groups is important.

Bulgaria
Sofia Needle Exchange Project: Outreach work on HIV/AIDS prevention among IDUs[118]
Starting year: 1998
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In the early 1990s, Bulgaria experienced an epidemic of heroin use; by 1998 it was estimated that 70% of regular users were injecting. While HIV infection among IDU remains low, hepatitis C prevalence is 50%. The project is implemented by the Initiative for Health Foundation, an NGO working with drug users. Funding for the project came from the OSI, UNDP, UNAIDS, Integrative Drogenhilfe, Germany, and the Chicago Recovery Alliance. The aims of the project are to reach out-of-treatment drug users in their own environment, reduce the risk of infection with HIV and hepatitis and other adverse health effects, help users gain access to treatment and services, target the Roma minority community, encourage IDUs to seek counselling and testing, and assess the incidence of HIV among the target group. These activities started in 1999. Mobile outreach, by minibus or on foot, is the main activity of the project. Outreach workers distribute education materials, condoms, sterile injecting equipment (and collect used equipment), and talk to users about safer sex and drug use, referring them to drug and medical treatment and hepatitis and HIV counselling and testing facilities.

In the first 18 months of the program, workers established new contacts with more than 1,300 IDUs (about 15-20% of IDUs in Sofia), making 730 referrals to treatment centres. Twenty staff of four new projects in other cities were trained, as were 20 volunteers. Intensive training was given to 10 staff members of the local drug treatment service, and 200 street police officers received training seminars on the project. Internal evaluation of the project's first 18 months found a reduction in risk practices, increased knowledge of risk reduction, a decline in unsafe sexual practices, and an increase in requests for and use of condoms. As in several countries,

legal change was central to the success of the strategy. The new drug law of 1999 made needle exchanges legal. Another central component of the approach is trust, respect and confidentiality for drug users. Networking with other agencies has been crucial, as has the establishment of good working relationships with police and other partners.

Lithuania
Developing substitution treatment as part of comprehensive treatment services.
Starting year: 1995 (Vilnius) and 1998 (Druskininkai)
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Website: www.lppa.lt
Contact person, Druskininkai: Elena Bykova
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The Vilnius program is implemented by the Vilnius Substance Abuse Treatment Centre and three primary health care centres. The Druskininkai program is implemented by the local health care centre, the municipality and the NGO Deliverance. The programs are funded through the state and the International Harm Reduction Development Program of the OSI. OSI Lithuania provides training of staff, advocacy and financial support for the program and networking.

The objectives of the projects are to

- increase the accessibility of health care and social services to IDUs;
- establish contact with a greater number of IDUs and give them information on health protection;
- increase availability of condoms and clean injecting equipment;
- reduce the stigma associated with IDU; and
- serve as demonstration projects for other programs, support other emerging substitution treatment programs and serve as a basis for teaching.

While HIV prevalence among IDUs is still low, it has been rising steadily since 1997. The programs were established as the result of study tours by Lithuanian experts to London and Amsterdam in 1995. The Ministry of Health arranged training of staff in Sweden and developed the first guidelines in 1995. Substitution treatment was allowed on an experimental basis in three specialized narcological centres. This was the start of the first such treatment programs in a former Soviet republic. The Druskininkai program was started in 1997 at the request of families of IDUs.

In addition to methadone, the centres provide general health care, free HIV testing and financial support. An outreach and needle exchange program was established in Vilnius in 1997, which employs peer educators. The substitution treatment programs have established several partnerships and alliances at the national and local levels. The law enforcement sector is increasingly involved in advocating the extension of substitution treatment as one means of reducing criminal behaviour and as a form of demand reduction. In 1999, 411 clients were in treatment and about 700 IDUs were reached through outreach in Vilnius (about one-third of registered users). The program was also able to provide services to a Roma community through a

trusted general practitioner. The prevalence of HIV among IDUs at the end of 1999 was 2.4%, with no cases in the Roma community. Attempts are being made to increase the number of clients in treatment by further decentralization.

