

**AN EVALUATION OF A
NEEDLE AND SYRINGE PROGRAM
INFORMATION KIT**

David Rouen and Kate Dolan

NDARC Technical Report No. 102

Technical Report Number 102

**AN EVALUATION
OF A NEEDLE AND SYRINGE PROGRAM
INFORMATION KIT**

David Rouen and Kate Dolan PhD

National Drug and Alcohol Research Centre
University of New South Wales
NSW Australia

ISBN No. 0 7334 1731 0

©NDARC 2000

Dr Kate Dolan
Senior Lecturer
National Drug and Alcohol Research Centre
University of New South Wales
Sydney NSW 2052
Australia
Telephone: +61 (2) 9398 9333
Facsimile: +61 (2) 9399 7143
Email: k.dolan@unsw.edu.au

The citation for this report is as follows:

Rouen, D. A. and Dolan, K. (2000). An Evaluation of a Needle and Syringe Program Information Kit. Technical Report No. 102, National Drug and Alcohol Research Centre. University of New South Wales, Sydney.

For additional copies of this report please see web site:

<http://www.med.unsw.edu.au/ndarc/>

For copies of the Needle and Syringe Information Kit please telephone:
ANCAHRD publications request line: 1800 022 863

TABLE OF CONTENTS

ACKNOWLEDGEMENTS _____	5
SUMMARY _____	6
BACKGROUND _____	9
INTRODUCTION _____	10
CONTENTS OF THE NEEDLE AND SYRINGE PROGRAM INFORMATION KIT _____	11
AIM OF THE EVALUATION _____	12
MATERIALS AND METHOD _____	12
RESULTS _____	14
Recruitment and Compliance _____	14
Demographic Characteristics of Respondents _____	14
Usefulness of Kit _____	16
Ease of Understanding the Kit _____	17
Perceived Comprehensiveness of Kit _____	18
Perceived Validity and Accuracy of Kit _____	19
Perceived Contribution to Readers' Knowledge about Needle and Syringe Programs _____	20
Influence of the Kit on Readers' Attitudes towards Needle and Syringe Programs _____	21
General Comments about the Kit or Needle and Syringe Programs. _____	22
SUMMARY AND CONCLUSIONS _____	25
REFERENCES _____	28
APPENDIX A: INTRODUCTORY LETTER FROM MR CHRIS PUPICK, CHAIR, ANCAHRD _____	29
APPENDIX B: NEEDLE AND SYRINGE PROGRAMS: A REVIEW OF THE EVIDENCE. _____	31
APPENDIX C: NEEDLE AND SYRINGE PROGRAMS: YOUR QUESTIONS ANSWERED. _____	71
APPENDIX D: EVALUATION FORM _____	103
APPENDIX E: EVALUATION FORM GENERAL COMMENTS _____	105

ACKNOWLEDGEMENTS

We are very grateful to the members of the Steering Committee: Mr Owen Westcott (New South Wales Department of Health), Ms Julie Dixon (Inner-city Needle and Syringe Program Coordinator), Ms Margaret MacDonald (National Centre in HIV Epidemiology and Clinical Research), Ms Marcelle George (Commonwealth Department of Health and Aged Care) and Mr Roger Stenhouse (Commonwealth Department of Health and Aged Care).

We would like to thank Mr Paul Dillon who co-wrote *Needle and Syringe Programs: Your Questions answered*, as well as Dr Libby Topp and Ms Margaret MacDonald who co-wrote *Needle and Syringe Programs: A Review of the Evidence*.

We are also grateful to Mr James Shearer and Ms Margaret Eagers at NDARC for their assistance in producing the Information Kit and conducting its evaluation.

We thank Ian Jopson Design for designing the Information Kit.

Finally, we would like to acknowledge the Australian National Council on AIDS, Hepatitis C and Related Diseases who supported the development of the *Needle and Syringe Program Information Kit*.

SUMMARY

The first Needle and Syringe Program started illegally in New South Wales in 1986 after two years of discussion (Wodak, et al., 1987). It was largely implemented as a community health measure to prevent the spread of HIV between injecting drug users and the wider community (Feachem, 1995). It is generally agreed that NSPs have fundamentally altered the course of Australia's AIDS epidemic (UNAIDS, 1999). For example, Needle and Syringe Programs were estimated to have prevented around 2,900 infections of HIV in 1991. In that year, \$10 million was spent on Needle and Syringe Programs nationally, producing an estimated saving of \$266 million in treatment costs (Hurley, et al., 1996).

Despite this, many misconceptions exist surrounding the rationale and role of Needle and Syringe Programs. As a response, a Needle and Syringe Information Kit was produced. This report provides an evaluation of that Needle and Syringe Information Kit.

The Information Kit contained four documents. An introductory letter from Mr Chris Puplick, chairman of the Australian National Council on AIDS, Hepatitis C and Related Diseases (ANCAHRD), gave a brief outline of the aims and purpose of the Information Kit (APPENDIX A).

A 28-page booklet entitled *Needle and Syringe Programs: A Review of the Evidence* (Dolan, et al., 1999) provided a detailed review of the scientific evidence for and against Needle and Syringe Programs. It was presented in a question and answer format and addressed crucial questions regarding the value and effectiveness of NSPs (APPENDIX B).

An 18-page booklet entitled *Needle and Syringe Programs: Your Questions Answered* (Dillon & Dolan, 1999) addressed frequently asked questions about Needle and Syringe Programs and provided a summary of scientific evidence in a non-technical, quick-reference format. It also addressed issues relevant to professionals who may receive inquiries from the media and the general public. These included how best to dispose of discarded syringes, how to deal with a needle-stick injury, how to respond to media questions about NSPs, and advice and referral contact details related to injecting drug use (APPENDIX C).

A questionnaire used to evaluate the Kit's utility in communicating relevant information about NSPs, *Evaluation of Needle and Syringe Program Information Kit* was also included (APPENDIX D).

Just over 12,000 Needle and Syringe Program Information Kits were mailed to key stakeholders and potentially interested individuals. Recipients included all Australian federal and state parliamentarians and local councillors, as well as public servants, environmental health officers, needle and syringe workers, alcohol and other drug workers, and pharmacists.

The response rate for the 'fax-back' questionnaire was 0.9%, with 107 forms returned by the specified date. Generally, all targeted occupations and locations were represented. The majority of respondents reported finding the information in the Kit to be "useful", "easy to understand", "comprehensive", "valid and accurate" and to "improve their knowledge" about NSPs.

Looking at attitudes towards Needle and Syringe Programs, eighty percent of respondents stated that they still supported needle and syringe programs after reading the Kit. Seven percent indicated that they still opposed such programs and 5% of respondents reported still being undecided. Of the respondents who indicated a change in attitude towards NSPs, 5% stated that they now support NSPs, and 1% (one person) stated that they now oppose them. No one reported that after reading the Information Kit they had become undecided about their position on NSPs. This result may indicate that the Information Kit did not confuse respondents about NSPs.

Respondents were also given an opportunity to make comments. Overall, 57% of respondents (n = 58) made some comment about the booklet or NSPs. Of these, 54% were considered positive or supportive, 23% were considered negative or critical and 23% were neutral. A complete list of comments can be found in APPENDIX E.

A major limitation of this study was the very low Evaluation Form response rate. As stated, the response rate was 0.9%. In contrast, the average response rate for postal surveys is typically around 50%. Reasons for this low response rate and possible methodological improvements are discussed.

The small sample size of this evaluation dictates that caution must be exercised when drawing conclusions due to the possibility of a response bias. Generally however, the results of this evaluation do offer qualified support for the utility of the Needle and Syringe Information Kit consistent with its stated aims and objectives.

BACKGROUND

The three main strategies undertaken by governments to address illicit drug use in our community include supply reduction through law-enforcement, demand reduction through education and treatment, and harm minimisation.

Australia's first Drug Strategy, the National Campaign Against Drug Abuse, was developed in 1985 (Blewett, 1987). The Strategy is based on the principle of harm minimisation. Harm minimisation acknowledges that non-medical drug use is inevitable in a society that has access to such drugs and that it is not always necessary to reduce non-medical drug use in order to reduce harms associated with that use. Needle and Syringe Programs (NSPs) are based on harm minimisation principles. The aim of NSPs is not necessarily to eliminate injecting drug use, an admirable yet unrealistic goal, but to reduce the harms associated with this practice for both users and the wider community.

The first Needle and Syringe Program started illegally in New South Wales in 1986 after two years of discussion (Wodak, et al., 1987). It was largely implemented as a community health measure to prevent the spread of HIV between injecting drug users, and to the wider community (Feachem, 1995). It is generally agreed that NSPs have fundamentally altered the course of Australia's AIDS epidemic (UNAIDS, 1999). For example, Needle and Syringe Programs were estimated to have prevented around 2,900 infections of HIV in 1991. In that year, \$10 million was spent on Needle and Syringe Programs nationally. This is estimated to have produced a saving of \$266 million in treatment costs (Hurley, et al., 1996).

Needle and Syringe Programs have received considerable acceptance in Australia. The 1998 National Drug Strategy Household Survey reported that approximately 46% of males and 54% of females in Australia stated that they supported free Needle and Syringe Programs (AIHW, 1999). A telephone survey of residents in the Kings Cross area of Sydney in 1997 found that 82% of people agreed with continued NSPs in New South

Wales. Twelve months later, after the introduction of a NSP in the area, the support had increased to 88% (MacDonald, et al., 1999).

Despite this support, significant misinformation and misunderstanding still surrounds NSPs. Although individual lines of evidence are always open to a variety of interpretations, the strength of the combined data on NSPs is compelling. The overwhelming weight of evidence points to the conclusion that NSPs are a crucial public health measure in reducing the transmission of blood borne viral infections.

As a response to current misconceptions, a Needle and Syringe Information Kit was produced to provide information on a range of issues about NSPs to key stakeholders. This report provides an evaluation of that Needle and Syringe Information Kit. It was targeted towards key stakeholders including policy makers, community representatives, public servants and health care workers.

INTRODUCTION

The aim of the Needle and Syringe Program Information Kit was to improve the understanding of why Needle and Syringe Programs are implemented in Australia and to strengthen support for such programs.

The content of the Information Kit was determined via a number of strategies. A systematic review of published literature was carried out. Databases such as Medline and PsychInfo were used to identify all articles related to Needle and Syringe Programs. In addition, key researchers in the field were contacted in an effort to identify relevant unpublished reports.

Stakeholders in four states were consulted and their opinions regarding the format, scope and content of the Information Kit was sought. In each of these states, National Drug and Alcohol Research Centre staff met with health department officials who organised meetings with environment health officers, needle and syringe program workers and relevant council workers.

A Steering Group also oversaw the project and provided guidance. The group consisted of: Mr Owen Westcott (New South Wales Department of Health), Ms Julie Dixon (Inner-city Needle and Syringe Program Coordinator), Ms Margaret MacDonald (National Centre in HIV Epidemiology and Clinical Research), Ms Marcelle George (Commonwealth Department of Health and Aged Care) and Mr Roger Stenhouse (Commonwealth Department of Health and Aged Care).

CONTENTS OF THE NEEDLE AND SYRINGE PROGRAM INFORMATION KIT

The Information Kit contained four documents. Copies of each of these documents can be found in APPENDIX A to D. An introductory letter from Mr Chris Puplick, chairman of the Australian National Council on AIDS, Hepatitis C and Related Diseases (ANCAHRD), gave a brief outline of the aims and purpose of the Information Kit. It also listed the groups to which the Kits had been distributed (APPENDIX A). A 28-page booklet entitled *Needle and Syringe Programs: A Review of the Evidence* (Dolan, et al., 1999) provided a detailed review of the scientific evidence for and against Needle and Syringe Programs. It was presented in a question and answer format and addressed crucial questions regarding the value and effectiveness of NSPs (APPENDIX B). An 18-page booklet entitled *Needle and Syringe Programs: Your Questions Answered* (Dillon & Dolan, 1999) provided a

summary of scientific evidence in a simple, non-technical, quick-reference format. It also included sections on how best to dispose of found syringes, how to deal with a needle-stick injury, talking with the media about NSPs and discarded needles and syringes, and contact details for services and information related to injecting drug use (APPENDIX C). The one-page questionnaire used to evaluate the Kit, *Evaluation of Needle and Syringe Program Information Kit*, was also placed in the Kit and is discussed in detail below. A copy is contained in APPENDIX D.

AIM OF THE EVALUATION

The aim of this evaluation was to obtain an indication of the Kit's utility in communicating relevant information about Needle and Syringe Programs.

MATERIALS AND METHOD

A total 12,166 Needle and Syringe Program Information Kits were mailed to key stakeholders and potentially interested individuals. Recipients included all Australian federal and state parliamentarians (n = 822) and local councillors (n = 3,344). A bulk delivery was also made to the appropriate section of the Health Department in New South Wales (n = 2,706), Victoria (n = 1,988), Queensland (n = 1,475), Western Australia (n = 782), South Australia (n = 635), Tasmania (n = 202), Australian Capital Territory (n = 131) and Northern Territory (n = 81) for distribution to environmental health officers, needle and syringe workers, alcohol and other drug workers, and pharmacists. The Evaluation Form contained a request for recipients to complete it and return it via facsimile to the National Drug and Alcohol Research Centre before 30 September 2000.

Questions on the evaluation form covered a number of areas. Demographic information included sex, age category, occupation, state/territory of residence and location of work (capital city or regional area). Respondents were asked a number of general questions regarding their perceptions of the information contained within the Kit. Respondents were asked:

Did you find this Information Kit:

- 1) *useful?*
- 2) *easy to understand?*
- 3) *comprehensive?*
- 4) *valid and accurate?*
- 5) *improved your knowledge about Needle and Syringe Programs?*

Answers to these questions were rated by respondents on a 5-point Likert scale. The response options were: (1) *not at all*, (2) *a little*, (3) *moderately*, (4) *very* and (5) *extremely*.

Respondents were also asked if the Kit influenced their attitudes towards NSPs with the question:

- 6) *“Did you find this Information Kit changed your attitude towards NSPs?”*

Six choices were given and respondents were asked to pick one. These included:

- | | |
|--|---|
| <i>“No, I still support NSPs”;</i> | <i>“Yes, now I support NSPs”;</i> |
| <i>“No, I’m still undecided about NSPs”;</i> | <i>“Yes, now I’m undecided about NSPs”;</i> |
| <i>“No, I still oppose NSPs”;</i> | <i>“Yes, I now oppose NSPs”.</i> |

Finally, respondents were presented with an open-ended question that provided an opportunity to make any other comments they may have about the Kit or Needle and Syringe Programs in general. These comments were coded into one of three categories. Positive comments were those considered supportive or encouraging of the Kit or NSPs. Negative comments were those critical of the information contained in the Kit or critical of harm minimisation or Needle and Syringe Programs more generally. Neutral comments were those asking for information beyond the scope of the Kit, those

questioning specific facts contained in the Kit, or those commenting on drug treatment or drug policy unrelated to harm minimisation or Needle and Syringe Programs. A copy of all comments made can be found in APPENDIX E.

RESULTS

Recruitment and Compliance

From a total of over 12,000 evaluation forms sent, 107 evaluation forms were received by the specified date and included in the data analysis. This represented a response rate of just under 0.9%. Possible reasons for this very low response will be discussed later. Another 18 forms were received after the specified date but were not included in the analysis. Examination of these 18 forms indicated that their inclusion would not have significantly affected the results.

Demographic Characteristics of Respondents

Of the 104 evaluation forms with completed demographic information, 50% of respondents were male. The most frequent age range was 35 to 44 years, with just over 33% of respondents comprising this category. Male and female respondents were equally represented in all age categories including 18-24 years, 25-34 years, 35-44 years, 45-54 years and 55+ years. Overall, 33% of respondents were from capital cities and 62% were from rural or regional areas; the remaining 5% did not specify their location. Figure 1 displays the breakdown of respondents by state/territory and capital city/regional location.

Figure 1: Percentage of respondents in each state/territory broken down by regional location.

