

# Report on the National Audit of Community Needle and Syringe Disposal Facilities

## RECOMMENDATIONS

June 2005



**Australian Government**

---

**Department of Health and Ageing**



*Waste Audit and Consultancy  
Services (Aust) Pty Ltd*

The following report on the National Audit of Community Needle and Syringe Disposal Facilities is compiled by Waste Audit and Consultancy Services (Aust) Pty Ltd on behalf of the Australian Government Department of Health and Ageing and is based on information provided to Waste Audit and Consultancy Services in the form of responses to surveys and through direct stakeholder consultation. To that extent this report relies on the accuracy of the information provided.

Accordingly, Waste Audit and Consultancy Services (Aust) Pty Ltd will not be liable for any loss or damage that may arise out of this report, other than the loss or damage caused as a direct result of Waste Audit and Consultancy Services (Aust) Pty Ltd's negligence.

This report contains sensitive and confidential information. It has been compiled by Waste Audit and Consultancy Services (Aust) Pty Ltd as one component of the Retractable Needle and Syringe Technology Initiative.

It is recommended that this report should be treated at all times as confidential, unless permission for the release of specific data is received from the Australian Government Department of Health and Ageing.

# Contents

|          |  |          |
|----------|--|----------|
| <b>1</b> | <b>Executive Summary</b>                       | <b>1</b> |
| 1.1      | Introduction                                   | 1        |
| <b>2</b> | <b>Recommendations</b>                         | <b>3</b> |
| 2.1      | Introduction                                   | 3        |
| 2.2      | Research Coordination                          | 3        |
| 2.3      | Guidelines, Standards and Best Practice Models | 4        |
| 2.4      | Education and Support Material                 | 6        |
| 2.5      | Management Practices                           | 10       |
| 2.6      | Data Management                                | 12       |
| 2.7      | Community Perceptions                          | 16       |
| 2.8      | Legislative Impacts                            | 17       |
| 2.9      | Police Activity and Associated Impacts         | 19       |
| 2.10     | Gross Pollutant Traps                          | 20       |
| 2.11     | Behavioural Aspects of Disposal Practices      | 20       |
| 2.12     | Planning Tools                                 | 21       |
| 2.13     | Expand Work with the Pharmacy Sector           | 23       |
| 2.14     | Comprehensive Overview of N&S Management       | 24       |
| 2.15     | National Hotline                               | 25       |
| 2.16     | Extended Producer Responsibility               | 25       |

## Glossary

The following abbreviations and terms have been used within this report.

| <b>Abbreviation/Term</b>         | <b>Definition</b>  |
|----------------------------------|--|
| <b>AHS</b>                       | Area Health Service.   |
| <b>AIVL</b>                      | Australian Injecting and Illicit Drug Users League   |
| <b>ALGA</b>                      | Australian Local Government Association.   |
| <b>ANTA</b>                      | Australian National Training Authority.  |
| <b>Appropriate Disposal</b>      | To dispose of N&S in a manner that meets the regulatory requirements for this waste type in the specific jurisdiction.   |
| <b>BBV</b>                       | Bloodborne Virus.  |
| <b>Commercial and Industrial</b> | Businesses and industries including shopping centres, restaurants and offices.   |
| <b>CUA</b>                       | Clean Up Australia.  |
| <b>DASSA</b>                     | Drug and Alcohol Services South Australia  |
| <b>DHA</b>                       | The Australian Government Department of Health and Ageing.   |
| <b>Discard</b>                   | To throw away in a public area, in the context of this report it refers to needles and syringes left for disposal in public areas as opposed to being disposed in a waste container. |
| <b>DOH<sup>1</sup></b>           | Department of Health.  |
| <b>Domestic</b>                  | Of or relating to family or household.   |
| <b>EPA</b>                       | Environmental Protection Authority.  |
| <b>EPR</b>                       | Extended Producer Responsibility.  |
| <b>GIS</b>                       | Geographic Information System.   |
| <b>GPT</b>                       | Gross Pollutant Trap – designed to remove gross solid materials from the stormwater system prior to discharge into waterways.  |
| <b>HBV</b>                       | Hepatitis B Virus.   |
| <b>HCV</b>                       | Hepatitis C Virus.   |