Lessons learned:
- Substitution treatment and outreach needle exchange increased the number of IDUs reached.
- Primary health care centres offer a non-stigmatizing setting for the treatment of IDUs.
- The introduction of new approaches enhanced compassion and understanding toward IDUs among staff who had previously been trained in a rather punitive approach.

Russian Federation
Reaching drug users through mobile services for HIV prevention
Starting year: 2000
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Between January 1997 and May 1999, a bus project was carried out by Médicins du Monde and a Russian NGO. After the bus was destroyed by arson in May 1999, the two organizations worked independently. Médicins du Monde now operates a new bus, which will be taken over by a local NGO. The project has been funded by the European Commission, Médicins du Monde, the OSI and the UK Know-How fund. The objectives of the project are to

- modify the risk behaviour of IDUs;
- create a network of peer outreach workers;
- lobby for the acceptance of HIV prevention by city authorities and to support the introduction of adequate programs; and
- modify the attitudes of health professionals toward drug users.

The outreach work is carried out from a bus in six locations in the city. Every week, the bus visits each location twice to enable users to stay in contact with the team and obtain an adequate supply of clean syringes. The team comprises two medical doctors, a nurse, a psychologist and five social workers. Services provided include information and education materials on HIV and STI prevention; outreach peer education for IDUs and sex workers; distribution of sterile injecting equipment, disinfecting material and condoms; medical care, psychological counselling and referral to medical services; and pre- and post-test counselling and voluntary testing for HIV, hepatitis and STIs. Other activities include behavioural risk studies; training of health professionals; creation of a city-wide network of Russian specialists; a prevention program for schools; a self-support group for HIV-infected people; and working with the police to increase understanding. From January to September 2000, more than 125,000 syringes and 50,000 condoms were distributed, and about 1,700 clients were tested for HIV and STIs. The rate of hepatitis C is 75% and of HIV 24%. Project staff provide training to local staff and to experts from other Russian cities. Some staff have undertaken long-term training on care of HIV-

infected people in Paris. Representatives of a number of cities have created an NGO, Doctors—New Initiatives, to facilitate exchange of experiences and increase sustainability of the approach.

Lessons learned:

- Co-operation with the authorities is a prerequisite to successful implementation of a new approach to HIV and STI prevention.
- Ongoing advocacy must be carried out with health professionals, media and members of the city administration.
- Establishment of links with public health structures increases the number of treatment options for clients and gains support in changing public opinion.

Ukraine
Public Movement "Faith, Hope, Love", Odessa
Starting year: 1996
Contact persons: Kostyik Olga, Tatiana Semikop
E-mail: semikop@te.net.ua

"Faith, Hope, Love" was organized by a group that included specialists in health care, lawyers, military officials, scientists and volunteers. The group started their work in Odessa in June 1996, carrying out HIV prevention among injecting drug users based on a harm reduction strategy. The movement was registered with Odessa's regional justice administration and now includes 120 individual and 4 institutional members. The movement's goals are to give aid and support to vulnerable population groups, to promote tolerant attitudes toward marginalized groups in society, to popularize healthy lifestyles, and to implement new methods of preventing negative social phenomena. Its main activities are as follows:

- HIV/STI prevention among vulnerable groups; training of specialists and volunteers on developing and implementing preventive measures among vulnerable groups;
- social development of groups that are vulnerable to HIV;
- educational activities on drug use, HIV/AIDS and other STIs, and preventing unwanted pregnancy among adolescents and youths;
- prevention of trade in people and rehabilitation of deported women;
- prevention of HIV/AIDS/STI and unwanted pregnancy among refugees; and
- organization of practical help for street children.

The movement implements the following projects with advisory, financial and humanitarian support of international organizations such as UNAIDS, UNICEF, USAID, Counterpart International and the Elton John Foundation:

- HIV/STI prevention among IDUs, sex workers, women in prison and MSM.
- International training centre.
- Popularization of the Convention on Defence of the Rights of the Child in schools.
- Help for the street children of Odessa.
- Hot-lines.

- Reproductive health of refugees.
- Educational training on reproductive health for children who have committed crimes.