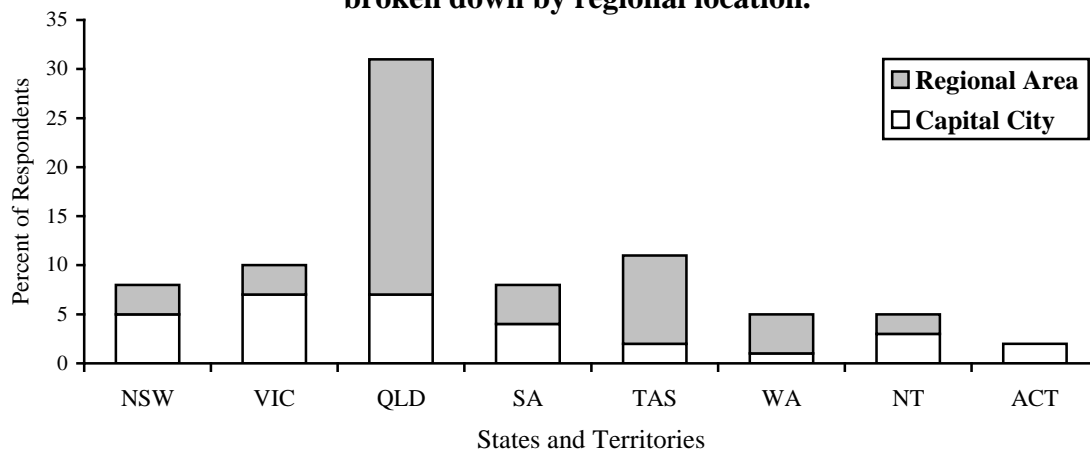
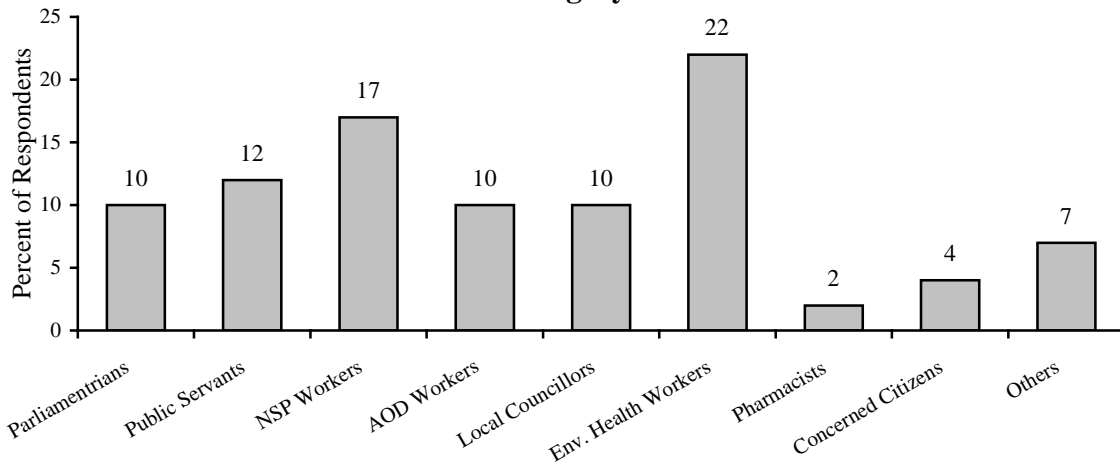


Figure 2 displays the breakdown of respondents by occupation category. It can be seen that more responses came from environmental health workers (21% of sample) and needle and syringe program workers (16% of sample) than other occupations. Six percent of respondents did not record their occupation.

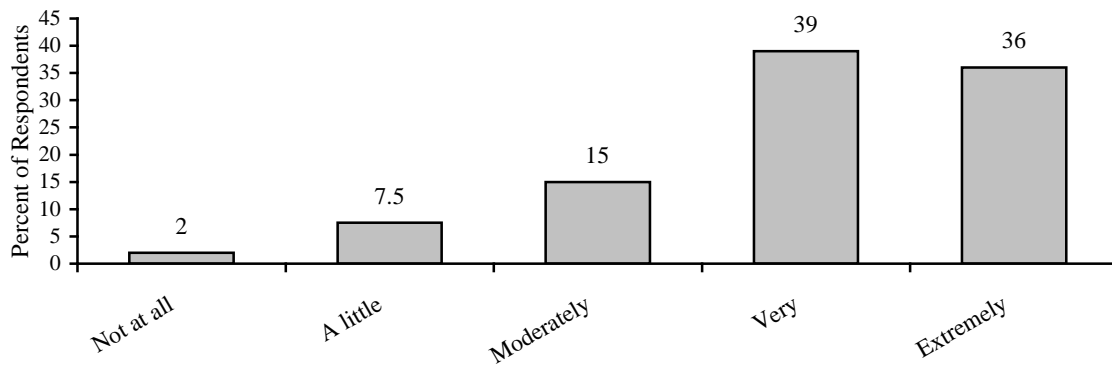
Figure 2: The Percentage of Respondents in each Occupation Category



Usefulness of Kit

As can be seen in Figure 3, the majority of respondents found the Information Kit to be either *very* useful (39%) or *extremely* useful (36%). Only 2% of respondents stated that the Kit was *not at all* useful.

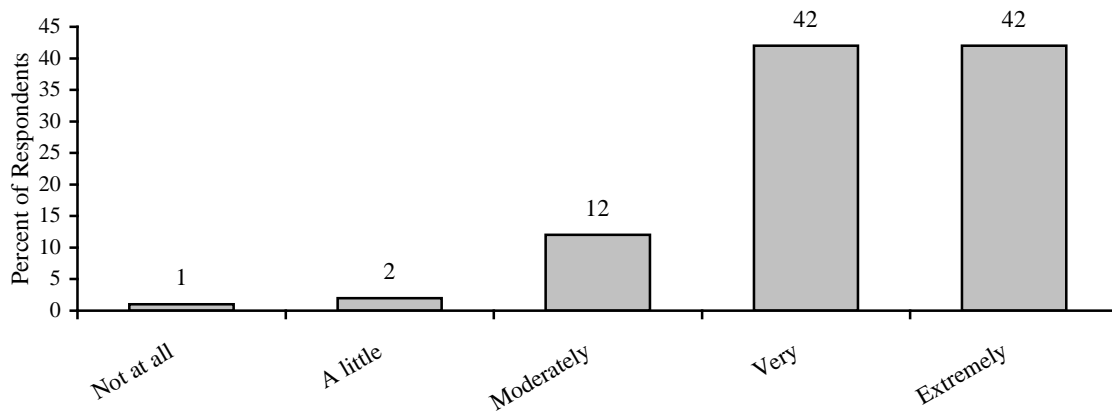
Figure 3: Perceived Usefulness of NSP Information Kit Reported by Respondents.



Ease of Understanding the Kit

As displayed in Figure 4, most respondents reported the NSP Information Kit to be either *very* easy to understand (42%) or *extremely* easy to understand (42%). One respondent appeared unable to understand the Kit, and two reported only understanding *a little*.

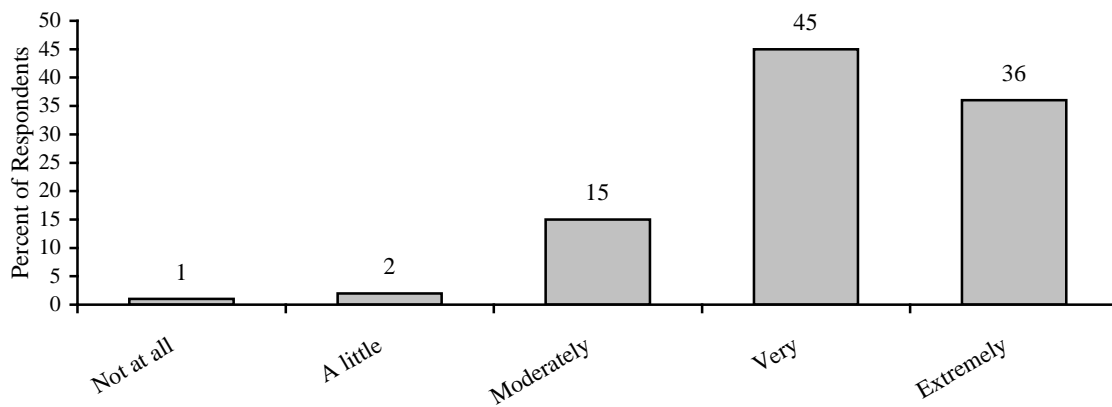
Figure 4: Perceived Ease of which Respondents Reported Understanding the NSP Information Kit.



Perceived Comprehensiveness of Kit

The majority of respondents believed the Kit to be comprehensive, as shown in Figure 5. Eighty percent stated that the Kit was either *very* or *extremely* comprehensive. Again, one respondent stated that the Kit was *not at all* comprehensive.

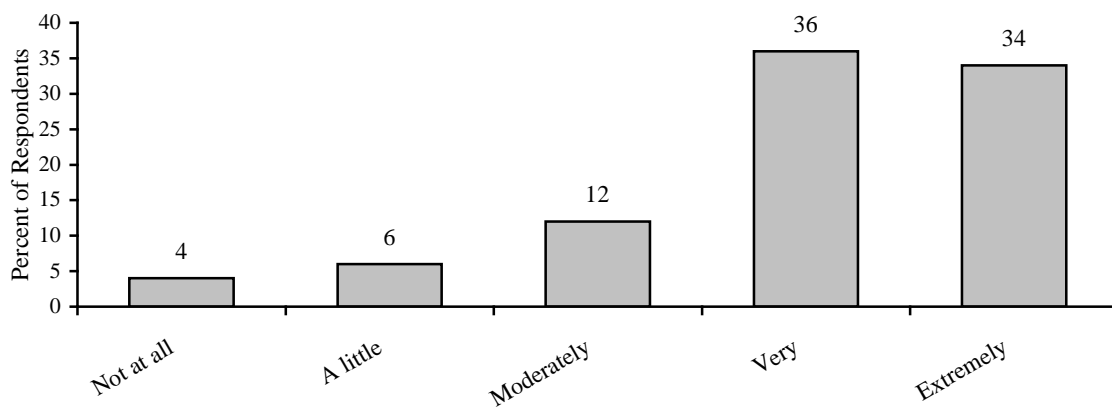
Figure 5: Respondents' Perception of the Comprehensiveness of the NSP Information Kit.



Perceived Validity and Accuracy of Kit

Figure 6 displays respondents' perceptions of the Information Kit's validity and accuracy. Most respondents believed the Kit to be either *very* or *extremely* (70%) accurate and valid. Ten percent of respondents thought that it was *not at all* or only *a little* accurate and valid. Eight percent of respondents offered no comment on the Kit's accuracy and validity.

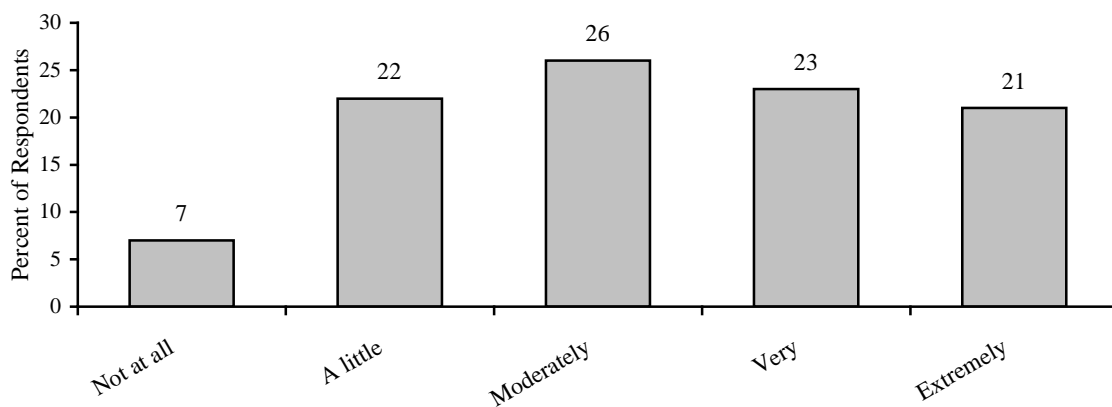
Figure 6: Respondents' Perception of the Validity and Accuracy of the NSP Information Kit.



Perceived Contribution to Readers' Knowledge about Needle and Syringe Programs

The primary aim of the Information Kit was to improve the reader's knowledge regarding Needle and Syringe Programs. Although many factors influence the degree of change, including an individual's prior knowledge, Figure 7 illustrates the Kit's contribution to improving respondents' knowledge. An improvement was reported in all but 7% of respondents. Forty four percent of respondents reported a *very* great or *extremely* great improvement in their knowledge of NSPs.

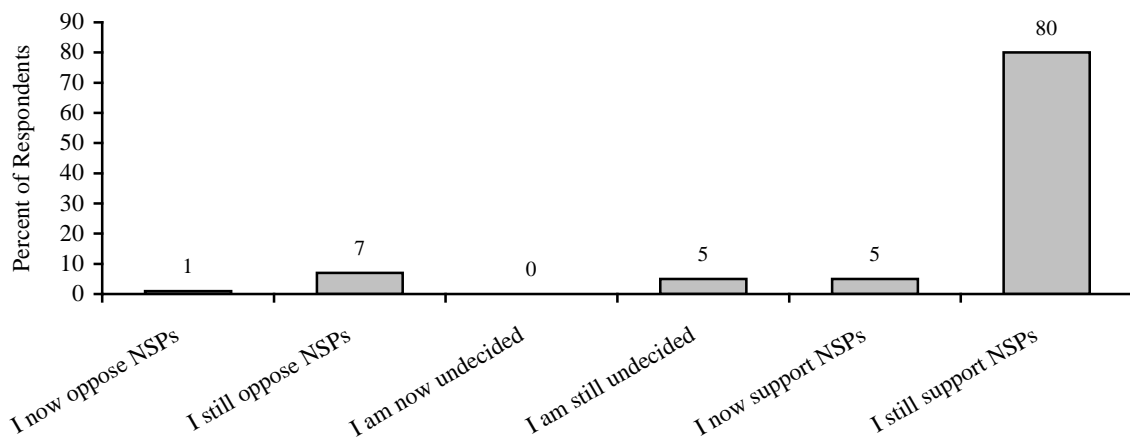
Figure 7: Perceived Improvement of Knowledge About NSPs Resulting from Reading the Information Kit.



Influence of the Kit on Readers' Attitudes towards Needle and Syringe Programs

Figure 8 indicates respondents' attitude change as a result of reading the NSP Information Kit. In the majority of cases, no attitude change occurred. Over 80% of respondents stated that they still supported Needle and Syringe Programs after reading the Kit. Seven percent indicated that they still opposed such programs and 5% of respondents reported still being undecided. Of the respondents who indicated an attitude change, 5% stated that they now support NSPs, and 1% (one person) stated that they now oppose them. No one reported that after reading the Information Kit they had become undecided about their position on NSPs. This result may indicate that the Information Kit did not confuse respondents about NSPs.

Figure 8: Respondents' Change in Attitude Resulting from the NSP Information Kit



General Comments about the Kit or Needle and Syringe Programs.

The general, open-ended question on the Evaluation Form allowed respondents to record any other comments they may have about the NSP Information Kit and/or NSPs in general. Overall, 57% of respondents (n = 58) made some comment about the booklet or NSPs. Of these, 54% were considered positive or supportive, 23% were considered negative or critical and 23% were neutral. The following quotes illustrate the range of responses. A complete list of comments can be found in APPENDIX E.

Much needed resource to quash misinformation in the community.
Male NSP worker, 25-34 year old.

An excellent Kit - particularly liked the "Q&A" section (some good quotes for use in dealing with media and Parliamentarians).
Female Public Servant, 35-44 year old.

Excellent resource for Environmental Health Officers who, as in our case, often deal with overly concerned/hysterical members of the public.

Female Environmental Health Worker, 35-44 year old.

A long awaited and exceptionally welcome kit that will assist NSPs to continue to improve the (public) health of people who inject drugs - liked the quotes e.g. Carol H p7 - liked the media guide p16.

Male CBO-NGO Representative, 45-54 year old.

Very useful. Well done people! Gives me a “nice” accurate looking authoritative looking "expert" looking document to share with people who doubt NSP's benefit.

Male NSP Worker, 25-34 year old.

Possibly too much information for an IV drug user but very good for people interested in this topic.

Male Environmental Health Worker, 45-54 year old.

Come to Canterbury Road Bankstown- local prostitutes have a high incidence of Hep B and HIV infection despite a very active needle and syringe programme. Also I dispute the stats in your literature i.e. P9 Questions Answered.

Male Parliamentarian, 35-44 year old.

We Australians must not accept this and accept this practice as normal. We must not let up, we have to teach our young on the street that drugs are bad.