1. For consistency within the report this definition is used for all State and Territory Health Departments.

|                               |  |
|-------------------------------|--|
| <b>HIV</b>                    | Human Immune Deficiency Virus.   |
| <b>Hot Spots</b>              | Areas where discarded needles and syringes accumulate or are regularly discarded.  |
| <b>IDU</b>                    | Injecting Drug User.   |
| <b>Inappropriate Disposal</b> | To dispose of N&S in a waste stream that is not designed to accept this waste type eg., placing used N&S in a recycling bin. |
| <b>LGA</b>                    | Local Government Area.   |
| <b>LGAQ</b>                   | Local Government Association of Queensland.  |
| <b>MINE</b>                   | Melbourne Inner-City Needle Exchange.  |
| <b>Mobile Services</b>        | Distribution and exchange services provided by vehicle or on foot.   |
| <b>MRF</b>                    | Materials Recovery Facility – generally sorts recyclable materials generated from domestic or commercial sources.            |
| <b>N&amp;S</b>                | Needle(s) and Syringe(s), can also be referred to as a “sharp” in legislation and the literature.                            |
| <b>NDSS</b>                   | National Diabetes Services Scheme.   |
| <b>Needlestick Injury</b>     | A penetrating stab wound caused by a needle.   |
| <b>NEPM</b>                   | National Environment Protection Measures.  |
| <b>NGO</b>                    | Non Government Organisation.   |
| <b>NSP<sup>2</sup></b>        | Needle and Syringe Program (eg., primary and secondary).   |
| <b>NSWH</b>                   | New South Wales Health Department  |
| <b>OH&amp;S</b>               | Occupational Health and Safety.  |
| <b>Outreach Services</b>      | Have workers who move around from place to place to extend the reach of the service, often out of hours.                     |
| <b>PBS</b>                    | Pharmaceutical Benefits Scheme.  |
| <b>PPE</b>                    | Personal Protective Equipment.   |
| <b>PSA</b>                    | Pharmaceutical Society of Australia.   |

2. For consistency within the report this definition is used for all Needle and Syringe Programs. In Tasmania this is referred to as a Needle Availability Program (NAP) and in Western Australia as Needle and Syringe Exchange Programs (NSEP).

|  |   |
|--|---|
| <b>Primary NSP<sup>3</sup><br/>(or 1° NSP)</b>   | Are stand-alone agencies that are specifically established to provide injecting equipment, sometimes along with primary medical care, education and counselling and referral services. Staff provide these specific services in a non-judgmental manner and develop a rapport with individuals who are otherwise hard to reach. |
| <b>Public Area</b>                               | This is an area of general public usage and/or that the public is allowed to access for no charge (eg., playground, beach, roadside or park), and that is not under the direct control of a private business or government agency that may provide restrictions on access.  |
| <b>Secondary NSP<sup>4</sup><br/>(or 2° NSP)</b> | Offer needle distribution or 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.  |
| <b>Sharp</b>                                     | Item capable of cutting or penetrating the skin. In the context of this project relates to a needle generally attached to a syringe.  |
| <b>Vending Machines</b>                          | Dispense needle and syringe packs typically for a small fee. These machines are monitored and restocked by Needle and Syringe Program staff.  |

3. For consistency within the report this definition is used to describe the range of services provided by primary NSP.

4. For consistency within the report this definition is used to describe the services provided by secondary NSP.

# 1 Executive Summary

## 1.1 Introduction

The Australian Government Department of Health and Ageing (DHA), commissioned Waste Audit and Consultancy to conduct the National Audit of Community Needle and Syringe Disposal Facilities, as a component of the Retractable Needle and Syringe Technology Initiative.

The key objective of the project was to determine current activities aimed at addressing inappropriate disposal of needles and syringes (N&S). The project involved the collection of data on community sharps disposal facilities in each State and Territory, working collaboratively with State and Territory Health Departments, Local Governments and other key stakeholders to enable the determination of current activities addressing inappropriate disposal of N&S<sup>5</sup>.

The project was designed to provide the following key outcomes:

- Identification of the locations of N&S disposal facilities across Australia.
- Identification of the location of areas with high levels of discarded N&S and the quantities of N&S being found in these areas.
- Identification of the type and location of N&S distribution outlets and the numbers of N&S distributed.
- Determine the current strategies for managing community N&S disposal.