Kyrgystan[119]
Kyrgystan has successfully piloted needed exchange, including in prisons, and substitution treatment. There are needle exchanges and methadone maintenance programs in 2 of 7 provinces. With funding from a recently approved Global Fund proposal and from the UK Department for International Development, they will be scaled up throughout the country. Kyrgyz officials aim to offer harm reduction services to a minimum of 60% of the drug using population. Needle exchange in prisons has already been scaled up throughout the country.

Western Europe

Germany
Frankfurt City Drug Services, Safe Injection Room: Konsumraum Niddastrasse
Contact person: Josch Steinmetz
E-mail: j.steinmetz@idh-frankfurt.de

One component of the comprehensive approach to harm reduction introduced by the city of Frankfurt (described in the previous section) was the opening of safe injection sites during the 1990s. These are clean sites, supervised by medical staff, where users can inject drugs with the sterile equipment provided. Users must supply their own drugs. Most users inject heroin, but increasingly cocaine and other stimulants are used. If needed, users can obtain help to inject safely. Preliminary evidence from such sites suggests that they reduce overdoses and other medical problems and help curb the spread of HIV and hepatitis C. Further systematic evaluation is required.

Latin America and the Caribbean

Argentina
Rosario Harm Reduction Program
Staring year: 1994
Contact person: Silvia Inchaurraga
E-mail: sinchaur@sede.unr.edu.ar

Harm reduction interventions began in Rosario and Buenos Aires in the early ’90s. In 1994 the Drug Abuse and AIDS Advanced Studies Centre of the National University of Rosario developed the Rosario Harm Reduction Program. This included a low-threshold model with disinfecting materials and harm reduction workshops in the city’s public mental health hospital. In 1998 a pilot substitution program was added and – through advocacy work – this received the regional governor’s official endorsement. Later the program developed the first injection kit with official support and funds from the National Ministry of Health (through World Bank funds).

Intercambios, Buenos Aires
Starting year: 1995
Contact person: Diana Rossi, Graciela Touze

E-mail: intercambios@intercambios.org.ar
Website: www.intercambios.org

Intercambios, an NGO founded in Buenos Aires in 1995, is dedicated to the study of and attention to problems related to drug use. They work to improve the lives of people who use drugs, both by providing direct services to this marginalized and vulnerable community and by lobbying for changes in drug control and public health policy. Intercambios was established by a group of professionals working with drug use and HIV/AIDS prevention and was a founding member of the Latin American Harm Reduction Network and the Argentinean Harm Reduction Network. Intercambios' mission is to use the basic precepts of human rights to shape the construction and application of knowledge about drug use and problems related to drugs. The organization works to improve understanding of the diverse problems related to drug use: those related to drug demand and sale, the politics of control (both social and criminal), and the repercussions of drugs on cultural and political life. Intercambios believes that stigmatization and discrimination against drug users and drug use often lead to violations of human rights.

The principle objectives of Intercambios are to

- develop interdisciplinary studies about problems related to drug use from both scientific and ethical perspectives;
- disseminate rigorous information about legal and illegal drugs as part of a co-ordinated effort to steer public opinion toward a more reflective and responsible vision of drug use and drug users;
- develop and provide resources to drug-using communities, including professional outreach workers and peer educators;
- design, implement, and evaluate prevention programs and community interventions;
- develop a network of social services and resources that will provide integrated services to people affected by problems related to drug use; and
- develop infrastructure for collaboration and co-operation between institutions, investigators, and social activists.

Since its creation, Intercambios has implemented investigations, prevention programs, training seminars, and project evaluations in co-operation with other national and international organizations, governmental and non-governmental agencies, universities, and businesses. Using the findings of initial research, they were able to design an HIV/hepatitis intervention project for IDUs. They have developed prevention materials, trained outreach workers, and received funding for the distribution of condoms and clean syringes in the street.