Local Councillor, 45-54 year old.

The Kit is OK if you believe in feeding a habit - I don't - Cure? - Instant death sentence for pushers. Get your free "hit" at your local police station. For users. - pay a fine and have your name displayed - Think of AA. Can you imagine getting a (sic) free grog?

Local Councillor, 55+ year old.

The Information Kit simply tries to defend the indefensible, supporting the dangerous behaviour of irresponsibles (sic) who throw needles away - where do you get funds for this propaganda?

Male Parliamentarian, 55+ year old.

Is the information in this Kit a balanced view on NSPs, or just a big sell - I still don't believe it's the answer to our drug problem – rehab (compulsory) not needle exchange, we have to break the chain not extend the links.

Male Environmental Health Worker, 45-54 year old.

I disagree with needle syringe programs. I believe too much emphasis is put on harm minimisation. Programs that treat symptoms and not the cause of the problem. This booklet implies that NSP refer drug users to treatment. That is not necessarily true many who participate in NSP do not refer users. I have sympathy with people in a situation but I believe harm minimisation does not solve the drug addicts problem nor does NSPs program. I believe the NSP program encourage addicts to believe its alright to use drugs and to [bottom of fax cut off].

Female Concerned Citizen, 35-44 year old.

SUMMARY AND CONCLUSIONS

The Needle and Syringe Program Information Kit was designed to improve individuals' understanding of why Needle and Syringe Programs are implemented in Australia and, given the available scientific data, to strengthen support for such programs. The aim of this evaluation was to examine the Kit's efficacy in doing so. An examination of the returned Information Kit Evaluation Forms indicated that generally, the majority of respondents found the Kit to be useful, easy to understand, comprehensive, valid and accurate, and to increase their knowledge about NSPs. It may be concluded therefore that the Kit achieved its aims.

It was found however that the Kit did not change many respondents' attitudes about NSPs, either for or against. This result can largely be attributed to the fact that most respondents (80%) already supported NSPs. Almost 5% of respondents did indicate an attitude change towards support for NSPs. The one individual's report of an attitude change away from NSP support must be taken with caution however, as she also stated that she found the Kit "not at all easy to understand". The use of an attitude measure prior

to the distribution of the Kit in order to more accurately measure change may have allowed more confident conclusions to be drawn.

A major limitation of this study was the very low Evaluation Form response rate. As stated, the response rate was 0.9%. In contrast, average response rates for postal surveys are typically around 50%. Possible reasons for this low response may include: (i) the Evaluation Form was not seen; (ii) the purpose and importance of the Evaluation Form was not sufficiently emphasised as no mention of the Form was made in the introductory letter or any other part of the Kit; (iii) Some Kit recipients may not have had convenient access to a facsimile machine (no postal address was provided yet two Forms were received by mail); (iv) the Kit was not read by all recipients due to a general lack of interest or its large overall size; (v) delays were experienced in the distribution of the Kits (18 Surveys were received after the deadline specified on the Survey, eight more than three months after this date); or (vi) the recipients held concerns regarding confidentiality as a facsimile machine typically attaches a facsimile number to the document. The small sample size of this evaluation unfortunately dictates that caution must be exercised when drawing conclusions due to the possibility of a response bias.

Possible improvements to the methodology of this evaluation may help to reduce this problem in similar future research. A comment about the importance of the Information Kit evaluation process; inclusion of a 'reply paid' envelope for easy return of Evaluation Forms; and an incentive in the form of a prize for a randomly selected respondent may increase response rates and thus provide a larger sample.

In summary, the results of this evaluation study do offer qualified support for the utility of the Needle and Syringe Information Kit consistent with its stated aims and objectives.

REFERENCES

- Australian Institute of Health and Welfare (1999). *1998 National Drug Strategy Household Survey: First Results*. AIHW cat. No. PHE 15. Canberra: AIHW (Drug Statistics Series).
- Blewett, N. (1987). NCADA: Assumptions, arguments and aspirations. National Campaign Against Drug Abuse. Monograph Series No. 1. Australian Government Publishing Services, Canberra.
- Dillon, P. & Dolan, K. (1999). *Needle and Syringe Programs: Your questions Answered*. ANCAHRD Publications, Sydney.
- Dolan, K., Topp, L. & MacDonald, M. (1999). *Needle and syringe Programs: A Review of the Evidence*. ANCAHRD Publications, Sydney.
- Feachem, R. G. A. (1995). Valuing the past ... Investing in the future. *Evaluation of the National HIV/AIDS Strategy 1993-94 to 1995-96*. Australian Government Publishing Service, Canberra.
- Hurley, S., Jolley, D. & Kaldor, J. (1996). The effectiveness and cost-effectiveness of needle and syringe programs. In S. Hurley and J. R. G. Butler (Eds.), *An economic evaluation of aspects of the Australian HIV/AIDS Strategies*. Evaluation of the National HIV/AIDS Strategy 1993-1994 to 1995-1996 Technical Appendix 2, pp. 55-63. Australian Government Publishing Service, Canberra.
- MacDonald, M., Rutter, S., Wodak, A. & Kaldor, J. (1999). K2 and Kings Cross: Community attitudes to needle syringe program, discarded syringes and public injection, 1997 and 1998. NSW Department of Health.
- UNAIDS (1999). Drug use and HIV/AIDS. *UNAIDS Best Practice Collection Key Material*. UNAIDS, Geneva.
- Wodak, A., Dolan, K. A., Imrie, A. A., Gold, J., Wolk, J., Whyte, B. M. & Cooper, D. A. (1987). Antibodies to human immunodeficiency virus in needles and syringes used by intravenous drug abusers. *Medical Journal of Australia*, 147, 275-276.

APPENDIX A: INTRODUCTORY LETTER FROM MR CHRIS PUPLOCK, CHAIR, ANCAHRD



Dear Reader

Needle and Syringe Programs have been at the centre of much public debate in recent times. To ensure these debates are as informed as possible, the Australian National Council on AIDS, Hepatitis C and Related Diseases has commissioned a review of the scientific evidence regarding such Programs' effectiveness in reducing the transmission of blood borne viruses, such as HIV and hepatitis C.

The weight of the evidence in favour of Needle and Syringe Programs is overwhelming and in order to disseminate this evidence as widely as possible, I have arranged for the attached Information Kit to be distributed to Federal, State and Territory parliamentarians, local government councillors, environmental health officers, health department officers and related service providers.

I hope you find this document useful.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Chris Puplock', written in a cursive style.

Chris Puplock

Chairman
Australian National Council on AIDS, Hepatitis C and Related Diseases
May 2000

Appendix B: Needle and Syringe Programs: A review of the evidence.

NSP

Needle & syringe programs: A review of the evidence

Prepared by the

National Drug and Alcohol Research Centre, UNSW,
on behalf of ANCARD.

ISBN 0642 41520 X

Copies of this Document can be obtained from:

ANCAHRD publications request line Tel: 1800 022 863

Foreword by Chris Puplick, Chair, ANCAHRD

Dear Colleague

Needle and Syringe Programs have been at the centre of public discussion recently. This is not surprising. The provision of free needles and syringes challenges many people's sense of how best to deal with the issue of injecting drug use in the community, fearing that it gives the wrong message to impressionable young people. Others have an understandable concern regarding cost and improperly disposed needles.

The Australian National Council on AIDS, Hepatitis C and Related Diseases (ANCAHRD) has commissioned a review of the scientific evidence for and against Needle and Syringe Programs. Although each individual line of evidence may be subject to a variety of interpretations, the strength of the combined data is absolutely compelling.

The overwhelming weight of evidence points to the conclusion that Needle and Syringe Programs are an essential public health measure. By reducing needle-sharing, Needle and Syringe Programs have been found to be very effective in reducing the spread of blood borne infections such as HIV/AIDS and hepatitis C, both in Australia and overseas. Public policy should be properly 'evidence-based' and the Needle and Syringe Program can certainly claim that it is.

Needle & Syringe Programs are also extremely cost effective: by preventing these infections, health care costs can be contained. Far from encouraging drug use, Needle and Syringe Programs provide a useful referral point for drug rehabilitation and education. The scientific evidence shows that Needle and Syringe Programs have not led to an increase in the number of discarded needles and form a useful disposal strategy.

In view of the compelling nature of this research, ANCAHRD has developed the enclosed Information Kit on Needle and Syringe Programs and I am arranging for the Kit to be distributed to Federal, State and Territory Parliamentarians, Local Government Officers, Environmental Health Officers, Health Department Officers and service providers working in the field.

The Information Kit consists of two documents. ***A Review of the Evidence*** provides the scientific evidence for Needle and Syringe Programs in a question and answer format. It addresses the crucial questions that people who are unsure about the value of Needle and Syringe Programs want answered. ***Your Questions Answered*** provides a summary of the scientific evidence in a quick reference format to assist in answering these inquiries. It also includes contact details for further information.

Australia's enviable record in controlling the spread of HIV/AIDS and hepatitis C has rested on the bi-partisan, partnership approach to public health policy in this field. I commend the decision of the Council of Australian Governments in April 1999 to approve a \$221 m package which included support measures for Needle and Syringe Programs. The main aims of these measures

are to increase the number of clients accessing education and treatment services and to increase the availability of Needle and Syringe Programs, including through pharmacies.

I commend this Information Kit to you and thank you for your interest in Needle and Syringe Programs.

A handwritten signature in black ink, appearing to read "Chris Puplick". The signature is fluid and cursive, with a large loop at the end.

Chris Puplick
Chair
Australian National Council on AIDS, Hepatitis C and Related Diseases
May 2000

Table of Contents

Foreword by Chris Puplick, Chair, ANCAHRD _____	33
Summary _____	36
How many people inject drugs in Australia? _____	39
What is Australia's Drug Strategy? _____	39
What are Australia's strategies on HIV/AIDS and hepatitis C? _____	43
What are Needle and Syringe Programs? _____	45
Do Needle and Syringe Programs prevent HIV, hepatitis B and hepatitis C? _____	48
How do we know the data are reliable? _____	52
Are Needle and Syringe Programs cost-effective? _____	52
Do Needle and Syringe Programs lead injecting drug users into treatment? _____	53
Do Needle and Syringe Programs increase drug use? _____	54
Do Needle and Syringe Programs lead to crime? _____	55
Do Needle and Syringe Programs result in discarded needles and syringes? _____	55
What is the chance of getting HIV, hepatitis B or hepatitis C from being pricked by a used needle? _____	57
What can be learnt from overseas experiences with Needle and Syringe Programs? _____	58
What is the level of support for Needle and Syringe Programs? _____	60
Conclusion _____	62
References _____	64

Summary

This Review summarises the literature on the provision of sterile injecting equipment to people who inject drugs and other related issues. The proportion of the Australian population thought to inject drugs is about one percent or approximately 275,000 people¹. The first case of HIV infection in a drug injector without other risk factors in Australia was detected in 1985. In the following year, Needle and Syringe Programs started in Australia. At that time, hepatitis C infection was already well established among drug injectors with more than half being infected².

Staff at Needle and Syringe Programs provide much more than injecting equipment. They are often the first point of contact with health services for people who inject drugs, facilitating the entry of many drug users into drug treatment. Some Programs also provide primary medical care to this disadvantaged section of Australians whose health is usually very poor.

Needle and Syringe Programs have reduced the transmission of HIV, hepatitis B and hepatitis C. The size of the reduction of HIV transmission due to Needle and Syringe Programs has been calculated to be at least 30 percent. Australia's Needle and Syringe Programs were estimated to have prevented 3,000 cases of HIV infection in 1991 alone, a saving of \$266 million. HIV epidemics have occurred recently in some cities in North America where Needle and Syringe Programs existed. Arbitrary restrictions on the number of needles and syringes provided from the Programs are thought to have been a critical weakness in their effectiveness in preventing transmission of blood borne viral infections.

Research has shown that Needle and Syringe Programs do not increase injecting drug use or the number of discarded needles and syringes. Even though Needle and Syringe Programs enjoy a high level of support from the public in Australia and abroad, they do attract some criticism. Objections to Needle and Syringe Programs include: concern about specific locations, the inconsistency in providing some free injecting equipment to drug injectors but not to people with diabetes, concern that the Programs are responsible for all discarded injecting equipment in a local area and that the Programs condone drug use.

Some members of the public are concerned that they may receive a needlestick injury from a discarded needle and syringe and then become infected with HIV or hepatitis. No cases of HIV, hepatitis B or hepatitis C infection resulted from a needlestick injury due to discarded injection equipment have been identified although researchers have investigated the outcomes of such injuries.

There is abundant evidence from Australia and other countries of the public health benefits of Needle and Syringe Programs. The US Secretary for Health and Human Services, Donna Shalala, has announced that ⁹⁰:

"This nation is fighting two deadly epidemics - AIDS and drug abuse. They are robbing us of far too many of our citizens and weakening our future. A meticulous scientific review has now proven that needle exchange programs can reduce the transmission of HIV and save lives without losing ground in the battle against illegal drugs. It offers communities that decide to pursue needle exchange programs yet another weapon in the fight against AIDS (20 April 1998)"

Countries that have implemented these Programs have averted HIV epidemics among injecting drug users, while countries that have not implemented these measures have often experienced uncontrolled epidemics. There is strong evidence that if HIV becomes endemic among injecting drug users HIV can then spread to their sexual partners and children resulting in high mortality rates and large social and economic costs to the entire population.

How many people inject drugs in Australia?

Because drug injection is an illegal and highly stigmatised activity, it is difficult to estimate how many Australians inject drugs. According to the National Drug Strategy Household Survey, one to two percent of the Australian population have injected drugs at some time in their lives¹. Another estimate places the number of regular and occasional injecting drug users in Australia at 100,000 and 175,000, respectively². The number of dependent heroin users in Australia in 1993 was estimated to be about 59,000³. There are also a large number of non-dependent heroin injectors and persons who inject other drugs, such as amphetamines and cocaine.

What is Australia's Drug Strategy?

Australia's first national drug strategy, the National Campaign Against Drug Abuse, was developed in 1985. When the National Drug Strategy (1993-1997) was evaluated, Single and Rohl⁴ found that the harm minimisation approach, which had been introduced in the initial strategy, was fundamental to the ongoing success of the strategy.

Harm minimisation refers to policies and programs aimed at reducing drug-related harm and encompasses a wide range of integrated approaches including supply-reduction (law enforcement), demand-reduction (including abstinence-oriented interventions) and harm-reduction (including Needle and Syringe Programs)⁵. Harm minimisation aims to improve health, social and economic outcomes for both the community and individuals. Governments do not condone illegal behaviours such as injecting drug use, but they do acknowledge that these behaviours occur. Consequently, authorities have a responsibility to develop and implement

public health and law enforcement measures that contribute to reducing the harm that such behaviours can cause, both to individuals and the community.

While the practice of injecting drug use continues, provision of sterile injecting equipment through Needle and Syringe Programs is an important harm reduction strategy to reduce the spread of blood borne viruses such as HIV and hepatitis C⁵.

Australia's National Drug Strategy is widely recognised as one of the most progressive and respected drug strategies in the world. Australia's current national drug strategy, "Building Partnerships", is based on four main features⁵:

- the principle of harm minimisation, which includes supply reduction, demand reduction and harm reduction
- a comprehensive approach, which includes all drugs and other substances
- a partnership between Commonwealth, State and Territory governments, health, law enforcement and education agencies, community based organisations and industry in tackling drug related harm
- an emphasis on rigorous research, evidence-based practice and evaluation and assessment of interventions.

A major component of the next phase of the National Drug Strategy is the Prime Minister's National Illicit Drug Strategy '*Tough on Drugs*'. The Strategy has been allocated \$516 million over four years and aims to combat illicit drug use through a sharper focus on reducing the supply of drugs and on reducing demand. It encompasses a balanced package of measures aimed at law enforcement, education, treatment and research.

In April 1999 the Council of Australian Governments approved a \$221 million package of measures also under the National Illicit Drug Strategy. Within this package two health promotion initiatives will be implemented by the National Centre for Disease Control: *Increased Education, Counselling and Referral Services Provided Through Community Based Programs and Diversification of Existing Needle and Syringe Programs*. These two initiatives will enhance the capacity of State and Territory Needle and Syringe Programs to provide effective and accessible education, counselling and referral services. The aims of these initiatives are to increase the number of clients accessing education and treatment services and to increase the availability of

sterile needles and syringes, including through pharmacies. The initiatives will be supported by the development of nationally consistent training packages for service providers.