To achieve these outcomes two types of data were sought, from a quantitative perspective, data on locations of disposal facilities and numbers of discarded N&S was compiled for analysis. The quantitative data was derived from surveys and interviews of key stakeholders and a review of the current legislation and pertinent literature.

During the course of the project the scope was extended to incorporate other activities within the methodology enabling a greater range of significant issues associated with the reasons and solutions to publicly discarded N&S to be identified. For example, consultation with the private sector and organisations such

<sup>5</sup> RFT 168/0304 request for tender, National Audit of Community Needle and Syringe Disposal Facilities & response to request for tender RFT 168/0304, National Audit of Community Needle and Syringe Disposal Facilities July 2004.

as Diabetes Australia and injecting drug user advocacy groups was necessary to ensure that equity issues were considered as they applied to management of used N&S. From this more effective and sustainable recommendations could be developed to both reduce, and safely manage discarded used N&S.

This project was based on the distribution, return and analysis of surveys and/or consultations with the broad range of identified stakeholders. As a consequence, the project depended on both the accuracy and quantity of data and information gathered through these activities. To illustrate this point, the following return rates were achieved from the distributed surveys:

78% – local government (excluding Queensland)

18% – pharmacies

100% of distributed State and Territory NSP surveys were returned. The NSPs at the local level were only contacted for survey at the discretion of the DOH State and Territory representatives.

Based on these return rates, some caution needs to be considered when extrapolating data to represent fully the sector under analyses. For example, a return rate of 18% for the pharmacy sector, slightly below the 25-30% anticipated by National Pharmacy Guild, does not provide a full understanding of the issues specific to this sector. However, this figure also needs to be taken in the context of receiving a very low return rate from Western Australian Pharmacies.

The methodology adopted for this project is such that validation of data was undertaken from a variety of sources whenever such data was made available. This has assisted in addressing some of the issues related to data quality.

## 2 Recommendations

### 2.1 Introduction

The following recommendations are based on the information and data gained through the various aspects of this project. This section provides a summary rationale for each recommendation.

The recommendations have been developed with the purpose of reducing incidents of discarded N&S as well as to improve current management methods for these wastes. Many of the recommendations are related however, they have been kept as distinct recommendations so as to assist in the understanding of the core element. Each recommendation also includes a suggested implementation process.

In developing these recommendations it is important to acknowledge the excellent work that is already being coordinated at all levels of administration. In light of this the recommendations have not been presented in any specific order of implementation, as each of the stakeholder groups, addressing their individual needs, will differ with respect to their priorities.

### 2.2 Research Coordination

#### **1. Develop a central coordinating portal for all NSP activity research.**

*Provide a centralised clearinghouse function for States and Territories. Details of recent projects together with planned projects to be provided for cataloguing. Research conducted overseas could also be listed, with a summary of its outcomes. This function could be the responsibility of a central library service. This service could also be contracted to analyse all research to provide summaries and comments as to applicability to Australia in terms of relevance or shortcomings.*

Reviews of research indicate that there has either been duplication, or reports produced not considered by other jurisdictions (eg., in the viability of vending machines). There are also some international studies that should have their conclusions validated for Australian perspectives.

By having a central coordinating portal for data on current and proposed research regarding NSP activities, there can be a higher level of efficiency in regards to prioritising and expending resources as well as ensuring the maximum outcomes are achieved.

## 2.3 Guidelines, Standards and Best Practice Models

- 2. Develop a set of “best practice” models that address different aspects of N&S disposal management. These models can be adopted by a wide variety of stakeholders in differing circumstances. The best practice models would be developed into kits containing a set of core guidelines with the ability to tailor application to different environments and situations. In this way best practice concepts can be shared and adapted to individual circumstances.**

*A tender process could be conducted to identify, collect and evaluate best practice examples from the broad range of stakeholders currently involved in the management of N&S. Best practice examples will need to be identified. Information from the surveys conducted during this project would also provide a basis for further analysis.*

*Best practice models should be developed for local government, NSPs, pharmacies, private businesses and other relevant stakeholders such as medical centres and doctors.*

*These best practice models should include methodologies for actually implementing the specific examples, such as establishing a disposal system.*

During this project a number of “best practice” models, in relation to the management of N&S disposal, were identified in each of the following stakeholder sectors: local government, NSPs; private businesses and pharmacies. In many cases, the organisation may have developed a very simple process or system to address a specific aspect of the management of N&S, for example, the monitoring of public disposal containers.

