

## **New Zealand's needle and syringe exchange programme saves lives**

Hon Jim Anderton

20 December 2002

New Zealand's needle and syringe exchange programme saves lives and \$35 million in treatment costs and is limiting problems associated with drug use, says Associate Minister of Health Jim Anderton.

An independent review of New Zealand's needle and syringe exchange scheme which has been in existence for 15 years, says it has helped prevent 20 deaths from AIDS and more than 2000 cases of HIV/AIDS and Hepatitis C," Associate Minister of Health Jim Anderton announced today.

The review, carried out by the Centre for Harm Reduction in Melbourne, calculates that the scheme has saved New Zealand more than \$35 million in treatment costs since it was launched in 1987.

"This review very clearly states that New Zealand's needle and syringe exchange programme is both effective and efficient, particularly with respect to prevention of HIV infections among injecting drug users," Jim Anderton said.

"While this Labour Progressive Government is against anyone using illegal drugs we need to ensure we are limiting the number of people with HIV and Hepatitis C.

"This Labour Progressive Government Drug and Alcohol programme has three main objectives: reducing demand, enforcement of the laws on illicit drugs, and treatment, all aimed at minimizing harm to individual New Zealanders and our communities. The reason for the establishment of needle and syringe programmes was to reduce transmission of HIV and Hepatitis C between people who inject drugs, therefore reducing the rate of infection for the entire community. We can now say with certainty that this is being achieved," said Jim Anderton.

The report said New Zealand has one of the lowest prevalences of HIV infection in injecting drug users among developed nations. An estimated 15,000 to 26,000 people use the exchange programme in New Zealand every year.

"We also know there has been a gradual decline in the prevalence of needle-sharing among New Zealand injecting drug users since the 1980s," Jim Anderton said.

"The most recent survey data shows a substantial reduction in the prevalence of sharing, from 50 percent to six per cent earlier this year.

"While proving a direct link between the needle and syringe programme activities and behaviour is difficult, the clear implication is that it has contributed to a reduction in needle-sharing among injecting drug users."

One of the strongest recommendations in the report was to remove the anomaly of possession of injection equipment being an offence under the Misuse of Drugs Act, while a defence exists under the Health (Needles and Syringes) Regulations 1998.

Jim Anderton said this was already a Ministry of Health work project and plans were in

place to move towards a legislative change as soon as possible.

The report can be viewed on the Ministry of Health's National Drug Policy website:  
[www.ndp.govt.nz](http://www.ndp.govt.nz)

The Ministerial Action Group on Alcohol and Drugs is responsible for the Government's campaign to minimise harm caused by alcohol and illicit drug use. The plan will focus on reducing demand, controlling supply and limiting problems associated with alcohol and drug use. The Group includes Associate Health Minister, Jim Anderton; Justice Minister, Phil Goff; Education Associate Minister, Lianne Dalziel; Police Minister, George Hawkins; Youth Affairs Minister, John Tamihere; Customs Minister Rick Barker; and Health Associate Minister Damien O'Connor.

## COST BENEFIT ANALYSIS

A cost/benefit analysis was conducted based on the estimated numbers of HIV and HCV infections prevented by NSEP introduction, annual treatment costs for people living with HIV or HCV disease, and annual investment in the NSEP. Treating the estimated 1,031 extra people living with HIV/AIDS and the estimated 673 diagnosed with chronic HCV by the end of 2001 (had the NSEP not been introduced) would have added \$35,678,516 to New Zealand's total healthcare outlay between 1988 and 2001, while total expenditure on the NSEP over that period was estimated at \$10,644,588. Thus the net benefit due to the NSEP based on HIV and HCV treatment costs avoided between 1988 and 2001 is \$25,033,928. Every \$1 spent on New Zealand's NSEP saved an estimated \$3.35 in healthcare costs which would otherwise have accrued over the period of investment. Extending the projections forward until all the extra New Zealanders infected with HIV or HCV between 1988 and 2001 due to non-establishment of the NSEP were estimated to have died produces a cumulative net benefit of \$202,274,686; using this approach, every \$1 spent on the NSEP between 1988 and 2001 yields \$20.00 in lifetime treatment costs avoided.