What are Australia's strategies on HIV/AIDS and hepatitis C?

The first National HIV/AIDS Strategy was launched in 1989. According to Professor Richard Feachem, from the World Bank, who oversaw the evaluation of the second National HIV/AIDS Strategy:

The first National HIV/AIDS Strategy released by the Commonwealth Government in 1989 provided a framework for an integrated response to the HIV epidemic and a plan for action across a range of policy and program activities. Needle and Syringe Programs were a key component of the education and prevention strategy⁶.

Professor Feachem concluded: 'Needle and Syringe Exchange Programs must be a foundation of Australia's prevention efforts in a third Strategy and beyond'. The third National HIV/AIDS Strategy (Partnerships in Practice: National HIV/AIDS Strategy 1996-97 to 1998-99) continues to support Needle and Syringe Programs as an important part of its prevention program for people who inject drugs.

Australia's HIV/AIDS Strategy has received international recognition. According to the Joint United Nations Programme on HIV/AIDS Best Practice Collection:

[In Australia], early and vigorous HIV prevention programmes aimed at injecting drug users resulted in stable and low rates of HIV prevalence among drug users and related population groups. It is generally agreed that this prompt - and sustained - action fundamentally altered the course of the country's epidemic⁷.

The fourth National HIV/AIDS Strategy and the first National Hepatitis C Strategy, both currently being developed, will continue to support Needle and Syringe Programs as effective harm minimisation interventions.

What are Needle and Syringe Programs?

Needle and Syringe Programs are a public health measure to reduce the spread of blood borne viral infections such as HIV and hepatitis C among injecting drug users. These Programs are supported by the National Drug Strategy's harm minimisation framework. They provide a range of services that include provision of injecting equipment, education and information on reduction of drug use, referral to drug treatment, medical care and legal and social services. Equipment provided includes needles and syringes, swabs, vials of sterile water and 'sharps bins' for the safe disposal of used injection equipment. The aim of providing sterile injecting equipment is to prevent the shared use of injecting equipment, which can lead to the transmission of blood borne viral infections. Staff also address the potential for transmission of infection via sexual contact by providing condoms and safe sex education. By engaging drug users into health services those who continue to use drugs are likely to cause less harm to themselves and society. They are also an important point for collection of used injecting equipment.

The first Australian Needle and Syringe Program began in Sydney in 1986 as a trial project⁸. The testing of syringes returned to this Darlinghurst Program detected an increase in HIV prevalence, suggesting that HIV was spreading among the clients^{8,9}. In the following year Needle and Syringe Programs became NSW Government policy. Other States and Territories followed soon after. There are now over 3,000 Needle and Syringe Programs in Australia. In 1996/97 total spending by States and Territories on Needle and Syringe Programs was almost \$13 million¹⁰.

There are several different types of Needle and Syringe Programs in operation in Australia. *Primary outlets* are stand-alone agencies that are specifically established to provide injecting equipment, usually along with primary medical care. Staff provide these specific services in a non-judgmental manner and develop a rapport with individuals who are otherwise hard to reach. *Secondary outlets* offer needle distribution and exchange as one of a range of other health or

community services. Typical secondary outlets include hospital Accident and Emergency Departments and Community Health Centres. *Mobile services* are distribution and exchange services provided by vehicle. *Outreach services* have workers who move around from place to place to extend the reach of the service. *Vending machines* dispense “Fitpacks” containing several 1 ml syringes for a small fee. These machines are monitored and restocked by Needle and Syringe Programs staff. Fitpacks are hard plastic containers which enable used syringes to be “locked-in” for disposal so that they cannot be removed for re-use or cause injury.

Needle and Syringe Programs tend to be located in relatively public places because they need to be accessible.

The Pharmacy Fitpack Scheme operating in over 500 pharmacies throughout Australia provides 1ml syringes, which can either be purchased, or, in NSW, exchanged free on return of a pack with used syringes. In addition to those participating in the Fitpack Scheme, other pharmacies sell needles and syringes and other equipment used for injecting. Injecting drug users paid over \$600,000 for needles and syringes in NSW in 1996/97.

The NSW Department of Health’s *Needle and Syringe Exchange Policy and Procedures Manual*¹¹ describes the rationale behind Needle and Syringe Programs:

- despite drug education and treatment programs, many people will continue to inject licit and illicit drugs for varying periods of time;
- people must be provided with the knowledge and skills necessary to make informed decisions about high-risk behaviours.

In Victoria, there are approximately 200 agencies registered to operate a Needle and Syringe Program and about half of these are in rural areas. Over 700 pharmacies sell needles and syringes.

Over 40 countries operate Needle and Syringe Programs including: Austria, Belgium, Brazil, Bulgaria, Canada, China, Croatia, Czech Republic, Denmark, Estonia, Finland, Germany, Greece, Hungary, India, Kazakhstan, Latvia, Luxembourg, Nepal, Netherlands, Norway, Philippines, Poland, Portugal, Slovak Republic, Salvador, Slovenia, Thailand, Ukraine, United Kingdom and the United States of America¹².

Do Needle and Syringe Programs prevent HIV, hepatitis B and hepatitis C?

The effectiveness of Australia's Needle and Syringe Programs can be measured against its success in controlling the spread of blood borne viruses such as HIV and hepatitis C. In terms of per capita AIDS incidence, Australia was ranked fifth among developed countries in 1985. The success of the strategies led to Australia being ranked at seventh by 1993. HIV prevalence (the percentage of people infected at any point in time) among injecting drug users in Australia has remained below three percent and HIV incidence (the percentage of new people infected each year), below one percent¹³⁻¹⁵.

By comparison, in the US, HIV infection is the leading cause of death among people aged between 25 and 44 years. Among the estimated 1-1.5 million injecting drug users in the US, approximately 19,000 HIV infections occur annually¹⁶. The Centres for Disease Control and Prevention in the US estimate almost half the 41,000 new HIV infections in the US each year occur among injecting drug users and their sexual partners and children¹⁷.

Professor Penny and Dr Wodak, leading Australian HIV experts commented that:

The risk of HIV in injecting drug users is not limited to themselves but to their sexual partners and, tragically to their children. In New York City, which has a population about the same size as NSW but rampant HIV among Injecting drug users [injecting drug users] more than 17,000 paediatric cases of AIDS have been reported, compared to 42 in NSW. These paediatric cases in New York City were in almost all cases the direct result of one or other parent being an IDU. There is a serious risk to Australian children of HIV infection acquired from their parents should an uncontrolled epidemic erupt among Injecting drug users, if present programs are curtailed. (Sydney Morning Herald, 19 August 1997, page 15)

In sharp contrast to HIV infection, the prevalence and incidence of hepatitis C is high among injecting drug users in Australia. Hepatitis C prevalence among injecting drug users is about 65% and incidence is about 15%. Hepatitis C has been more difficult to contain because the virus is more infectious than HIV. Evidence also exists for significant rates of hepatitis C among injecting drug users in Australia as early as 1971- the epidemic was therefore well established prior to the virus being identified in 1989. A disease is more difficult to control once it has already been established. An injecting drug user sharing an uncleaned needle used by another injecting drug user of unknown infection status is at between 150 and 800 times higher risk of infection with hepatitis C than HIV. High rates of hepatitis C transmission have been found among injecting drug users who share injecting equipment¹³.

There are approximately 11,000 new hepatitis C infections annually, of which about 90% are thought to be from injecting drug use. Approximately 190,000 Australians have been infected with hepatitis C, of whom about 134,000 remain chronically infected and therefore at risk of cirrhosis¹⁸. For each 1,000 new infections with hepatitis C, over \$14 million (in 1994 terms) is added to Australia's health care costs¹⁹.

Without Needle and Syringe Programs the rates of hepatitis C infection are likely to have been far higher. There is some indication that the incidence of hepatitis C has fallen in some Australian injecting drug user populations, from 18% prior to 1987 to about 12% since then²⁰.

A recent article recommended the following strategy in order to bring hepatitis C under control¹³:

Control of the hepatitis C epidemic requires more intense concentration on reducing needle-sharing and other risky behaviour, and will require a greater effort to decrease incidence than HIV has. This has been seen with HIV infection among injecting drug users in other countries - epidemics which have reached a high prevalence have proven much harder to control than epidemics which have not taken off

before intervention began. Further decreases in needle-sharing will require increased support for accepted programs as well as consideration of new strategies.

Almost all studies of risk behaviour of people attending Needle and Syringe Programs have found a decrease or at least no increase in risky practices²¹⁻²⁶. Some Needle and Syringe Programs are deliberately located in areas of high drug use, where people who inject drugs tend to be more disadvantaged than other groups of injecting drug users who purchase injecting equipment from pharmacies. Studies of these Programs find extremely high levels of risk behaviour among clients. One study reported no change in risky practices in people attending a Needle and Syringe Program. Hahn²⁷ found that among 341 injecting drug users in drug treatment in San Francisco between 1989 and 1990, the number of partners with whom equipment was shared declined equally among injecting drug users who had never used Needle and Syringe Programs as well as those who had. A review of all Australian studies on injecting drug use up to 1994 found dramatic decreases in syringe sharing from almost 100% in 1986 to about 15% in 1994²⁶.

In Windham, Connecticut, a Needle and Syringe Program closed in March 1997, after several years of operation and following 10 months of heated community debate. Injecting drug users from Windham were interviewed before, and three months after, the closure of the Program²⁸. After the program closed, 51% of injecting drug users were forced to obtain their syringes from unsafe sources, such as family, friends or street dealers, compared with 14% when the program was operating. Further, the number of injections per syringe increased from 3.5 to 7.7 injections after the Program closed. The proportion of injecting drug users who reported sharing injecting equipment in the preceding month rose from 16% to 34%. There was no decrease in the number of needles and syringes discarded in public places and no effect of the visibility on the Windham illicit drug scene after the closure of the Needle and Syringe Program.

Two recent studies confirmed the beneficial effect of Needle and Syringe Programs in reducing transmission of HIV. Des Jarlais²⁹ examined data on more than 7,300 injecting drug users from five cities around the world that had stable and consistent levels of HIV infection between 1984 and 1993. Compared to those cities with high levels of infection, such as New York City, the cities with consistently low levels of HIV, such as Sydney, had made concerted efforts to ensure sterile injecting equipment was widely available. Hurley³⁰ reviewed research findings on the effectiveness of Needle and Syringe Programs in 81 cities between 1984 and 1994. Among drug injectors HIV prevalence decreased 5.8% per year in 29 cities with Needle and Syringe Programs and increased 5.9% in 52 cities (n=52) without such Programs.

Compelling evidence for the effectiveness of Needle and Syringe Programs in reducing the spread of HIV comes from a rigorous study in New Haven, USA. A unique syringe-tracking and testing system was used to evaluate the program³¹⁻³³.

The biological evidence in this study is important because, unlike other sorts of evidence, it does not rely on injecting drug users' awareness of their own HIV status. Each client and each syringe were assigned a unique identification code. The time and place where needles were distributed and returned, client codes and syringe codes were recorded for every transaction. Systematic samples of returned needles were tested for HIV. This system allowed sophisticated mathematical modelling which showed that HIV incidence among clients was reduced by more than 30% as a result of this Program.

Injecting drug users who had ever used the Needle and Syringe Program in Tacoma, USA, were 5.5 times less likely to have hepatitis B and 7.3 times less likely to have hepatitis C than their non-attending peers³⁴. A later study failed to find a protective effect of the Program on hepatitis B and hepatitis C incidence³⁵. However, the sample size may have been too small to detect any benefit. In the US, access to sterile injecting equipment is restricted by long-standing syringe prescription and paraphernalia laws (prohibiting the possession of injecting equipment) and a

Congressional ban, in place since 1988, on the use of federal funds to operate Needle and Syringe Programs. Despite the lack of federal support, 117 Needle and Syringe Programs were operating in 1998 in the US, exchanging nearly 14 million needles and syringes each year. As there are an estimated 1.3 billion injections each year in the US³⁶, the effectiveness of US Needle and Syringe Programs is severely limited by their inadequate coverage.

How do we know the data are reliable?

Much of the data collected about Needle and Syringe Programs consist of self-reports of illegal and socially stigmatised activities. This inevitably raises concerns about the accuracy of these data. Numerous investigations have demonstrated that self-reported data are accurate and can be used for studies of illicit drug users. A review of the literature³⁷ found that self-reported data of illicit drug users were reliable (likely to be confirmed on repeat testing) and valid (likely to be confirmed by interviews with significant others). The data are accurate provided strong assurances of confidentiality and anonymity have been provided, as was the case in the studies of the impact of Needle and Syringe Programs on various outcomes^{38, 39}. Some studies specifically assessed the accuracy of self-reported risk behaviours of injecting drug users and found them to be reliable⁴⁰ and not significantly affected by attempts to provide socially desirable responses⁴¹.

Are Needle and Syringe Programs cost-effective?

Estimates of the cost-effectiveness of Needle and Syringe Programs in Australia in 1991 were made using the base case (the most plausible), best case and worst case assumptions⁴². Needle and Syringe Programs were estimated to have prevented between 300 (worst case), 2900 (base case) and over 10,000 (best case) infections of HIV in 1991. In the same year, \$10 million was

spent on Needle and Syringe Programs nationally which produced savings of \$266 million. The savings in treatment costs resulting from the prevention of HIV more than offset the operating costs of the programs. Further, the analysis actually underestimated the likely cost-effectiveness of Needle and Syringe Programs because it did not include savings from prevention of the transmission of hepatitis B and hepatitis C. Had these additional benefits been measured, both the number of years of life saved and the net direct cost savings would be substantially increased. Based on conservative assumptions, Lurie and Drucker¹⁷ estimated that if the US had adopted Needle and Syringe Programs in 1987 as Australia did and continued their expansion until 1995, at the same rate as Australia, then between 4,400 and 10,000 HIV infections would have been prevented. This action would have saved the US health care system between US\$240 and US\$540 million.

Five US Government-funded reviews concluded that Needle and Syringe Programs were both effective and cost-effective in the prevention of HIV without increasing illicit drug use⁴³⁻⁴⁷. These conclusions were confirmed at the 1997 US National Institutes of Health Consensus Development Conference.

Do Needle and Syringe Programs lead injecting drug users into treatment?

Injecting drug users come from all walks of life. However, some reports suggest that Needle and Syringe Programs tend to attract injecting drug users who are homeless, inject more frequently^{27, 48}, use shooting galleries⁴⁸ or engage in sex work^{48, 49}. Many of these clients have never been in contact with other drug services^{24, 50, 51}. Therefore, Needle and Syringe Programs can be important points of contact for high-risk injecting drug users by providing harm reduction educational materials and referral to drug treatment, medical, legal and social services. Studies in London⁵² and New Haven, USA^{53, 54} found that Needle and Syringe Programs acted as

"gateways" to more traditional medical treatment for drug dependence for substantial proportions of clients. Over two years, almost 600 drug users attending a Needle and Syringe Program in New Haven, USA, requested treatment for drug problems. Over a 16 month period, 38% of clients attending a London Program were referred to drug services and other medical services.

Do Needle and Syringe Programs increase drug use?

Fluctuations in drug use patterns are common⁵⁵. Initiation into drug use, including injecting, is influenced by a complex interplay of a wide range of social, psychological, cultural and historical factors⁵⁶⁻⁶¹. Watters and colleagues²⁵ evaluated a Needle and Syringe Program in San Francisco using bi-annual interviews with 5,644 injecting drug users recruited from detoxification programs and the "street" between 1986 and 1992. They found that there was a progressive decline in the proportion of injecting drug users who reported first injecting drugs in the preceding year, from 3% in 1989 to 1% in 1992. If Needle and Syringe Programs encouraged new recruits into injecting, the proportion of new recruits would be increasing rather than decreasing. A similar decline in initiation to injecting was also reported by Guydish⁶². The median age of initiation of injecting among injecting drug users attending over 20 Needle and Syringe Programs around Australia has remained stable at 18 years between 1995 and 1997⁶³.

In November 1986, a trial Needle and Syringe Program was established in Sydney adjacent to a methadone maintenance unit. The increased availability of needles and syringes was not associated with an increase in the presence of illicit injectable drugs in the urine specimens of clients of the methadone program compared to a control methadone unit where there was no known change in needle and syringe availability⁶⁴. Among injecting drug users attending Needle and Syringe Programs, decreases in the number and frequency of injections have been reported by several studies⁶⁵⁻⁶⁷.