Each of these cases provides workable solutions to problems that other stakeholder groups may be encountering. To enable them to be able to be used effectively by other stakeholders, an implementation plan should accompany each model.

Overriding the best practice examples is the need to ensure that all waste disposal systems and management practices, as a minimum meet legislative requirements, (refer to Legislation Review) and should meet established best practice guidelines such as the Australian and New Zealand Clinical Waste Management “Code of Practice for the Management of Clinical and Related Waste 4th Edition”, and relevant Australian Standards.

**3. Design a communication tool aimed at gaining feedback from users of the “best practice” kits, allowing modification and improvements to be made, as well as allowing new case studies to be added.**

**Recommendation 2**



*This process could be contracted to an appropriate body. To ensure that feedback is gained, access to the kits would be conditional on the provision of feedback following implementation. As with recommendation 1, a central “publications” department could then have the responsibility for reviewing the feedback.*

*Once the criteria for inclusion of what is to be considered best practice has been established, measurement of all programs can be conducted. While recommendation 2 provides guidance as to the initial stages, subsequent analysis could be conducted by requiring, as a component of funding for NSP activities, a report illustrating programs implemented against defined criteria, that is what programs and/or resources have been successfully implemented.*

In the early stages of use of these best practice kits, a process to obtain and evaluate feedback as to the benefits and/or amendments required needs to be structured. This ensures that the kits meet their stated aims and remain relevant.

**4. Develop “best practice” guidelines for the design of N&S disposal containers and collection systems.**

*Conduct a review and establish a committee with representation from all stakeholders, charged with the development of standards for public place sharps containers, community sharps bins and systems to collect used N&S. This is a process that has already been undertaken with such relevant issues as sharps containers used in healthcare settings as well as for Fitpacks.*

There is a need to have a variety of designs of N&S containers and housings, due to many factors including the location and position of the containers; size and user needs. It is imperative however that these containers meet all necessary OH&S requirements in terms of use and management. Implementing specific occupational health and safety guidelines for the design, siting and management of these containers is essential so that those responsible for the programs ensure the safety of all.

To illustrate this point, the IDU culture in Tasmania and the Northern Territory means that larger syringes are more typically used (20 and 50 ml), these do not fit into many public place sharps containers. As a result, many used N&S fall or are discarded onto the floor. As another example, many NSPs use 240 litre mobile garbage bins with some form of chute. Some have the chute designed to empty into the bin, while others empty at the top of the bin resulting in N&S falling past the bin onto the floor.

Other issues include the colours and symbols that are to be used. While a bright yellow colour with the words “used needles” may discourage some from using these containers, due consideration must be placed on the OH&S risk that may develop should these containers be differently coloured and less clearly marked.

- 5. Develop guidelines for the positioning and monitoring of public place N&S disposal containers to ensure efficient and effective use of resources, without posing risks to the community or to staff managing N&S containers.**

**Recommendation 2**

*Work could be undertaken in conjunction with the waste management industry, to develop and promote such guidelines.*

During the project, many local governments advised that while N&S containers had been placed in public toilets, they did not know if they were being used or if they were in the correct location.

Some local governments had processes in place to identify the most suitable location for N&S containers, however most did not. To ensure that the limited resources available in this area are not wasted, guidelines for the location of N&S containers is needed to assist local governments in this process.

## 2.4 Education and Support Material

- 6. Establish an electronic library based on existing resources, supported by an evaluation of its applications and limitations.**

**Recommendations 1, 2, 3, 4 and 5**

*An organisation could be contracted to develop this library by requesting all stakeholders to contribute information and resources. These can then be evaluated as to their applicability with the possibility of lodgement on a website. Accompanying the resource should be an indication as to its preferred usage and what actions may be needed to meet local conditions (eg., legislative requirements).*

*In addition, assessment criteria for evaluating new resource material should be developed. The resources should also be classified by the stakeholder group(s) to encourage greater access (eg., people with Diabetes, local government, NSP, community groups).*

There are available a number of resources developed by NSPs, local governments, pharmacies, and State and Territory departments that provide specific guidance on different aspects of N&S programs. One such example is the work undertaken by the Queensland Pharmacy Guild in providing pharmacies with education material on harm reduction principles.