## BACKGROUND INFO

### **Hepatitis C**

An estimated 25,000 New Zealanders are infected with hepatitis C and this number is predicted to increase to more than 37,000 in the next 10 years.

Worldwide, the World Health Organization estimates 170 million individuals (about three percent of the world's population) are infected with hepatitis C virus and between three and four million people are newly infected each year.

Unlike hepatitis B, there is currently no hepatitis C vaccine available and the development of an effective vaccine is not imminent.

Hepatitis C, a viral infection of the liver, is a global health problem of significant clinical, personal and public health importance.

Initially infection often occurs without symptoms. One in five people recover and the rest become chronically infected.

Chronic infection with hepatitis C can lead to years of ill health and reduced quality of

life. Some people with chronic infection are at risk of developing cirrhosis, cancer of the liver and liver failure.

Hepatitis C is primarily spread by blood-to-blood contact and in developed countries including New Zealand, the injection of illicit drugs has become the single most important risk factor for acquiring the virus, accounting for around 80 percent of infections.

The best health advice is that people should not inject illicit drugs, however, if people are already injecting drug users, harm can be reduced by not sharing needles, syringes, and other injecting equipment and by attending needle and syringe exchange outlets for sterile equipment and good advice.

For people already infected with hepatitis C, re-infection should be avoided and alcohol intake should be minimal. Also, affected people should consider being immunised against hepatitis A and hepatitis B if they are already not immune to these viruses.

Advice and information on hepatitis C can be sought from GPs, specialists, needle exchanges, and Hepatitis C Resource Centres.

The Ministry of Health action plan has been developed to help address the New Zealand Health Strategy priority population health objective: Minimising harm caused by alcohol and illicit and other drug use to individuals and the community.

The Ministry of Health's action plan identifies priority areas for action at a national, regional and local level by government agencies and at a local area by District Health Boards, service providers and others. It identifies policies or programmes that can be delivered in the near future within existing resources, and those that will require extra resources before they can be implemented.

The Ministry of Health also published Guidelines for the Safe Piercing of Skin (Ministry of Health 1998). These guidelines provide a framework of minimum standards with respect to infection control in the body piercing and tattooing industries, with a particular focus on protection of staff and clients from blood-borne viruses.

## **HIV/AIDS**

Worldwide, the number of people with HIV/AIDS continues to grow, with an estimated 40 million people living with HIV. AIDS has already killed about 20 million people, and the annual number of deaths continues to rise. Last year alone, three million people died from AIDS and another 68 million people are estimated to die from AIDS by the year 2020.

Efforts to control the spread of HIV among men who have sex with men have had some success in New Zealand, but there are also other vulnerable groups. These include injecting drug users, sex workers, and migrants from areas where HIV prevalence is high.

Latest New Zealand figures show that up until 30 September, 770 people were notified as having AIDS.

During the third quarter of 2002, the AIDS Epidemiology Group received five notifications of people with AIDS -- three men and two women. In the same period, 22 people -- 15

males and seven females -- were found to be infected with HIV. This brings the total number of people found to be infected with HIV in New Zealand to 1849. The total number who have died from AIDS is 583 (558 males and 25 females).

The largest annual number of people with AIDS diagnosed in New Zealand was in 1989 and 1990. Since that time the annual number of diagnoses has declined, with the year 2000 registering the lowest number of notifications since 1986. The fall since 1996 is likely to be mainly due to the introduction of new treatments that delay the progression of HIV infection.

HIV stands for Human Immunodeficiency Virus. The virus attacks the immune system, the very part of the body that defends us during infections. Initially, the body puts up a strong fight against HIV and drugs that attack the virus lead to many years of healthy life. This is why someone infected with HIV may look and feel well for years before becoming sick.

AIDS stands for Acquired Immune Deficiency Syndrome. It is a syndrome (a group of illnesses or conditions) resulting from a weakened (or deficient) immune system. Someone with HIV only develops AIDS after years of living with HIV, when the virus has destroyed much of the immune system. Someone with AIDS typically dies of diseases such as forms of pneumonia or cancer, which the person's weakened immune system cannot fight. These diseases are known as opportunistic infections.