One recent study reported a negative impact of Needle and Syringe Programs on drug use. Schoenbaum⁶⁸ found that between 1989 and 1993 among 329 methadone clients in New York City, there was a 61% relative decline in the proportion of non-Needle and Syringe Program users continuing to inject, compared with a 14% decline in those who had ever used the Needle and Syringe Program. It is possible, however, that these results simply represent self-selection: injecting drug users who expected to continue to inject may have been more likely to access the Needle and Syringe Programs.

Do Needle and Syringe Programs lead to crime?

Very little evidence exists as to whether Needle and Syringe Programs lead to crime. Researchers in America found that a Baltimore needle-exchange program neither contributed to crime nor to the number of discarded needles in the street. Researchers examined arrest patterns in areas with Needle and Syringe Programs and areas without such Programs and found no difference⁶⁹.

Do Needle and Syringe Programs result in discarded needles and syringes?

There is no evidence that Needle and Syringe Programs increase the number of needles and syringes discarded in public areas. Oliver⁷⁰ reported on the number of discarded syringes in the immediate vicinity of a Needle and Syringe Program for 3.5 months before it opened and for 20 months after. Prior to the start of the Program, 5.1 syringes were found per month. After the program started the average number of syringes found per month declined to 1.9. Doherty⁷¹ conducted a survey of a random sample of 32 city blocks in areas with high levels of drug use in Baltimore, Maryland, before and after the implementation of a Needle and Syringe Program.

Analyses showed no significant increase in the number of discarded needles during the first two months of the Needle and Syringe Program's operation.

In Tasmania, authorities reported that approximately 99% of needles and syringes are disposed of in a responsible manner. In 1997/98, there were approximately 2,800 syringes distributed in Tasmania for every single report of used discarded equipment (Department of Community and Health Services, personal communication). The NSW Department of Health reported that in the 1996-1997 financial year, 50% of all needles and syringes distributed under the program were returned to needle and syringe outlets. All Area Health Services in NSW collect self-reported data from Needle and Syringe Program clients regarding their methods of disposal of injecting equipment. These figures indicate that between 90% and 95% of all clients disposed of needles and syringes in a safe way. During a twenty-month period in Brisbane, 1.4 million pieces of injecting equipment were distributed and only 871 pieces were found to have been inappropriately discarded. This represents less than 0.1% of injecting equipment being discarded⁷².

There was no change in the number of needlestick injuries to members of the general public in the years before and after Needle and Syringe Programs were introduced in Amsterdam^{73, 74}.

For injecting drug users, criminal penalties can be a substantial deterrent to participation in programs aimed at safe disposal of used equipment⁷⁵. In Connecticut the number of needlestick injuries reported by police fell after laws preventing legal access to injecting equipment were repealed⁷⁶.

What is the chance of getting HIV, hepatitis B or hepatitis C from being pricked by a used needle?

There are two types of needlestick injuries. Occupational needlestick injuries occur to health care workers and other staff in the course of their work. Accidental needlestick injuries occur when a member of the public is pricked by a needle that has been improperly discarded. The risk of HIV transmission from a single occupational needlestick injury for health workers, where the source-patient is known to be HIV positive has been estimated to be 0.3% per exposure (or 1 in 316)^{77,78}. The risks are higher for transmission of hepatitis C (3% - 10%) and hepatitis B (19-30%).

The probability of becoming infected with a blood borne virus following an injury is even lower for members of the general population for a variety of reasons. The needle often has to pierce clothes or shoes before penetrating the skin. The syringe may have been exposed to the elements for some time. HIV is a fragile virus once outside the living body especially when exposed to unfavourable external environmental conditions⁷⁹. In addition, the syringe is likely to contain a far smaller volume of blood than syringes encountered in a health care setting⁸⁰. No cases have been published of a member of the general public becoming infected with HIV, hepatitis B or hepatitis C as a result of a needle stick injury from discarded injection equipment (Queensland Health, personal communication, 1999). A review of emergency room records in Rome identified 408 people who had suffered needlestick injuries from discarded syringes. All wounds were superficial; in 40% of the injuries, the needle had passes through a shoe or clothing. None of the 408 patients had developed HIV following the needlestick injury⁸¹. In Madrid, 249 children who suffered a needlestick injury from discarded needles and syringes between May 1988 and April 1995 were tested for HIV. No infections were detected⁸².

What can be learnt from overseas experiences with Needle and Syringe Programs?

Despite Needle and Syringe Programs, HIV infection among injecting drug users has still spread in some cities around the world, including Montreal and Vancouver (which has the largest Needle and Syringe Program in North America).

Schechter⁴⁸ documented the association between frequent Needle and Syringe Program attendance and higher HIV prevalence among Injecting drug users in Vancouver. This finding was interpreted subsequently as evidence that Needle and Syringe Programs exacerbate the spread of HIV and therefore should be discontinued. However, Schechter found a number of confounding factors which were likely to have accounted for the association between frequent use of the Needle and Syringe Programs and higher levels of HIV infection. Frequent Needle and Syringe Program attendees were younger and significantly more likely to report unstable housing, frequent injecting, frequent cocaine injecting, involvement in the sex trade, injecting in shooting galleries and incarceration within the preceding six months, and significantly less likely to report enrolment in methadone maintenance. These risk factors among attenders were more likely to account for the observed association between frequent Needle and Syringe Program attendance and HIV infection than the hypothesis that Needle and Syringe Programs contribute to the formation of new needle sharing networks⁸³. No evidence of such networks could be found.

The Canadian experience suggests that although Needle and Syringe Programs are crucial, they are only one component of a comprehensive blood borne viral infection program which should include counselling, support, education and drug treatment such as methadone maintenance programs¹⁶. In Vancouver, although Needle and Syringe Programs were introduced relatively early, the number of needles exchanged was grossly inadequate to ensure single-use of sterile injecting equipment¹⁶. Furthermore, access to treatment, methadone maintenance and counselling was inadequate. Education of injecting drug users, increased availability of sterile

injecting equipment, ready access to effective drug treatment acceptable to the target population, and organised involvement of injecting drug users in response to this epidemic are all necessary for effective control⁸⁴.

A cohort of people who inject drugs has been studied in Montreal, where a Needle and Syringe Program has operated since 1988. One report from this study suggested that attenders were more than twice as likely to become infected with HIV as non-attenders⁴⁹. In explaining these results, the authors pointed out that the Montreal Needle and Syringe Program had a strict one-for-one exchange policy (that is, used needles and syringes had to be returned in order to obtain sterile replacements), with a maximum of 15 syringes exchanged per person per night. Since attenders engaged in higher risk behaviours including more frequent injecting than non-attenders, the authors concluded that the number of needles and syringes distributed was likely to have been substantially less than was actually needed.

The Vancouver study¹⁶ has also attracted the attention of opponents of Needle and Syringe Programs despite the fact that it does not clearly demonstrate either adverse or beneficial effects of Needle and Syringe Programs. According to Drucker and colleagues⁸⁵:

That study demonstrated that a significant HIV epidemic occurred despite the presence of an NSEP (this does not mean that the NSEP was ineffective, only that it was not perfectly effective) and, like the Montreal study, that the highest-risk IDU [injecting drug user] attend the NSEP [Needle and Syringe Exchange Program]. The number of incident HIV infections was only 24 and almost all used the NSEP, so it was impossible to say whether NSEP users were more likely to contract HIV infection than those not using the program or whether the epidemic would have occurred sooner or been larger had there not been an NSEP.

It is critical to recall that, by the authors' own descriptions, neither study was designed to evaluate NSEP. But both the Montreal and the Vancouver studies suggest that NSEP, because they attract high-risk IDU, would be excellent places to implement behavioural risk-reduction programs. It is significant that public-health officials in Montreal and Vancouver, rather than curtailing these programs, have responded to these findings by expanding the availability of NSEP services in their cities⁸⁵.

What is the level of support for Needle and Syringe Programs?

In Perth, 87% of a sample of 400 members of the general public agreed that injecting drug users “should be legally able to obtain new needles from authorised sources”, while 93% felt that the provision of new needles was important to stop the spread of HIV⁸⁶. In NSW, 90% of a sample of 300 urban and rural members of the general community supported the continuation of the State’s Needle and Syringe Programs and 96% agreed that Needle and Syringe Programs play an important part in stopping the spread of AIDS in Australia⁸⁷. In five suburbs around the Kings Cross area in Sydney, 305 residents were randomly selected for a telephone survey of whom 82% agreed that Needle and Syringe Programs should continue⁸⁸.

A 1997 US national telephone survey found that 71% of respondents supported the lifting of a ban on federal funding for Needle and Syringe Programs. This includes majorities of supporters in both political parties⁸⁹. In 1996, a 70% of the Swiss population rejected a proposal in a national referendum to discontinue Needle and Syringe Programs (Sydney Morning Herald, 30th September, 1997, page 8). In Australia, the Inaugural Metropolitan Mayors Statement on Drugs recognised the “importance of needle exchange as part of the National HIV/AIDS Strategy and [undertook] to encourage appropriate agencies and pharmacies to provide syringes” (24 November, 1998).

The US Secretary for Health and Human Services, Donna Shalala, has announced that⁹⁰:

this nation is fighting two deadly epidemics - AIDS and drug abuse. They are robbing us of far too many of our citizens and weakening our future. A meticulous scientific review has now proven that needle exchange programs can reduce the transmission of HIV and save lives without losing ground in the battle against illegal drugs. It offers communities that decide to pursue needle exchange programs yet another weapon in their fight against AIDS (20 April 1998).

Dr Harold Varmus, Director of the US National Institutes of Health noted that⁹⁰:

an exhaustive review of the science in this area indicates that needle exchange programs can be an effective component of the global effort to end the epidemic of HIV disease.... recent findings have strengthened the scientific evidence that needle exchange programs do not encourage the use of illegal drugs.

Conclusion

Needle and Syringe Programs are a critical component of strategies to control the spread of HIV, hepatitis C and other blood borne viral infections among injecting drug users and ultimately the broader community. Evidence of the effectiveness of Needle and Syringe Programs is consistent and compelling. They have been found to be highly cost effective compared to the cost of treating HIV and hepatitis C infection. Needle and Syringe Programs have not been associated with increases in drug injecting or discarded used injecting equipment. These Programs enable referral to drug treatment and other health services. In communities where Needle and Syringe Programs have been established, they generally receive community support.

Authors

Dr Kate Dolan and Ms Libby Topp

National Drug and Alcohol Research Centre.

Ms Margaret MacDonald
National Centre in HIV Epidemiology and Clinical Research

UNSW, Sydney, 1999

References

1. Commonwealth Department of Health and Family Services, 1996. National Drug Strategy Household Survey Report: Canberra
2. Australian National Council on AIDS and Related Diseases 1998. *Estimating the number of injecting drug users in Australia using the Delphi technique*. National Centre in HIV Epidemiology and Clinical Research, Sydney
3. Hall, W. 1995. The demand for methadone maintenance treatment in Australia. National Drug and Alcohol Research Centre, Technical Report No. 28. Sydney.
4. Single, E. and Rohl, T. 1997 *The National Drug Strategy: Mapping the Future. Evaluation of the National Drug Strategy 1993-1997*. Australian Government Publishing Service, Canberra.
5. Ministerial Council on Drug Strategy, 1998. National Drug Strategic Framework 1998-99 to 2002-03. Building partnerships. A strategy to reduce the harm caused by drugs in our community. Commonwealth of Australia, Canberra.
6. Feachem, R.G.A. 1995. Valuing the past ... Investing in the future. Evaluation of the National HIV/AIDS Strategy 1993-94 to 1995-96. Australian Government Publishing Service, Canberra.
7. UNAIDS, 1999. Drug use and HIV/AIDS, UNAIDS Best Practice Collection Key Material, UNAIDS, Geneva.
8. Wodak, A., Dolan, K.A., Imrie, A.A., Gold, J., Wolk, J., Whyte, B.M. & Cooper, D.A. 1987. Antibodies to human immunodeficiency virus in needles and syringes used by intravenous drug abusers. *Medical Journal of Australia*, 147, 275-276.
9. Wolk, J., Wodak, A., Morlet, A., Guinan, J.J., Wilson, E., Gold, J., and Cooper, D. 1988. Syringe seroprevalence and behavioural and demographic characteristics of intravenous drug abusers using syringe exchanges in Sydney, Australia, 1987. *AIDS*. 2:373-378.
10. Shiell, A. 1998. Economic analyses for the review of the National Hepatitis C Action Plan. Unpublished report.
11. NSW Department of Health. 1994. Needle and syringe exchange policy and procedures manual, Sydney.
12. Strathdee, S.A., van Ameijden, E.J.C., Mesquita, F., Wodak, A., Rana, S. & Vlahov, D. 1998. Can HIV epidemics among injection drug users be prevented? *AIDS*, 12 (suppl A), S71-S79.
13. Crofts, N., Aitken, C.K. and Kaldor, J. 1999. The force of numbers: why hepatitis C is spreading among Australian injecting drug users while HIV is not. *Medical Journal of Australia*, 170:220-221.

14. Kaldor, J.M., Elford, J., Wodak, A., Crofts, J.N. & Kidd, S. 1993. HIV prevalence among Injecting drug users in Australia: A methodological review. *Drug and Alcohol Review*, 12, 175-184.
15. MacDonald, M., Wodak, A.D., Ali, R., Crofts, N., Cunningham, P., Dolan, K., Kelaher, M., Loxley, W., van Beek, I and Kaldor, J. 1997. HIV prevalence and risk behaviour in needle exchange attenders: A national study. *Medical Journal of Australia*, 166, 237-240.
16. Strathdee, S.A., Patrick, D.M., Currie, S.L., et al. 1997. Needle exchange is not enough: Lessons from the Vancouver injecting drug use study. *AIDS*, 11, F59-F65.
17. Lurie, P. & Drucker, E. 1997. An opportunity lost: HIV infections associated with lack of a national needle-exchange programme in the USA. *Lancet*, 349, 604-608.
18. Australian National Council on AIDS and Related Diseases Hepatitis C Sub-Committee 1998. *Hepatitis C Virus Projections Working Group: Estimates and Projections of the Hepatitis C Virus Epidemic in Australia*. Sydney: National Centre in HIV Epidemiology and Clinical Research.
19. Brown, K. & Crofts N. 1998. Health care costs of a continuing epidemic of hepatitis C virus infection among injecting drug users. *Australian and New Zealand Journal of Public Health*, 22 (3 Suppl), 384-8.
20. Crofts, N Jolley, D and Kaldor, J 1997. The epidemiology of HCV infection among injecting drug users in Australia. *J Epidemiol Community Health* 51:692-697.
21. Frischer, M. & Eliot, L. 1993. Discriminating needle exchange attenders from non-attenders. *Addiction*, 88, 681-687.
22. Hankins, C., Gendron, S., Bruneau, J. & Roy, E. 1994. Evaluating Montreal's needle exchange CACTUS-Montreal. In: *Proceedings of the Workshop on Needle Exchange and Bleach Distribution Programs*, pp.83-90. Washington: National Academy Press.
23. Peak, A., Rana, S., Maharjan, S.H., Jolley, D. & Crofts, N. 1995. Declining risk for HIV among injecting drug users in Kathmandu, Nepal: The impact of a harm reduction programme. *AIDS*, 9, 1067-1070.
24. van Ameijden, E.J.C., van den Hoek, J.A.R., van Haastrecht, H.J.A. & Coutinho, R.A. 1992. The harm reduction approach and risk factors for human immunodeficiency virus (HIV) seroconversion in injecting drug users, Amsterdam. *American Journal of Epidemiology*, 136, 236-243.
25. Watters, J.K., Estilo, M.J., Clark, G.L. & Lorvick, J. 1994. Syringe and needle exchange as HIV/AIDS prevention for injection drug users. *Journal of the American Medical Association*, 271, 115-120.
26. Crofts, N., Webb-Pullman, J. & Dolan, K. 1996. An analysis of trends over time in social and behavioural factors related to the transmission of HIV among IDUs and prison inmates. *Evaluation of the National HIV/AIDS Strategy. Technical Appendix 4*. Australian Government Publishing Service, Canberra.