By making these resources available to other stakeholders, resources can be better utilised and funds directed to other areas of need.

**7. Develop a suite of education programs (based on existing material), to assist stakeholder groups to educate key sectors of the community (including business and government agencies), on risks and management strategies associated with used N&S. Such programs focus on individual issues such as; waste management, quality control programs, community education, risks associated with discarded N&S etc.**

*This process would be more effective if tendered out to an organisation that has both an understanding of the stakeholder issues and of community education principles. This will ensure that the developer consults widely to determine specific training needs for each stakeholder group and that the developed training materials meet those needs in terms of content and mode(s) of delivery. Fact sheets summarising the key issues can also be developed to assist in educating the wider community.*

A common point resulting from discussions with the broad spectrum of stakeholders in relation to management of used N&S, as well as being supported in the literature, is that of education in relation to risks and management of used N&S. The consultations conducted have revealed a range of education materials that in many instances are extremely well designed in terms of structure and content.

Prior to developing new resources, those that currently exist should be identified and logged with standard details such as the type of resource, author and format. Each resource should then be analysed in terms of its particular application and currency in regards to advice contained within (ie., legislation guidelines and interpretation, education of NSPs). These materials can then be added to the resource database described in recommendation 6.

A standard review guide that allows a consistent process to be followed for all materials would enable it to be easier for those owning the resource to contribute it to the pool. Key requirements to be reviewed would include:

- Intended application.
- Support requirements.
- Legal implications ie., State and Territory applicability.
- Suitability checklist.
- Guide for use.

Following the review of existing material, gaps in this area could be identified and fed into future development programs, or provided to States and Territories to direct their future efforts.

## 8. Development of an education program on the risks and procedures associated with the management of discarded N&S.

### Recommendation 7 & 13 develop in tandem with



*It is essential to ensure that all staff who manage N&S are required to have received this training program. This should then be distributed through health departments, local governments and all individuals and organisations that distribute N&S or are involved in cleaning up discarded N&S).*

There have been some anecdotal reports that casual staff and volunteers employed to clean up public areas (eg. park and beach clean ups), are not provided with sufficient knowledge and equipment to safely manage discarded N&S. Data from the surveys did indicate that some training of different stakeholders' staff occurs, but this should be reviewed to ensure it meets standards specified in developed procedures.

Well developed and targeted education programs, that are available to any person that has responsibility for or potential contact with used N&S, can assist in ensuring appropriate management of N&S as well as reducing emotional trauma should a needlestick injury occur. Such programs would assist in alleviating many of the issues raised by stakeholders during the course of this project.

## 9. Develop a Catalogue of Standard Signage to be used to indicate disposal containers and systems.

### Recommendations 2 and 4



*An appropriate agency with expertise in this area could conduct this process.*

As with many other resources, there is a high level of duplication of signage design and development. Most stakeholder groups have developed signs to support their individual programs, with a wide variety of wording and imagery used. As a consequence, different signs and container colours are being used. This has the potential to cause confusion and hence inappropriate disposal of used N&S.

Consistent colour schemes and signage have already been developed and are well documented and accepted within the clinical and related waste field. These standards need to be adopted for use within the management and disposal practices for N&S used within the context of this report. By transferring these standards stakeholders can be assured that they reflect best practice guidelines and are consistent with legal and OH&S requirements. The development of this resource will also increase usability, as the consistency of symbols and words will assist recognition by users moving between geographic areas.

## 10. Develop a nationally accredited training package for NSPs.

*Obtain outlines of existing training packages that may be suitable for the type of activity carried out by a NSP worker. Using these as a guide, develop specific competencies relevant to NSP workers. These competencies would form the basis of the training package to be endorsed nationally. Specific training resources could then be developed to support these competencies while allowing region specific issues to be addressed (refer recommendations 14 and 26).*

All State and Territory authorities provide training to NSP staff in relation to the provision of services and the health aspects associated with their work. While a detailed review of this training was not part of this project, a number of individual NSP workers across different jurisdictions commented that the training they received was not suitable and did not meet their needs.

## 11. Information on correct disposal and disposal sites be circulated to healthcare practitioners and other bodies involved in the distribution of N&S for them to advise patients.