Brazil
Institute of Studies and Research in AIDS of Santos (IEPAS)
Starting year: 1989
Contact person: Rita de Cássia Haiek
E-mail: iepas@iepas.org.br
Website: www.iepas.org.br

São Vicente Health Secretariat Harm Reduction Program
Starting year: 1995
Contact person: Paula Jayme Araujo
E-mail: coaidssv@atribuna.com.br

IEPAS was the site of the first syringe exchange program in Brazil, in the port city of Santos. It is a member of the Latin American Harm Reduction Network, the Brazilian Harm Reduction Network, the Brazilian Harm Reduction Association, and the São Paulo State Harm Reduction Association. The organization works with drug users and their sexual partners and families (392/month); adolescents (135/year); women (422/year); men working in construction jobs (1,640/year); vulnerable communities (649/year); and the general population (5,033/year). It provides a needle exchange program, counselling, outreach and mobile programs, HIV testing, safer sex components, human rights work (advocacy, protections, consulting), and policy development, as well as training for policy makers and other government officials, NGOs, IDUs, peer educators (IDUs, sex workers), youth, and health professionals. The neighbouring program in São Vicente does similar work.

An evaluation of IEPAS was carried out by the STD/AIDS Program of the city of Santos in 2002. The results were positive and showed the importance of these activities in fighting HIV and other diseases. The evaluation also highlighted efforts to fight for drug users' human rights and against discrimination. The programs intend to contribute to the elaboration and modification of a new National Drug Policy now being discussed in Brazil. They also want to ensure that harm reduction becomes part of public policy in all government institutions, especially those in the health field.

Lessons learned from the two programs:

- Needle and syringe exchange is more effective than bleaching techniques.
- To access IDUs, the best method is the 'snowball': need to focus on the IDU and his/her friends, no matter where they live or where they are, whether they are in the designated area or not.
- Peer education is the best method to reach the IDUs.
- Community support is fundamental to implement harm reduction/needle exchange. The community can help in accessing and exchanging the needles and syringes.

STD/AIDS of São Paulo Harm Reduction Program
Starting year: January 2001
Contact person: Regina Bueno
E-mail: prdsampa@hotmail.com; recabuen@terra.com.br

Brazil's largest city, São Paulo (11 million inhabitants), has 51,000 AIDS cases, 20% of them caused by injecting drug use. Cocaine is the main drug injected in Brazil. The program has 20 health units and 1,400 health workers, almost 80 of them dedicated mainly to controlling the spread of HIV among and from IDUs. The main activities of the project are needle exchange, counselling, outreach and mobile programs, safer sex components, services for HIV-positive drug users, social and medical services for IDUs, policy development, legal/ethical/human rights

work, training for policy makers and other government organizations, NGOs, IDUs, peer educators (IDUs, sex workers), youth, sexual partners and community, evaluation of projects/programs, funding, educational materials and provision of male and female condoms. The program is supported by government (federal and city) funds. Services for injecting drug users and their sexual partners reach about 4,000 persons. They have distributed 27,000 syringes and needles in a Harm Reduction Kit that includes alcohol swab, distilled water, and a preparation cup.

The most interesting lesson learned has been how to build a government harm reduction program, including the inclusion of outreach workers in the formal payment process.

North America

United States
Point Defiance Needle Exchange, Tacoma, Washington
Starting year: 1987
Contact person: Dave Purchase
E-mail: dp@seanet.com

The first needle exchange in the United States, this remains the model for all exchanges, providing user-friendly services and outreach. Dave Purchase also co-ordinates the North American Syringe Exchange Network (see below).

Canada
Portland Hotel, Vancouver Residence and services for drug users
Starting year: 1990
Contact person: Mark Townsend
E-mail: Mark@portlandhotel.ca

Portland Hotel provides some of the most innovative harm reduction programs in the world. It is a residence that provides syringe exchange and other services to residents, who have their own apartments. The project is actively involved in education, advocacy and training. The hotel has built a safe injection site, which it plans to open this year.

4.4 Best Practices in Training and Networking

To maximize the effectiveness, efficiency and sustainability of harm reduction strategies and interventions, it is necessary to provide reliable, objective and evidence-based information and to improve the knowledge and skills of policy makers and practitioners.