27. Hahn, J.A., Vranizan, K.M. & Moss, A.R. 1997. Who uses needle exchange? A study of injection drug users in treatment in San Francisco, 1989-1990. *Journal of Acquired Immune Deficiency Syndrome and Human Retrovirology*, 15, 157-164.
28. Broadhead, R.S., van Hulst, Y. & Heckathorn, D.D. 1999. Impact of the closure of a needle exchange program. *Social Problems*, 46, (1): 48-66
29. Des Jarlais, D.C., Hagan, H., Friedman, S.R., *et al.* 1995. Maintaining low HIV seroprevalence in populations of injecting drug users. *Journal of the American Medical Association*, 274, 1226-1231.
30. Hurley, S.F., Jolley, D.J. & Kaldor, J.M. 1997. Effectiveness of needle-exchange programs for prevention of HIV infection. *Lancet*, 349, 1797-1800.
31. Kaplan, E.H. 1994. A method for evaluating needle exchange programmes. *Statistics in Medicine*, 13, 2179-2187.
32. Kaplan, E.H. & Heimer, R. 1994. A circulation theory of needle exchange. *AIDS*, 8, 567-574.
33. Kaplan, E.H., Khoshnood, D. & Reimer, R. 1994. A decline in HIV-infected needles returned to New Haven's needle exchange program: Client shift or needle exchange? *American Journal of Public Health*, 84, 1991-1994.
34. Hagan, H., Des Jarlais, D.C., Friedman, S.R., Purchase, D. & Alter, M.J. 1995. Reduced risk of hepatitis B and hepatitis C among injection drug users in the Tacoma syringe exchange program. *American Journal of Public Health*, 85, 1531-1537.
35. Hagan, H., McGough, J.P., Thiede, H., Weiss, N.S., Hopkins, S. & Alexander, E.R. 1999. Syringe exchange and risk of infection with hepatitis B and C viruses. *American Journal of Epidemiology*, 149, 203-213.
36. Lurie, P., Jones, T.S. & Foley, J. 1998. A sterile syringe for every drug users injection: How many injections take place annually and how might pharmacists contribute to syringe distribution. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*, 18 (supplement 1), S45-S51.
37. Darke, S. 1998. Self-report among injecting drug users: A review. *Drug and Alcohol Dependence*, 51, 253-263.
38. Bale, R.N., van Stone, W.W., Engelsing, T.M.J., Zarcone, V.P. & Kuldau, J.M. 1981. The validity of self-reported heroin use. *International Journal of the Addictions*, 16, 1387-1398.
39. Magura, S., Goldsmith, D., Casriel, C., Goldstein, P.J. & Lipton, D.S. 1987. The validity of methadone clients' self-reported drug use. *International Journal of the Addictions*, 22, 727-749.
40. De Irala, J., Bigelow, C., McCusker, J., Hindin, R. & Zheng, L. 1996. Reliability of self-reported human immunodeficiency virus risk behaviours in a residential drug treatment population. *American Journal of Epidemiology*, 143, 725-731.
41. Latkin, C., Vlahov, D. & Anthony, J.C. 1993. Socially desirable responding and self-reported HIV infection risk behaviors among intravenous drug users. *Addiction*, 88, 517-526.

42. Hurley, S., Jolley, D. & Kaldor, J. 1996. The effectiveness and cost-effectiveness of needle and syringe programs. In: S. Hurley, & J.R.G. Butler (Eds.), *An economic evaluation of aspects of the Australian HIV/AIDS Strategies. Evaluation of the National HIV/AIDS strategy 1993-1994 to 1995-1996 Technical Appendix 2*, pp.55-63. Canberra: Australian Government Publishing Service.
43. Lurie, P., Reingold, A.L., Bowser, B., et al. (Eds.), *The public health impact of needle exchange programs in the United States and abroad*. San Francisco: University of California, 1993.
44. Normand, J., Vlahov, D. & Moses, L.E. (Eds.), *Preventing HIV transmission: The role of sterile needles and bleach*. Washington: National Academy Press.
45. National Commission on Acquired Immune Deficiency Syndrome 1991. *The twin epidemics of substance use and HIV*. Washington, D.C.: National Commission on Acquired Immune Deficiency Syndrome.
46. U.S. General Accounting Office 1993. *Needle exchange programs: Research suggests promise as an AIDS prevention strategy*. Report to the Chairman, Select Committee on Narcotics Abuse and Control, House of Representatives. Report number GAO/HRD-93-60. Washington, D.C.: House of Representatives.
47. Office of Technology Assessment, 1995. *The effectiveness of AIDS prevention efforts*, Washington.
48. Schechter, M.T., Strathdee, S.A., Cornelisse, P.G.A. Currie, S., Patrick, D.M., Rekart, M.L. & O'Shaughnessy, M.V. 1999. Do needle exchange programs increase the spread of HIV among injection drug users: An investigation of the Vancouver outbreak. *AIDS* 13(6): F45-F51.
49. Bruneau, J., Lamothe, F., Franco, E., Lachance, N., Desy M, Soto, J. & Vinclette, J. 1997. High rates of HIV infection among injection drug users participating in needle exchange programs in Montreal: Results of a cohort study. *American Journal of Epidemiology*, 146, 994-1002.
50. Klee, H. & Morris, J. 1995. The role of needle exchanges in modifying sharing behaviour: Cross-study comparisons 1989-1993. *Addiction*, 90, 1635-1645.
51. Stimson, G.V. 1989. Syringe exchange programmes for injecting drug users. *AIDS*, 3, 253-260.
52. Carvell, A.M. and Hart, G.J. 1990. Help-seeking and referrals in a needle exchange: A comprehensive service to injecting drug users. *British Journal of Addiction*, 85: 235-240.
53. Heimer, R., Kaplan, E.H., Khoshnood, K., Jariwala, B & Cadman, E.C. 1993. Needle exchange decreases the prevalence of HIV-1 proviral DNA in returned syringes in New Haven, Connecticut. *American Journal of Medicine*, 95, 214-220.
54. Heimer, R. 1998. Can syringe exchange serve as a conduit to substance abuse treatment. *Journal of Substance Abuse Treatment*, 15(3):183-191.

55. Kozel, N.J. & Adams, E.H. 1986. Epidemiology of drug abuse: An overview. *Science*, 21, 970-974.
56. Catalano, R.F., Morrison, D.M., Wells, E.A., Gillmore, M.R., Iritani, B. & Hawkins, J.D. 1992. Ethnic differences in family factors related to early drug initiation. *Journal of Studies on Alcohol*, 53, 208-217.
57. Dinwiddie, S.H., Reich, T & Cloniger, C.R. 1993a. Patterns of lifetime drug use among intravenous drug users. *Journal of Substance Abuse*, 4, 1-11.
58. Dinwiddie, S.H., Reich, T & Cloniger, C.R. 1993b. Prediction of intravenous drug use. *Comprehensive Psychiatry*, 33, 172-179.
59. Ellickson, P.L., Hays, R.D. & Bell, R.M. 1992. Stepping through the drug use sequence: Longitudinal scalogram analysis of initiation and regular use. *Journal of Abnormal Psychology*, 101, 441-451.
60. Morrison, V. 1991. Starting, switching, stopping: Users' explanations of illicit drug use. *Drug and Alcohol Dependence*, 27, 213-217.
61. Power, R. 1989. Methods of drug use: Injecting and sharing. In: P. Aggleton, G. Hart & P. Davies (eds.), *AIDS: Social representations, social practices*. Lewes: Falmer.
62. Guydish, J., Bucardo, J., Young, M., Woods, W., Grinstead, O. & Clark, W. (1993). Evaluating needle exchange: Are there negative effects? *AIDS*, 7, 871-876.
63. MacDonald, M., Wodak, A.D., Dolan, K., Van Beek, I., Cunningham, P. Kaldor J. 2000 Hepatitis C virus antibody prevalence among injecting drug users at selected needle and syringe programs in Australia 1995-1997. *Medical Journal of Australia*, 172(2): 57-61.
64. Wolk, J., Wodak, A., Guinan, J.J., Macaskill, P. & Simpson, J.M. 1990. The effect of a needle and syringe exchange on a methadone maintenance unit. *British Journal of Addiction*, 85, 1445-1450.
65. Paone, D., Des Jarlais, D.C., Caloir, S., Freedman, P., Ness, I. & Freidman, S.R. 1994. New York City syringe exchange: An overview. In: *Proceedings of the Workshop on Needle Exchange and Bleach Distribution Programs*, pp.47-63. Washington: National Academy Press.
66. Fennema, J.S.A., Wiessing, L.G., Coutinho, R.A., van den Hoek, A., Houweling, H. & van Ameijden, E.J.C. 1997. Trends in injection drug use in a city with harm reduction. In: H. Fennema (Ed.), *HIV infection among drug users and the potential for heterosexual spread*, pp.51-62. Wageningen: Ponsen and Looijen BV.
67. Vlahov, D., Junge, B., Brookmeyer, R., Cohn, S., Riley, E., Armenian, H. & Beilenson, P. 1997. Reductions in high-risk drug use behaviours among participants in the Baltimore needle exchange program. *Journal of Acquired Immune Deficiency Syndrome and Human Retrovirology*, 16, 400-406.
68. Schoenbaum, E.E., Hartel, D.M. & Gourevitch, M.N. 1996. Needle exchange use among a cohort of injecting drug users. *AIDS*, 10, 1729-1734.

69. Bor, J 1999. Needle programs no spur to crime. *Baltimore Sun*, pp1B, 30 March, 1999.
70. Oliver, K., Maynard, H., Friedman, S.R. & Des Jarlais, D.C. 1994. Behavioral and community impact of the Portland syringe exchange program. In: *Proceedings of the Workshop on Needle Exchange and Bleach Distribution Programs*, pp. 35-46. Washington: National Academy Press.
71. Doherty, M.C., Garfein, R.S., Vlahov, D., Junge, B., Rathouz, P.J., Galai, N., Anthony, J.C. & Beilenson, P. 1997. Discarded needles do not increase soon after the opening of a needle exchange program. *American Journal of Epidemiology*, 145, 730-737. Q
72. Queensland Department of Health. 1999. Report on the Queensland Needle Availability Support Program, Brisbane
73. Buning, E.C. 1991. Effects of Amsterdam needle and syringe exchange. *The International Journal of the Addictions*, 26, 1303-1311.
74. Buning, E., van Brussel, G. & van Santen, G. 1992. The impact of harm reduction drug policy on AIDS prevention in Amsterdam. In: P.A. O'Hare, R. Newcombe, A. Matthews, E.C. Buning and E. Drucker (Eds.), *The reduction of drug-related harm*, pp.30-38. London: Routledge.
75. Macalino, G.E., Springer, K.W., Rahman, Z.S., Vlahov, D. & Jones, T.S. 1998. Community-based programs for safe disposal of used needles and syringes. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*, 18(Suppl 1), S111-S119.
76. Groseclose, S.L., Weinstein, B., Jones, T.S., Valleroy, L.A., Fehrs, L.J. & Kassler, W.J. 1995. Impact of increased legal access to needles and syringes on practices of injecting drug users and police officers - Connecticut, 1992-1993. *Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology*, 10, 82-89.
77. Beekmann, S.E., Fahey, B.J., Gerberding, J.L. *et al.* 1990. Risky business: Using necessarily imprecise casualty counts to estimate occupational risks for HIV-1 infection. *Infection Control and Hospital Epidemiology*, 11, 371-179.
78. Ippolito, G., De Carli, G., Puro, V. *et al.* 1994. Device-specific risk of needle stick injury to health care workers. *Journal of the American Medical Association*, 272, 607-610.
79. Resnick, L., Vere, K., Salahuddin, S.Z., Tondreau, S. & Marham, P.D. 1986. Stability and inactivation of HTLV III/LAV under clinical and laboratory environments. *Journal of the American Medical Association*, 225, 1187-1891.
80. Gaughwin, M.D., Gowans, E., Ali, R. & Burrell, C. 1991. Bloody needles: The volume of blood transferred in simulations of needlestick injuries and shared use of syringes for injection of intravenous drugs. *AIDS*, 5, 1025-1027.
81. Montella, F., DiSora, F. & Recchia, O. 1992. Can HIV-1 infection be transmitted by a discarded syringe? *Journal of Acquired Immune Deficiency Syndromes*, 5, 1274-1275.
82. Aragon Pena, A.J., Arrazola Martinez, M.P., Garcia de Codes, A., Davila Alvarez, F.M. and de Juanes Pardo, J.R. 1996. Hepatitis B prevention and risk of HIV infection in children injured by discarded needles and/or syringes. *Atencion Primaria*, 17: 138-140.

83. Bruneau, J., Franco, E. & Lamothe, F. 1997. Assessing harm reduction strategies: The dilemma of observational studies. *American Journal of Epidemiology*, 146, 1007-1010.
84. Wodak, A., Strathdee, S.A., Friedman, S.R. & Byrne, J. 1998. The global response to the threat of HIV infection among and from injecting drug users. *AIDS Targetted Information*, 12, R41-R44.
85. Drucker, E., Lurie, P., Wodak, A. & Alcabes, P. 1998. Measuring harm reduction: The effects of needle and syringe programs and methadone maintenance on the ecology of HIV. *AIDS*, 12 (Supplement A), S217-230.
86. Lenton, S. 1994. *Illicit drug use, harm reduction and the community: Attitudes to cannabis law and needle and syringe provision in Western Australia*. Perth: National Centre for Research Into the Prevention of Drug Abuse.
87. Schwartzkopf, J., Spooner, S., Flaherty, B., Braw, J., Grimsley, A., Scanlon, K. & Stewart, K. 1990. *Community attitudes to needle and syringe exchange and to methadone programs*. NSW Department of Health Report Number A90/6. Sydney: NSW Department of Health.
88. MacDonald, M., Rutter, S., Wodak, A. and Kaldor, J. 1999 *K2 and Kings Cross community attitudes to the needle syringe program, discarded syringes and public injection, 1997-1998*. NSW Department of Health, Sydney.
89. The Lindesmith Centre. 1997. 71% of Americans Support Lifting Ban on Federal Funding for Needle Exchange Programs. Press Release October 30.
90. Shalala, D. Research shows Needle Exchange Programs Reduce HIV Infections Without Increasing Drug Use. Press Release April 20 1998. <http://www.hhs.gov>

Appendix C: Needle and Syringe Programs: Your Questions Answered.

NSP

Needle & syringe programs: Your questions answered

Prepared by the

National Drug and Alcohol Research Centre, UNSW,
on behalf of ANCARD.

ISBN 0642 41521 8

Copies of this Document can be obtained from:

ANCAHRD publications request line Tel: 1800 022 863

Foreword by Chris Puplick, Chair, ANCAHRD

Dear Colleague

Needle and Syringe Programs have been at the centre of public discussion recently. This is not surprising. The provision of free needles and syringes challenges many people's sense of how best to deal with the issue of injecting drug use in the community, fearing that it gives the wrong message to impressionable young people. Others have an understandable concern regarding cost and improperly disposed needles.

The Australian National Council on AIDS, Hepatitis C and Related Diseases (ANCAHRD) has commissioned a review of the scientific evidence for and against Needle and Syringe Programs. Although each individual line of evidence may be subject to a variety of interpretations, the strength of the combined data is absolutely compelling.

The overwhelming weight of evidence points to the conclusion that Needle and Syringe Programs are an essential public health measure. By reducing needle-sharing, Needle and Syringe Programs have been found to be very effective in reducing the spread of blood borne infections such as HIV/AIDS and hepatitis C, both in Australia and overseas. Public policy should be properly 'evidence-based' and the Needle and Syringe Program can certainly claim that it is.

Needle & Syringe Programs are also extremely cost effective: by preventing these infections, health care costs can be contained. Far from encouraging drug use, Needle and Syringe Programs provide a useful referral point for drug rehabilitation and education. The scientific evidence shows that Needle and Syringe Programs have not led to an increase in the number of discarded needles and form a useful disposal strategy.

In view of the compelling nature of this research, ANCAHRD has developed the enclosed Information Kit on Needle and Syringe Programs and I am arranging for the Kit to be distributed to Federal, State and Territory Parliamentarians, Local Government Officers, Environmental Health Officers, Health Department Officers and service providers working in the field.

The Information Kit consists of two documents. ***A Review of the Evidence*** provides the scientific evidence for Needle and Syringe Programs in a question and answer format. It addresses the crucial questions that people who are unsure about the value of Needle and Syringe Programs want answered. ***Your Questions Answered*** provides a summary of the scientific evidence in a quick-reference format to assist in answering these inquiries. It also includes contact details for further information.