### Recommendation 28



*Coordinate information from the State and Territory environmental agencies, waste management authorities and waste management industry peak bodies. This information could then be circulated to all relevant parties or made available through a web site or other data management system.*

This project has demonstrated that there are a large number of sites available for the disposal of used N&S, and not just for those from IDU. The project has also demonstrated that a large percentage of those generating used N&S are not always sure of correct disposal options and the location of suitable facilities.

Providing such information to those who provide medications and/or N&S (eg., healthcare facilities, doctors and pharmacies), to pass onto patients, can resolve the confusion and anxiety that may result with not knowing what to do with used N&S.

In addition, by widely circulating the availability of this information, using methods such as providing links to publicly available disposal sites within resources like the public toilet database website, generators of used N&S who travel can plan ahead to ensure safe disposal of these waste items.

## 12. A media kit be developed and circulated.

### Recommendation 7 – Conduct in tandem.



*A draft version of this resource could be produced based on information from the literature review conducted during this project and existing information available. Appropriate regional variations may be included.*

During the course of this project there have been a number of media reports relating to needlestick injuries occurring in the community from exposure to N&S discarded in public places. As with a number of issues, the information reported in the media does not always reflect the actual situation.

A media kit that is supported (ie., co-badged), by all organisations that distribute N&S (eg., DOH, Pharmacy Guild, Diabetes Australia, NSP and the Division of General Practice), would assist in better educating the community about discarded N&S and the real risks to the public. Additionally, the kit can be used to provide support for such actions as establishment of NSPs, provision of sharps containers in public areas and correct management of discarded N&S.

## 2.5 Management Practices

### 13. With input from State and Territory DOH, and WorkCover authorities, develop a guideline that provides advice on managing N&S in non-healthcare work environments.

### Recommendation 8



*A relevant authority could be contracted to prepare such advice for all non-healthcare workplaces (eg., Queensland WorkCover has done this for the hotel sector). It is essential that government environment and waste management agencies are also involved in these discussions. In addition, the guideline may propose advice on immunisation requirements for people working in areas where they may have contact with used N&S.*

Most State and Territory DOH and many local governments, have developed information on the correct handling of used N&S in their working environments. It is important that the procedures developed are in fact safe and are consistent from workplace to workplace. By having definitive procedures the element of risk associated with handling and management of N&S can be significantly reduced or negated.

**14. An evidence based study in the form of a cost/benefit analysis should be undertaken to compare costs of disposal programs and measure outcomes, to support the implementation of disposal services and facilities, where required.**

*A suitably qualified organisation could be contracted to determine what would be considered the minimum standard for used N&S disposal from stakeholder organisations (eg., NSPs, local governments), and then conduct an analysis of the consequences arising from not providing disposal systems (eg., increased needlestick injuries, community stress, etc.).*

The most common obstacle cited for the non-introduction of best practice disposal of N&S is cost. For smaller distributors, regional areas and many secondary NSPs funding is not provided for the provision of appropriate disposal services for N&S. What is often not taken into account is the consequential cost of not providing these services. The cost to the community of the consequences of N&S being discarded in public places, and even more so, the cost of needlestick injuries to workers within the waste industry stuck with inappropriately disposed N&S. By analysing these costs in detail, those with such responsibilities can make informed decisions about the provision of N&S disposal services.

**15. Review standard operating procedures for NSP in relation to the management of used N&S and the advice provided regarding appropriate disposal standards.**

**Recommendations 2, 4, 7 and 10**



*Review the procedures followed by NSP staff in each State and Territory when coordinating collection, transport and disposal of appropriately disposed and discarded N&S with a view to developing systematic consistency. A review of the information NSPs provide to users in relation to appropriate disposal of N&S should also be undertaken to ensure best practice standards are presented in each State and Territory.*

There have been examples during this project of differing procedures used by NSP when coordinating the management of used N&S including such aspects as the method by which N&S are collected from fixed disposal units. In addition, there have been examples of procedures and/or advice that may not meet the absolute requirements or interpretations of relevant government agencies.