HIV can be detected in the body by having an antibody test, which detects the presence of antibodies produced by the body in response to HIV. You are "HIV-Positive" if you have these antibodies in your blood. But these antibodies do not appear until two weeks -- or in some cases a few months -- after infection, a period known as the "window period". The tests for HIV infection are available from your general practitioner, local sexual health centre or from sexual health centres run by the AIDS Foundation. All consultations and testing results are confidential.

There may not be any signs or symptoms of HIV infection for years. Some people have flu-like symptoms about two to six weeks after infection, which last for a few days. Others show no signs at all until the immune system becomes weak and damaged several years later.

HIV can be transmitted through blood, semen, vaginal fluids and breastmilk. It can also be transmitted through blood transfusions, unprotected anal sex and pregnancy. There are no cases of HIV being transmitted by saliva or tears, but theoretically, it is possible to become infected through oral sex, particularly if there are open sores or bleeding gums. The risk of contracting HIV from sexual intercourse becomes much higher in the presence of genital ulcers from sexually transmitted infections. Condoms are recommended to prevent sexual transmission.

Antiretroviral drugs are available for people with HIV infection. They are started when the virus's effects on the immune system is apparent on a blood test. People with the infection remain well for many years before needing drug therapy. For more information, go to [www.moh.govt.nz/aids.html](http://www.moh.govt.nz/aids.html)

## QUESTIONS AND ANSWERS

### **Why have a needle exchange programme?**

The sharing of needles and syringes is one of the most effective methods of transmitting HIV and the Hepatitis B and C viruses. The Needle Exchange Programme (NSEP) was set up to minimise the spread of HIV and other blood-borne disease. The NSEP, while not condoning the use of illegal drugs, accepts that drug use continues to occur despite its legal prohibitions.

The NSEP is based on a rationale of harm minimisation. This rationale includes the following:

- despite drug education and treatment programmes many individuals will choose to inject illicit and licit drugs for varying periods of time;
- people must be provided with knowledge and skills necessary to make informed choices about risk behaviours;
- the wider, non drug-using community faces a greater danger from the wider spread of HIV and hepatitis infections than it does from the effects of drug use itself.

### **What does the Needle Exchange Programme do?**

The NSEP has three elements:

- providing information on risks and disease prevention to accompany the needle exchange sales;
- new needles and syringes are sold to drug users as a regulated commercial activity;
- used needles and syringes, which are returned to outlets for destruction, are collected and destroyed.

### **When did needle exchange begin in New Zealand?**

Needle exchange became possible in New Zealand through the introduction of the Health (Needles and Syringes) Regulations 1987 (later replaced by the Health (Needles and Syringes) Regulations 1998). The regulations allow for the sale of needles and syringes to injecting drug users. The programme allows pharmacists, medical practitioners and other authorised representatives to provide clean needles and syringes.

The possession of injecting equipment was not decriminalised at the same time. However, the regulations provide a defence against charges under the Misuse of Drugs Act. The Ministry recommends a change to the Misuse of Drugs Act to remove the offence of possession of needles and syringes legally obtained through NSEP.

### **Where can needles be bought and exchanged?**

The Director-General of Health is responsible for licensing people to offer needle exchange services.

There were 12 dedicated Needle Exchanges operating in New Zealand in May 2002. Needle Exchanges offer a complete range of needles and syringes, as well as a range of accessories such as sterile water, swabs and safer sex supplies.

In most areas of the country needle exchange services are also provided by local pharmacies. In May 2002 there were 185 pharmacies offering the service. Pharmacies can offer needle exchange services at two levels. Level two outlets are higher volume pharmacies with strong demand for needle exchange services, and usually stock four or five of the more popular types of needles and syringes. Level one outlets sell only one type of needle and syringe. All pharmacies are required to either sell needles and syringes or direct customers to where they can obtain them. Where local pharmacists are opposed to offering needle exchange services, other venues such as sexual health clinics are used. Additionally, all offices of the New Zealand Prostitutes Collective offer needle exchange services.

There are currently two electronic dispensing machines in operation, one at the Auckland needle exchange and one at the Christchurch needle exchange.

The machines offer needle exchange service after the normal opening hours of the exchange and extend the service to 24 hours. Both machines use a different pin number to prevent use by children.