Australia's enviable record in controlling the spread of HIV/AIDS and hepatitis C has rested on the bi-partisan, partnership approach to public health policy in this field. I commend the decision of the Council of Australian Governments in April 1999 to approve a \$221 m package which included support measures for Needle and Syringe Programs. The main aims of these measures

are to increase the number of clients accessing education and treatment services and to increase the availability of Needle and Syringe Programs, including through pharmacies.

I commend this Information Kit to you and thank you for your interest in Needle and Syringe Programs.

A handwritten signature in black ink, appearing to read "Chris Puplick". The signature is stylized with loops and a long horizontal stroke at the end.

Chris Puplick
Chair
Australian National Council on AIDS, Hepatitis C and Related Diseases
May 2000

Table of Contents

Foreword by Chris Puplick, Chair, ANCAHRD _____	73
Why are Needle and Syringe Programs necessary? _____	78
Why do governments provide syringes to people who inject drugs? _____	79
Won't the distribution of needles and syringes increase the level of injecting drug use in our locality? _____	81
Wouldn't it be better to stop people from using drugs than to give them free syringes? _____	83
What are governments doing about discarded syringes? _____	85
Do Needle and Syringe Programs increase the number of discarded syringes that are found in our local area? _____	85
Do Needle and Syringe Programs increase the number of discarded syringes that are found in our local area? _____	86
Why do some drug users throw their syringes away? _____	88
I have found a syringe near my home, what should I do? _____	89
If you tread on a syringe in the park, should you have an HIV or hepatitis C test? _____	91
Is there an age limit for clients at needle and syringe programs? _____	92
Why do people with diabetes have to pay for needles and syringes when people who inject drugs can get free equipment? _____	93
Needle and Syringe Programs and the media _____	94
How the media works _____	94
Needs and expectations of journalists _____	94
Working with the media _____	96
Your rights _____	98
Contacts _____	100

This booklet is to assist professionals who may receive inquiries from the media and the general public regarding Needle and Syringe Programs. It addresses frequently asked questions about Needle and Syringe Programs and also discusses the media and your rights when dealing with journalists.

Needle and Syringe Programs have been one of the major public health success stories. However, many people are still uncertain about their role. As a result, questions are sometimes raised about the functions of the Needle and Syringe Program and possible adverse effects they may have upon the community.

Here are some of the most frequently asked questions about Needle and Syringe Programs. Answers have been based on the most current research available. For more detailed information on any of these areas you are advised to read the booklet 'Needle and Syringe Programs: A Review of the Evidence'.

Why are Needle and Syringe Programs necessary?

Needle and Syringe Programs are an important public health measure. These Programs have prevented people from sharing injecting equipment and have thus contained the spread of HIV among people who inject drugs.

This has meant that in Australia, HIV infection is very rare among both injecting drug users and the whole community. In some countries, such as the USA and parts of Europe, where Needle and Syringe Programs were not established in time, HIV spread rapidly among injecting drug users and on to the wider community through sexual contact.

In Australia, the rate of HIV infection among people who inject drugs has remained below 3%, compared to other countries around the world with levels over 50%.

- **Needle and Syringe Programs protect the community from infections such as HIV and hepatitis C.**
- **In Australia, Needle and Syringe Programs have prevented thousands of cases of infections among people who inject drugs and, in turn, have protected the rest of the community.**

The Australian National Council on Drugs (ANCD) is very supportive of Needle and Syringe Programs. Evidence suggests that these programs have made a significant contribution to the prevention of the spread of HIV/AIDS and other blood-borne diseases.

The ANCD certainly echoes the views of the Australian National Council on AIDS, Hepatitis C and Related Diseases on Needle and Syringe Programs as a useful referral point for drug rehabilitation. The Council recently endorsed the need to expand and enhance these programs; creating linkages between Needle and Syringe Programs, treatment, counselling, education and other support services.

Australian National Council on Drugs

Why do governments provide syringes to people who inject drugs?

Governments provide people who inject drugs with needles and syringes in order to prevent the transmission of blood borne viral infections. In 1991, \$10m was spent on Australia's Needle and Syringe Program, which prevented an estimated 3,000 cases of HIV infection, saving at least \$266m in health care costs in that year alone.

- **Governments provide Needle and Syringe Programs to prevent the spread of blood borne viral infections such as HIV and hepatitis C.**
- **The money saved in health care costs by preventing HIV infections alone is more than twenty times the cost of running Needle and Syringe Programs.**

About six or seven years ago I went to a conference about methadone at St Vincent's Hospital in Melbourne, because we had been running a methadone program for many years out of our pharmacy. I was sitting next to this guy from the Health Department who said that they needed more pharmacists involved in the needle exchange program. It was obvious that it was needed here because there were always so many syringes inappropriately disposed of in the streets, so I agreed to take part. It seemed like a natural extension of our methadone program. We have paper bags with five fits [needles and syringes], a sharps container and swabs, which people get for free if they bring back used fits or for \$2 if they don't. They place their own used fits in our Medi-waste bin. I think the fact that they can get it for free if they bring back used fits encourages them to be responsible about disposal, and my impression is that there are less syringes lying around our car park now than in the past. With the ones who come in regularly, sometimes I can give them a bit of a shove in the right direction, like giving them information about methadone or recommending a sympathetic doctor.

Solly Lew, Pharmacist, St Kilda, Melbourne, operates Victoria's largest pharmacy distributor of needles and syringes.

Won't the distribution of needles and syringes increase the level of injecting drug use in our locality?

There are many reasons why people start taking drugs, including social, psychological and cultural influences. It is considered highly unlikely therefore that Needle and Syringe Programs would contribute to increased levels of injecting drug use. In fact, some studies have reported decreases in drug use following the introduction of Needle and Syringe Programs, because they act as a referral point for getting clients into drug treatment.

A study in Sydney in 1990 examining the impact of a trial Needle and Syringe Program, concluded that an increase in the availability of sterile needles and syringes did not lead to any increase in the frequency of injecting drug use

In a study of a Needle and Syringe Program in San Francisco over 5,000 drug injectors were interviewed. Researchers found that the number of people starting to inject drugs decreased, from 3% in 1989 to 1% in 1992.

- **There is no evidence that Needle and Syringe Programs increase injecting drug use.**
- **Needle and Syringe Programs refer clients into drug treatment services.**
- **Drug use can actually decrease among injecting drug users who attend a Needle and Syringe Program.**

The Pharmaceutical Society of Australia supports Needle and Syringe Programs as a means of reducing the rate of transmission of blood-borne viruses and minimising the harmful effects of illicit drug use.

Pharmaceutical Society of Australia

Wouldn't it be better to stop people from using drugs than to give them free syringes?

Only a very small number of people inject drugs, less than two percent of all Australians. One of the major risks associated with the injection of drugs is the risk of being infected with HIV or hepatitis.

Needle and Syringe Programs are one of the main strategies we have to prevent HIV infection among people who inject drugs. Unfortunately, some people in the general community believe that they just provide syringes to people who inject drugs. These programs not only provide sterile injecting equipment to prevent the spread of infections, they also encourage clients into drug treatment and provide medical, legal and social services, and sexual health education.

The aim of Needle and Syringe Programs is to reduce the harms associated with drug injecting and benefit both users and the wider community. Some people believe that Needle and Syringe Programs may delay people from giving up drugs. Studies have shown that these Programs actually refer many clients to treatment agencies.

- **The aim of Needle and Syringe Programs is to reduce the harm associated with injecting by providing sterile equipment.**
- **Needle and Syringe Programs refer drug users to treatment.**

"I remember twenty years ago rummaging through the dirty garbage to retrieve a syringe I had disposed of days ago. It is difficult to explain the difference it made to me the first time I could walk into an exchange and ask for the equipment I needed. The subsequent relationship that developed between me and the worker was instrumental to my eventual detox. It gave me a point of contact between the using world and the rest of the community that had not been available to me before that. It was very important."

Carol H. Former heroin user

What are governments doing about discarded syringes?

Responsibility for dealing with discarded injecting equipment varies between the States and Territories. Many have employed a partnership approach to this issue. For instance, in Western Australia the Health Department, Local Government Authorities, the WA Substance Users Association, the WA Drug Abuse Strategy Office, the Police Department and other key agencies have collaborated in developing a strategy to increase safe disposal of injecting equipment.

There are a number of measures that have been implemented to reduce the level of discarded injecting equipment. In NSW, there is an incentive for people who inject drugs to return used injecting equipment to pharmacies and receive free replacements. Staff at Needle and Syringe Programs encourage their clients to dispose of injecting equipment safely and will visit 'hot spots', where drug use and drug dealing are visible, to collect discarded injecting equipment. Most Programs will respond to calls from the general public about discarded injecting equipment. Some jurisdictions, such as NSW and the ACT, operate Hotlines which members of the public can call to have needles and syringes removed (see Contacts at the back of this booklet). Some Local Government Authorities have installed sharps bins in public spaces and commercial premises and are encouraging pharmacies to receive used syringes.

- **In some States and Territories the public can call syringe clean-up hotlines so that discarded injecting equipment is picked up in problem areas.**

The Pharmacy Guild of Australia will continue to support and develop the Needle and Syringe Program so as to reduce harm from illicit drug use in Australia. Just as the Guild was a major player in the development of the Fitpack syringe pack in Australia, so the Guild is now committed to examining all options to protect Australians from blood-borne disease associated with needle sharing.

Pharmacy Guild of Australia

Do Needle and Syringe Programs increase the number of discarded syringes that are found in our local area?

During a twenty-month period in Brisbane, 1.4 million items of injecting equipment were distributed and only 871 items were reported to have been inappropriately discarded. This represents less than 0.1% of injecting equipment distributed.

In Tasmania, up to 99% of needles and syringes are disposed of safely. Police, school, local government and members of the community collect reports of discarded syringes in Tasmania. In 1997/98, there was only one report of an inappropriately discarded needle and syringe for every 2,800 syringes distributed.

Needle and Syringe Programs dispose of used needles and syringes and reduce the number of improperly discarded needles and syringes by providing information to their clients about safe disposal and by cleaning up discarded injecting equipment on a regular basis.

- **Almost all needles and syringes are disposed of safely and appropriately.**
- **Needle and Syringe Programs can decrease the number of improperly discarded syringes left in an area.**

An example of best practice: The Foot Patrol, Melbourne

This innovative street-based Needle and Syringe Program started in 1996. Workers walk a set beat daily through the CBD of Melbourne carrying backpacks with Fitpacks, other sterile injecting equipment and disposal containers. The Foot Patrol has over 3,000 contacts with injecting drug users per month and targets people who would not otherwise access mainstream health and community services, including youth, homeless people, indigenous people who inject drugs, and people from culturally and linguistically diverse backgrounds. Referral can be immediate via a mobile phone. The majority of these injecting drug users inject on the street. Clients are educated through informal counselling and via resource cards providing information on overdose, safer using, safer sex and safe disposal of injecting equipment placed in the Fitpacks. Staff also educate the wider community through training sessions on harm reduction, Needle and Syringe Programs, safe disposal of used equipment, hepatitis C, and drug use issues. An important element of the Foot Patrol is the Community Syringe Disposal Project which responds to reports of discarded injecting equipment.

Why do some drug users throw their syringes away?

Just as the vast majority of people do not litter most people who inject drugs dispose of their used syringes safely. However, some drug users inject in public places like toilets because they are young, homeless, or are dependent on drugs and may inject immediately after buying them.

Some of our major cities have 'hot spots', where drug use and dealing are visible. People who come from other areas to buy drugs and then dispose of their equipment inappropriately make the problem of discarded syringes in 'hot spots' worse.

Some drug users throw their injecting equipment away because they fear the police may use this equipment to charge them with an offense called 'self-administration'.

- **Needle and Syringe Programs collect used needles and syringes and encourage clients to dispose of used equipment safely.**
- **Some of our major cities have 'hot spots', where drug use and dealing are visible. Inappropriate disposal of syringes is a problem in some of these areas but Needle and Syringe Programs can help to alleviate this.**

I have found a syringe near my home, what should I do?

Sometimes injecting equipment is discarded improperly. If you find a needle and syringe and wish to dispose of it yourself you should find a strong plastic container with a screw top lid, such as those used for fruit juice or detergent. Take the container to the syringe you have found. Carefully pick up the syringe by the barrel end, away from the needle. Do not attempt to replace the cap on the needle. Keep away from the sharp end and put the needle and syringe into the container, seal it securely and place it in a rubbish bin.

A number of local councils have responded to the problem of discarded injecting equipment by establishing hotlines to assist with public inquiries. Contacts in each state and territory are listed at the back of this booklet to assist you with further information.

If you find a needle and syringe and wish to dispose of it yourself:

- **Take a strong plastic container with a screw top and place it on the ground near the syringe.**
- **Wearing gloves or using a piece of paper carefully pick up the syringe by the barrel end, away from the needle.**
- **Do not replace the cap on the needle.**
- **Put the needle and syringe into the container and seal it securely.**
- **Put it in a rubbish bin**

Or, if you don't wish to dispose of the needle and syringe yourself, contact a service listed at the back of this booklet.

If you tread on a syringe in the park, should you have an HIV or hepatitis C test?

One fear is that an injury from discarded injecting equipment may result in infection with HIV or hepatitis. Sensational and emotive coverage of these issues in some media have exaggerated the risk. Although this is an extremely upsetting experience, the risk of contracting an infection such as HIV or hepatitis from discarded needles and syringes in public places is extremely small.

There have been cases of transmission of blood borne viruses through needlestick injuries in health care settings but these are extremely rare. If you do tread on a syringe in a public place it is important to be aware of the very low risk of infection. Wash the affected area with warm soapy water and apply a band-aid. Contact your doctor or local community health centre for confidential advice.

- **There are no published accounts of HIV, hepatitis B or hepatitis C infection after a member of the general public has been injured by discarded injection equipment.**
- **If you do tread on a syringe:**
 - **wash your foot with warm soapy water and apply a band-aid**
 - **contact your doctor or local community health centre. Ask your doctor for information regarding a tetanus shot.**

Is there an age limit for clients at needle and syringe programs?

The average age at which injecting drug users commence injecting is 18. It is vital therefore that young people are given access to Needle and Syringe Programs. The arrangements for dealing with minors seeking injecting equipment varies among the States and Territories. In some jurisdictions, there are mandatory notification requirements so that staff have to report minors attending Needle and Syringe Programs to the Department of Community Services.

In Australia, staff at a Needle and Syringe Programs undergo training before being authorised to distribute injecting equipment. The training varies between the States and Territories, but it outlines the providers' responsibility to link minors with youth alcohol and other drug services and provides information on how staff can identify new injectors.

- **Young people need the same protection from blood borne viral infections as adults.**
- **Staff at Needle and Syringe Programs undergo training on identifying and responding to young injecting drug users.**

Needle and Syringe Programs are a vitally important part of Australia's Drug Policy and have made a major contribution to public health in this country by limiting the spread of HIV and other blood-borne viruses among Injecting Drug Users and then into the wider community. That they also provide a first point of contact with health, welfare and legal services for a group which is likely to be severely disadvantaged is an added benefit.

National Expert Advisory Committee on Illicit Drugs

Why do people with diabetes have to pay for needles and syringes when people who inject drugs can get free equipment?

Although the use of illicit drugs is not condoned, the facts are that the re-use and sharing of syringes can result in the spread of many infectious diseases including HIV/AIDS and hepatitis B and C. The larger the pool of people carrying these diseases within the injecting population, the greater the risk of transmission to the general population. Any barriers, including cost barriers, which make it more difficult for injecting drug users to obtain syringes increases the likelihood of re-using and sharing contaminated syringes by these people. The supply of syringes to injecting drug users is therefore seen as a public health measure.

The provision of subsidised syringes to persons with diabetes is not a public health measure but a health benefit, similar to pharmaceutical benefit. Considerable support to persons with diabetes is provided through the National Diabetic Services Scheme, which is administered by Diabetes Australia and the Pharmaceutical Benefits Scheme. Products under these schemes are heavily subsidised. In 1998-99, in addition to providing funding under the Pharmaceutical Benefits Scheme for the products used in the treatment of diabetes, the Commonwealth funded the National Diabetics Services Scheme \$42.5m.