To maximize the effectiveness, efficiency and sustainability of harm reduction strategies and interventions, it is necessary to provide reliable, objective and evidence-based information and to improve the knowledge and skills of policy makers and practitioners. Many countries and regions have developed initiatives to disseminate information on innovative approaches to HIV/AIDS prevention among drug users, to increase networking and the exchange of information on lessons learned, and to provide continuous training.

To design and establish new services, the capacities of the existing health care system must be reoriented to meet the needs of a comprehensive strategy on HIV prevention among drug users. Professionals need current information and training in the provision of diversified services to drug users and in HIV/AIDS prevention interventions.

Networking among service providers and drug users has proven one of the most effective tools in preventing HIV/AIDS among drug users. Networking takes the form of exchanges of information and lessons learned, support and debate, and allows exchanges to take place among a much larger group than would otherwise be possible.

Africa

AFHRN, African Harm Reduction Network
Starting year: 1999
Contact person: Akin Akinhanmi
E-mail: akinhanmi@infoweb.abs.net

This network is still in formation.

Asia and the Pacific

AHRN, Asian Harm Reduction Network
Starting year: 1996
Contact person: Ton Smits
E-mail: tonsmits@ahrn.net,
Website: www.ahrn.net

The Asian Harm Reduction Network has played a crucial role in the establishment of harm reduction programs and the development of more supportive policies throughout the region. It runs a website, publishes a newsletter, carries out training, prepares training materials and is actively involved in advocacy.

The Oceania Harm Reduction Coalition
Starting year: 1999
Contact person: Campbell Aitken
E-mail: aitkenc@burnet.edu.au
Website: www.chr.asn.au/oceania

The OHRC exists to ensure that Oceania is represented whenever regional harm reduction coalitions act together; to facilitate co-operation between organizations involved in harm reduction activities in Oceania; and to promote the development and implementation of harm reduction in the region. (Oceania includes Australasia, Micronesia, Polynesia and Melanesia.)

AusAID Training and Funding program
The AusAID fudning and training program is active in several parts of Asia. Most notably, the organisation has been working in Indonesia over the last several years to bring about program and policy change through a series of workshops including those for police and politicians
Health: Jeff Stanton: arhpjeff@hn.vnn.vn
Police: Drew Morgan: arhpdrew@hn.vnn.vn

Central and Eastern Europe and Central Asia

CEEHRN, Central and Eastern European Harm Reduction Network
Starting year: 1997
Contact person: Emilis Subata
E-mail: EmilisSubata@takas.lt
Website: www.ceehrn.net

The Central and Eastern European Harm Reduction Network was founded in 1997 by 18 programs and has since extended its membership to more than 100 organizations and individuals from 26 countries. It disseminates information through a list-server, provides information on member organizations on its website, and produces a printed newsletter. Members of the network exchange information and lessons learned and support each other in problem solving.

IHRD/Open Society Institute (OSI)
Starting year: 1995
Contact person: Kasia Malinowska Sempruch, New York
E-mail: kmalinowska@sorosny.org
Website: www.soros.org/harm-reduction/

Responding to increasing rates of drug use and HIV infection in Eastern Europe and the former Soviet Union, the Open Society Institute began the International Harm Reduction Development (IHRD) program in 1995. IHRD's mission is to diminish the individual and social harms associated with drug use through innovative measures based on harm reduction. In conjunction with OSI's Network Public Health Programs and the national OSIs, IHRD currently supports more than 180 projects in two dozen countries in Eastern Europe and the former Soviet Union. IHRD provides funding and training. A directory of harm reduction programs can be found on their website.

Russian Federation
AIDS Foundation East/West Training (AFEW)
Russian Federation training: Nora Stojanovik: nora_stojanovik@afew.org
Ukraine training: Anna Shapoval: anna_shapoval@afew.org

AFEW provides education on drugs and HIV to various sectors of society. It is also active in policy reform and programme development.

Western Europe

United Kingdom
HIT (formerly Mersey Drug Training and Information Centre)
Contact person: Andrew Bennett
E-mail: andrew@hit.org.uk
Website: www.hit.org.uk

HIT produces educational materials, provides training and organizes conferences. Its materials have set the standard that others seek to match.