#### **How much does it cost?**

Outlets that offer needles exchange services are free to charge what they like for the service and to set up whatever discount incentives they feel appropriate to encourage the return of used injection equipment. Generally, prices at dedicated needle exchanges are lower than those at other outlets since it is their main business. As a guide, most users can expect to pay around \$1 per needle and syringe at most outlets.

#### **How many needles and syringes are bought and exchanged each year?**

Needle exchange sales grew rapidly between 1994 and 2000. This trend has had a marked effect in decreasing the reuse and sharing of needles and syringes. The increase is thought to be due to an increasing awareness within the drug using community of hepatitis C infection levels, and the dangers of re-using equipment. In 2001 there were just over one million sales of needles and syringes.

#### **Why was the needle exchange programme reviewed?**

The aim of the review was to see whether the NSEP is working in the most effective and efficient way possible within the available resources.

#### **What did the review of the needle exchange programme say?**

Needle and syringe programmes worldwide are effective in reducing prevalence and/or incidence of HIV infection and other blood-borne diseases in injecting drug users.

New Zealand has one of the lowest prevalences of HIV infection in intravenous drug users. It is estimated that had the NSEP not been introduced, by the end of 2001 New Zealand would have additional people living with hepatitis C, another 1031 people living with HIV/AIDS and an extra 20 people would have died following an HIV infection.

Survey data shows a substantial reduction in prevalence of needle sharing from 50 percent in 1994 to six percent in 2002.

### **What did the review recommend?**

The review made 16 recommendations. They are:

- That the effectiveness and efficiency of New Zealand's NSEP be acknowledged;
- That New Zealand's government and community recognise the vital role of the NSEP in preventing HIV infections;
- That consideration be given to opening a second peer-based Needle Exchange (NE) in Auckland, to bring per-capita service coverage closer to the level which exists elsewhere in New Zealand;
- That consideration be given to improving NSEP coverage on the South Island's west coast and Southland by opening branch NEs and/or upgrading and expanding existing pharmacy outlets;
- That consideration be given to increasing the reach of the NSEP by enabling and/or encouraging the provision of needle exchange services through existing health service infrastructure, such as Community Health Centres and Sexual Health clinics;
- That consideration be given to expanding the use of electronic dispensers at NEs to provide after-hours exchange services;
- That the costs and benefits that would result from the introduction of free one-for-one (new for old) needle and syringe exchange in New Zealand be formally investigated;
- That the crucial role of NE volunteers in New Zealand's NSEP be affirmed, and that any resolution of the "reimbursement problem" must not jeopardise volunteers' input to the programme;
- That New Zealand's parliament approve the proposed amendment to the Misuse of Drugs Act which would remove the offence of possession of needles and syringes legally obtained through the NSEP;
- That the (perceived) problems of pharmacy staff attitudes towards needle exchange clients be addressed in a systematic way by the Ministry of Health, NENZ and the Pharmacy Guild; research into pharmacy exchange users' perceptions of service would be a useful first step;
- That the Pharmaceutical Society provide NEST with details of pharmacy closures, openings, and changes of ownership on a monthly basis; While return of used needles and syringes to NEs or pharmacies for destruction should remain first priority, NEs should address the issue of disposal of needles and syringes, by means other than return to NEs or pharmacies, in their IDU education activities in order to reduce visibility of needles and syringes in public places and risk of needlestick injury;
- That training modules for pharmacy staff be developed by NENZ and NEST in consultation with the Pharmacy Guild and Pharmaceutical Society, promoted by them, and delivered by NEST staff;
- That GP training in New Zealand include a component on aspects of illicit drug use, including the NSEP (its rationale and operation) and methadone maintenance programmes;

- That the Ministry of Health liaise with the NZMA about encouraging GPs to work with their local NE to provide improved access to testing, counselling and primary healthcare services;
- That basic training for NZ police include a short session on New Zealand's harm minimisation policy and the NSEP. NENZ should liaise with police to achieve this goal.

#### **What next as a result of the review?**

- The Ministry is currently proposing an amendment to the Misuse of Drugs Act to remove the anomaly of the offence of possession of needles and syringes;
- The Ministry is considering the findings of the review and will facilitate and act towards implementing the review's recommendations, as appropriate, in consultation with other relevant organisations.

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