- **Providing injecting equipment reduces the likelihood of equipment being shared.**
- **Access to injecting equipment for people who inject illegal drugs is an important public health measure that protects the whole community.**

Needle and Syringe Programs and the media

Debates of public significance take place in the media everyday. Australians follow these debates in newspapers, on radio and television. What they read, see and hear, fuels discussion in the office, on the factory floor, in the school, in the pub and at home. Needle and Syringe Programs are one topic that has attracted much attention in recent times. Although the reporting of this issue has not always been fair, informed and balanced, the fact remains that any decisions which are made about Needle and Syringe Programs will be influenced significantly by the way this issue is covered in the media.

How the media works

The media is made up of people from all walks of life. As in the general community, there will be some people who do not have all the facts when it comes to alcohol and other drug issues.

Given that we expect the media to inform the public accurately, it is important that they are informed themselves. For this reason, health workers must learn to work with the media to ensure the public is receiving correct and relevant messages about alcohol and other drugs.

Journalists are often expected to produce a number of stories about diverse subjects everyday. They rely heavily on outside organisations and groups to provide them with background material to use in their reports. To ensure that issues around Needle and Syringe Programs are reported correctly, it is vital that health workers are able to provide accurate information quickly. Due to time constraints, it is important for journalists to locate factual information on controversial issues, such as Needle and Syringe Programs, as quickly as possible. Health workers who are able to provide this information will be able to take advantage of these opportunities and ensure that important information about Needle and Syringe Programs and harm minimisation are conveyed to the general public.

Needs and expectations of journalists

It is important to be aware of journalists' needs and expectations. Often, what you and the journalist want are completely different. Understanding what it is that you want, as well as what the media wants, will assist you in making an acceptable compromise.

What journalists are looking for

quick access to accurate information

a personal angle

photographs or visual images

something new, or exclusive

quotable quotes

new angles

What health advocates are looking for

to be reported accurately

to report the good news

to have client confidentiality respected

to convey a moderate and balanced view

to have your point of view clearly communicated

to have all the 'should-know' material presented

Working with the media

Journalists are people who bring their views, values, experiences and relationships with them to the job. If you have a good, constructive relationship with journalists this will greatly increase the chance of your issue being reported and being reported accurately.

Do

follow your organisation's media policy

provide accurate information

educate journalists about your point of view

Don't

say anything 'off the record'

be afraid to steer journalists in another direction

repeat 'facts' second hand

undergo media training

react, participate in debate

use quotable quotes

be afraid to take time to think about a
response

use technical language or acronyms

try to slant the facts or tell only half the story

Your rights

Issues and incidents are rarely going to be reported exactly the way you want them to be. Health workers and journalists work from different agendas and reporters can be pressured by editors to put a certain slant on a story. You do not have to answer journalists' questions and, if they print or broadcast something incorrectly, you have certain rights of appeal.

You have a right to:

- **Decline to be interviewed**
- **Decline to answer questions**
- **Refer the interviewer to another person or expert**
- **Ask for time to prepare and respond**
- **Ask for questions or angles in advance**
- **Ask who else is being interviewed**
- **Write to the editor if the story is inaccurate**
- **Encourage reporters to use correct terminology around alcohol and other drug issues**

Authors

Mr Paul Dillon and Dr Kate Dolan

National Drug and Alcohol Research Centre, UNSW, Sydney, 1999

Acknowledgement

Sections of this document are based on the Australian Drug Foundation (1993) *The Media Machine: Sitting in the Driver's Seat (A Health Professional's Guide to Media Liaison)*, South Melbourne.

Contacts

New South Wales

Alcohol and Drug Information Service

Metro callers Phone: 8382 2111 Country callers Phone: 1800 422 599

NSW Needle Clean Up Hotline 1800 633 353

Members of the public can call the Hotline to have needles and syringes removed.

Queensland

Alcohol and Drug Information Service

Metro callers Phone: 3236 2414 Country callers Phone: 1800 177 833

Brisbane City Council Custom Call Centre Phone: 3403 8888

For the removal of discarded injecting equipment from public places.

Victoria

Drug and Alcohol Directline

For advice, referral or counselling for alcohol and other drug problems.

Metro callers Phone: 9416 1818 Country callers Phone: 1800 136 385

ACT

Alcohol and Drug Program Phone: 6205 4545 24 hour helpline.

SHARPS Hotline Phone: 132281 for the removal of discarded injecting equipment.

Tasmania

Alcohol and Drug Information Service Phone: 1 800 811 994

Western Australia

Alcohol and Drug Information Service

Metro callers 9442 5000 Country callers 1 800 198 024

For further information regarding discarded injecting equipment phone the Environmental Health Officer at your Local Government Authority.

South Australia

Alcohol and Drug Information Service Phone: 1 300 131 340

For further information regarding discarded injecting equipment phone the Environmental Health Officer at your Local Government Authority

Northern Territory

Amity House Phone: 8981 8030 Country callers Phone: 1 800 629 683

Northern Territory AIDS Council & Needle Exchange Program

Metro callers Phone: 8941 1711 Country callers Phone: 1 800 880 899



ISBN 0642 41521 8

Copies of this document can be obtained from :

ANCAHRD publications request line Tel: 1800 022 863

APPENDIX D: EVALUATION FORM

Evaluation of Needle and Syringe Program Information Kit

To determine whether the Information Kit has been useful, please complete and fax this questionnaire to Dr Kate Dolan by September 30, 2000. Fax: 02 9661 0529

Are you Male Female

Age range 18-24 25-34 35-44 45-54 55+

Occupation Parliamentarian Public servant NSP worker
AOD worker Local councillor Journalist
Environmental health worker Pharmacist
Concerned citizen Other (specify)

State/Territory **Area where you work** Capital City Other

Please use this rating scale to answer questions 1 to 5 by circling the appropriate number:

1	2	3	4	5
not at all	a little	moderately	very	extremely

Did you find this Information Kit:

1. useful?	1	2	3	4	5
2. easy to understand?	1	2	3	4	5
3. comprehensive?	1	2	3	4	5
4. valid and accurate?	1	2	3	4	5
5. improved your knowledge about Needle and Syringe Programs?	1	2	3	4	5
6. changed your attitude towards NSPs?					

NO – I still support NSPs **YES** – now I support NSPs

NO – I'm still undecided about NSPs **YES** – now I'm
undecided about NSPs

NO – I still oppose NSPs

YES – I now oppose NSPs

7. Would you like to make any other comments about this Information Kit or Needle and Syringe Programs in general?

.....

.....

.....

.....

.....

.....

.....

THANK YOU FOR YOUR TIME AND EFFORT

APPENDIX E: EVALUATION FORM GENERAL COMMENTS

The following is a complete list of all comments received from respondents on the Evaluation Form.

That Regional WA is in dire need of NSEP- at least access to free fits after hours.

Female AOD Worker, 35-44 years old.

People rely on this info for validity and accuracy they don't check it out and are rarely in a position to answer questions. I would be interested in info on NSP in corrections institutions.

Male Parliamentarian, 45-54 years old.

Re: NSP. It would seem to me that users should be weaned of i.e. should gradually reduce strength of injection and time between hits. No one asked these people to become junkies, so they should get off as soon as possible.

Male Local Councillor, 55+ years old.

On Page 9 of "Your Questions Answered" booklet, you quoted that only 871 discarded needles were found incorrectly disposed of in Brisbane during a 20 month period, a contact in Brisbane City Council stated that the number is up to 20 times greater in the past financial year!

Male Environmental Health Worker, 18-24 years old.

I only received the kit in August, I would very much like to push such information, we have here a local councillor who deliberately misinforms about harm minimisation and needle exchange.

Female Concerned Citizen, 55+ years old.

Is the information in this kit a balanced view on NSPs or just a big sell - I still don't believe its the answer to our drug problem - rehab (compulsory) not needle exchange, we have to break the chain not extend the links.

Male Environmental Health Worker, 45-54 years old.

Whilst the community do like to "do the right thing" and attempt to dispose of discarded needles they may find, I would prefer them to contact the council, police or community health centre rather than handling needles themselves.

Male Environmental Health Worker, 25-34 years old.

Come to Canterbury Road Bankstown- local prostitutes have a high incidence of Hep B and HIV infection despite a very active needle and syringe programme. Also I dispute the stats in your literature i.e. P9 Questions Answered.

Male Parliamentarian, 35-44 years old.

Possibly too much information for an IV drug user but very good for people interested in this topic.

Male Environmental Health Worker, 45-54 years old.

From past experience only about 40% of used syringes are returned to the distributor. More emphasis on return of syringes.

Male Environmental Health Worker, 45-54 years old.

Well presented, helpful information.

Male Environmental Health Worker, 35-44 years old.

An excellent kit - particularly liked the "Q&A" section (some good quotes for use in dealing with media and Parliamentarians).

Female Public Servant, 35-44 years old.

Excellent resource for Environmental Health Officers who, as in our case, deal with often overly concerned/hysterical members of the public.

Female Environmental Health Worker, 35-44 years old.

Appears biased in focus.

Male Environmental Health Worker, 45-54 years old.

The information kit simply tries to defend the indefensible, supporting the dangerous behaviour of irresponsibles (sic) who throw needles away - where do you get funds for this propaganda?

Male Parliamentarian, 55+ years old.

Too much to read - paragraphs rather than pages please. Reduce booklet and review of evidence. Questions and answers - excellent up to date reference. Thank you.

Female Local Councillor, 45-54 years old.

The kit is OK if you believe in feeding a habit - I don't - Cure? - Instant death sentence for pushers. Get your free "hit" at your local police station. For users. - and pay a fine and have your name displayed - Think of AA. Can you imagine getting a (sic) free grog???

Local Councillor, 55+ years old.

Public should be encouraged to use hotline or council services rather than dispose of syringes even though contained in council rubbish bins.

Male Environmental Health Worker.

Too much emphasis on overseas studies rather than local hence Q4 [on Evaluation Form] not applicable. Please include: AIDS Council of Central Australia - Alice Springs & Needle Exchange Program.

Male NSP Worker/Community Educator, 55+ years old.

Useful resource.

Female AOD Worker, 55+ years old.

This is a very useful approach to a controversial issue which could be applied to other areas.

Female Public Servant, 35-44 years old.

An excellent resource material that should be distributed to all decision makers in State and Local Govt. and efforts made to ensure that the material has been read. Also suggest distributing to service clubs.

Male Parliamentarian, 55+ years old.

Great to see! Hopefully will assist with current debates in the community that occasionally occur in Cairns FNQ. Only to happy too!!

Male Public Servant, 35-44 years old.

It should be an exchange not a dispensary.

Female Local Councillor, 25-34 years old.

Good work - keep it up.

Male Environmental Health Worker, 35-44 years old.

More info on needle stick injury, e.g. encourage wound to bleed, apply antiseptic.

Female NSP Worker, 25-34 years old.

Disposal and discarded syringe info inaccurate. numbers cited for Brisbane (ref 7) are wrong. In last 5 months of '99 BYS collected over 5000 discarded syringes in inner city Brisbane. O/S studies are not relevant to Australia as they have a strict 1 to 1 return/re-issue policy, and in Amsterdam users collect dirty fitts off the street to exchange for more to sell to other users.

Male NSP Worker, 25-34 years old.

Excellent. Valuable resource. Well put together.

Female AOD Worker, 45-54 years old.

Much needed resource to quash misinformation in the community.

Male NSP Worker, 25-34 years old.

The stats help me greatly in putting forward positive arguments in defence of NSPs.

Female AOD Worker, 35-44 years old.

Well done!

Female Hep C Council Project Officer, 18-24 years old.

Need to go into schools and assist with educating young people.

Female Parliamentarian, 45-55 years old.

I firmly believe the syringe programs should be replaced by a "demand reduction" and rehabilitation of addicts to a drug free state of life.

Local Councillor, 55+ years old.

The information kit is well constructed and appropriately separates the evidence review from the general question and answer session. This will allow it to target slightly different audiences. However, the language in which they are written could potentially bypass a large group of the community given the inherent jargon in the document.

As the authors have not clearly articulated the target audience, it is difficult to determine whether or not this kit will achieve its objectives as it appears pitched at the well educated and well informed sector of the community.

In the question and answer document, a couple of specific matters will need to be addressed, namely:

- *On page 10 the word "offense" should be amended to "offence".*
- *On page 12 the protocol for dealing with needle-stick injury appears to be incongruous with the DASC recommendations which include testing.*
- *On pages 15-17 where media issues are discussed, some of the statements and recommendations could be considered affronting, particularly to persons involved in the media. Perhaps rather than discussing nebulous tactics for media management, this space could better accommodate the inclusion of privacy provisions.*

Female Public Servant, 35-44 years old.

The format is very good - clear and well set out. Should offer it also in other formats – e.g. larger print, on tape etc.

Female Researcher, 25-34 years old.

Very useful - well done people! Gives me a "nice" accurate looking authoritative looking "expert" looking document to share with people who doubt NSPs benefit.

Male NSP Worker, 25-34 years old.

Every pharmacy should supply syringes whether as an exchange or sale at a low price.

Male Pharmacist, 45-54 years old.

A long awaited and exceptionally welcome kit that will assist NSPs to continue to improve the (public) health of people who inject drugs - Liked the quotes e.g. Carol H p7 - Liked the media guide p16.

Male CBO-NGO Representative, 45-54 years old.

Kit is very reasonable and brings together information from other states.

Male Local Councillor, 55+ years old.

I still feel our diabetics are discriminated having to line up with other drug users. Still not widely known they are able to collect syringes free of charge. QLD methadone program seems to be too long a program - not decrease doses quick enough as they still supplement their habits with other drug use.

Yes I agree NSPs may help decrease AIDS etc. but why do we as health workers have to encourage their habit by giving out syringes water etc. Surely the millions of dollars spent on the NASP programs can be used elsewhere - such as primary school health education.

Inappropriate to have in emergency departments - I would rather some of our public money be spent on drug education for primary school children. There is a place for NSP, but it has changed to the community to acceptance of drug use.

Female Nurse, 35-44 years old.

What does each state do with returned equipment and equipment utilized by nursing staff, tattooists etc. How does it get destroyed? If it does! Also: What training are pharmacists receiving re: NSP -> HIV -> Hep C?

Female NSP Worker, 25-34 years old.

A very valuable resource!

Female AOD Worker, 35-44 years old.

*NASP programs should go back to "exchanges" and compulsory testing (after counselling of course). There should be syringes used with retractable needles. Chemists should **not** sell kits and hospitals "give" them away. Emergency departments are not the place for them anywhere!!*

Female Registered Nurse, 35-44 years old.

Well done.

Female Registered Nurse, 45-54 years old.

Could you please send us approx. 20 more copies for our student resource kit and other workers at our 2 secondary NSPs. Thanks.

Female NSP Worker, 25-34 years old.

Very good for those who have limited knowledge.

Female NSP Worker, 18-24 years old.

OK for people in "the industry" but for the average person on the street: probably too wordy and not user friendly.

Male Environmental Health Worker, 35-44 years old.

Useful information.

Female Community Health Nurse, 35-44 years old.

We Australians, must not accept this and accept this practice as normal. We must not let up, we have to teach our young on the street drugs are bad.

Male Local Councillor, 45-54 years old.

The information kit should be distributed to every household to offer informed, up to date and accurate information to everyone.

Female NSP Worker, 45-54 years old.

Excellent resource - well done.

Male Public Servant, 25-34 years old.

I disagree with needle syringe programs. I believe too much emphasis is put on harm minimisation. Programs which treat symptoms and not the cause of the problem. This booklet implies that NSP refer drug users to treatment. That is not necessarily true many who participate in NSP do not refer users. I have sympathy with people in a situation but I believe harm minimisation does not solve the drug addicts problem nor does the NSPs program. I believe the NSP programs encourage addicts to believe its alright to use drugs and to [bottom of fax cut off]

Female Professional, 35-44 years.

Before being a counsellor I was the nurse with Gold Coast Hospital detox. Attitudes are heavily polarised. This is a great pamphlet.

Male Local Councillor, 45-54 years old.

This kit should be more widely available, schools etc. I have learnt a lot about the whole program.

Male Student, 16 years old.

Thanks.

Female Registered Nurse, 45-54 years old.

Wider distribution including media and youth workers and health students (uni).

Male, 25-34 years old.

Its good to have commonly asked questions simply answered so as a quick comeback for knockers is possible.

Female Health Care Worker, 35-44 years old.

There is no need for people to use drugs, why not put Government funds to better use and let the druggies take care of themselves. Do not waste.

Male Local Councillor (Farmer), 55+ years old.