Exchange Supplies Harm Reduction on-line
Contact person: Andrew Preston
E-mail: info@saferinjecting.org
Website: www.saferinjecting.org

The main activities of this organization are writing information materials, providing safer drug use paraphernalia to drug services, policy development, legal/ethical/human rights work, and training for policy makers and other governmental organizations, IDUs, and peer educators (IDUs, sex workers).

The Netherlands
Drugtext Foundation
Starting year: 1994
Contact person: Mario Lap
E-mail: Mario@drugtext.org
Website: www.drugtext.org

Drugtext's main activities include counselling, human rights work (advocacy, protections, consulting), policy development, legal/ethical/human rights work, and training for policy makers and other governmental organizations and for peer educators (IDUs, sex workers).

The Mainline Foundation, Health and Prevention for Drug Users, Amsterdam
Starting year: 1990
E-mail: info@mainline.org
Website: www.mainline.org

Mainline is an NGO with the aim of improving the quality of life of drug users. Direct contact with drug users enables Mainline to identify and analyze new developments in drug scenes at an early stage. This makes targeted harm reduction possible. Main activities include health education for drug users, policy development, research, consultancy and training of social workers. Mainline works with prisoners. Mainline is active in Eastern Europe, including Russia, and collaborates with organizations such as Médicins sans frontières. Mainline publishes a newsletter, "Take It", for HIV-positive drug users.

Latin America and the Caribbean

RELARD, Latin American Harm Reduction Network
Starting year: 1998
Contact person: Sandra Batista
E-mail: flamarion@uol.com.br
Website: www.relard.org

Formed during the International Conference on the Reduction of Drug Related Harm in São Paulo in 1998, RELARD has grown rapidly. Its many activities include advocacy, training, seminars and publication of a newsletter.

North America

United States
HRC, Harm Reduction Coalition
Starting year: 1990
Contact person: Allan Clear
E-mail: clear@harmreduction.org
Website: www.harmreduction.org

The Harm Reduction Coalition of the United States provides education and support to harm reduction programmes throughout the United States. It has a regular newsletter, a website and a meeting every two years.

NASEN, North American Syringe Exchange Network
Starting year: 1990
Contact person: Dave Purchase
E-mail: dp@seanet.com
Website: www.nasen.org

The North American Syringe Exchange Network provides education, funding and support for syringe exchange programs throughout the United States and Canada. It has a website and an annual meeting.

Canada
The Canadian Harm Reduction Network
Starting year: 1999
Contact person: Walter Cavalieri
E-mail: noharm@canadianharmreduction.com
Website: www.canadianharmreduction.com

The Canadian Harm reduction Network provides education and support to harm reduction programmes throughout Canada. It has a regular newsletter and a website.

CHALN, Canadian HIV/AIDS Legal Network
Starting year: 1992
Contact person: Ralf Jurgens
E-mail: ralfj@aidslaw.ca
Website: www.aidslaw.ca

The Canadian HIV/AIDS Legal Network provides legal and ethical advice to organizations in Canada and internationally. It has a website, a regular newsletter, produces regular reports on pressing issues, including prisons, and fact sheets to accompany these.

International

IHRA: Network of harm reduction networks
Starting year: 1996
Contact person: Diane Riley
E-mail: rileydm@aol.com
Website: www.ihra.net

The International Harm Reduction Association (IHRA) was formed as a result of the rapidly increasing popularity of the International Conference on the Reduction of Drug Related Harm and the demand for services and support with respect to harm reduction policies and programs extending beyond the brief period of the annual meeting. It is an international, professional association for individuals and organisations concerned with the development and adoption of more appropriate and effective drug policies which seek to reduce the harmful consequences of drug use. IHRA seeks to intervene in the process of formulating drug policy, such that harm reduction principles are widely adopted: it informs the wider population of the issues; to those providing interventions it offers information, training and educational materials; and for policy shapers, makers and implementers, it engages in specific, targeted programmes.

IHRA has a website, with links to the regional networks which are under its umbrella, a newsletter and an annual conference, with scholarships for delegates form the developing world.

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