## 16. Award contracts to ensure appropriate used N&S collection systems are provided to all NSPs.

### Recommendation 40



*Review current practice in each State and Territory and identify where gaps exist in the existing service contracts provided. For example, are only primary NSPs covered? A position statement could be developed for each State and Territory that identifies the costs involved in providing this service, and possible funding sources.*

Centralised contract services for NSPs have been implemented in some jurisdictions while in other areas the NSPs rely on the largesse of other services (eg., neighbouring healthcare facilities) or have a mix of these systems depending on what is available locally.

Ensuring that all NSPs have access to an appropriate N&S disposal service is vital to avoid any adverse impacts. The system could range from regularly scheduled collections for those NSPs generating larger quantities of used N&S to “on-call” services for those generating smaller quantities or having seasonal demands. Victoria uses such a model for management of used N&S from its NSP.

Funding options that may be reviewed should include concepts such as extended producer responsibility schemes. (See recommendation 40)

## 17. Prepare standard collection contracts.

### Recommendation 16



*Work cooperatively with the waste management industry and its peak bodies to prepare such contracts.*

Having standardised contract and tender briefs, will allow for systems to be requested that meet all objectives in terms of safety and cost-effectiveness. These standard contracts should be prepared and distributed to central coordinating bodies for modification to meet any local issues/requirements. Once developed these contracts should be used when tendering as a matter of standard procedure.

## 2.6 Data Management

### 18. Develop a data management system to be used by local governments, NSPs, State and Territory agencies and other key stakeholders to ensure greater consistency in data collection and management.

*Identify data needs sources and current gaps. Based on this preliminary review, tender out the development and/or maintenance of a data collection analysis and management system. This system should be able to be accessed electronically based on criteria to be established.*

Collection of accurate data from all areas in relation to the disposal (appropriate and inappropriate) of N&S is essential to understand the extent of the problem. Comprehensive information would assist in developing effective strategies in dealing with N&S disposal. Examples of the use of data collection for improving management of discarded N&S include the Melbourne Inner-City Needle Exchange (MINE) NSP in Fitzroy, Victoria, and the City of Maribyrnong, also in Victoria with their GPS system.

In gathering data for this project it became apparent that non standard measurement or recording protocols existed, either between States or between different stakeholders within the same State. Information is gathered in different forms by different organisations, for example the quantity of N&S disposed is currently recorded by weight, by volume of container, or by actual number of N&S, or in many instances not recorded at all. The level of information recorded also varies, for example many of the Hotlines record the actual street number and location of N&S found, including site type, while many local government areas simply record actual numbers found, or do not record this information at all.

The inconsistency in this approach to data management hinders more efficient management of the disposal of N&S.

#### **19. Develop a central database and reporting mechanisms to record all needlestick injuries and health outcomes.**

##### **Recommendation 18**



*WorkCover requires the reporting of a raft of work place injuries. In addition, medical practitioners are required to report on specific medical conditions. Develop a process whereby all needlestick injuries are reported to a central authority. The consultation and development of reporting mechanisms could be tendered out.*

*In consultation with the process of recommendation 18, a suitable organisation could be contracted to develop such a database. Consultation with NSP and DOH State and Territory representatives should also occur as states such as Tasmania already have data reporting mechanisms established.*

Needlestick injuries occurring in the community are not routinely recorded by a central system unless there is an adverse health consequence (eg., seroconversion to HIV, HBV, HCV). Doctors and pathology laboratories are only required to report specific diseases (in relation to needlestick injuries this would mean seroconversion to some bloodborne pathogen).

According to a report by the University of Western Australia, research on the consequences of community acquired needlestick injury has only focussed on those presenting to emergency departments. Needlestick injuries that occur within a workplace or by staff carrying out their tasks may be reported and recorded by WorkCover agencies. Similarly, there may be some who go to their local GP or do not seek any medical assistance. The lack of information in this area hinders accurate reporting of the real risks associated with inappropriate N&S disposal, and consequently the real costs.

## 20. Conduct further research of N&S management issues within the private sector

### Recommendations 1, 2 and 4



*A research project could be tendered out that is focussed on consulting with a wider group of private business and business associations to gather data on types, quantities and other details such as management strategies, in relation to discarding of N&S on private and commercial property.*

*This research would identify whether inappropriate disposal of N&S is an issue within this sector, and the extent of the issue. It would also identify current practices and highlight potential best practice case studies.*

While the focus of this project was discarded N&S in public areas, a number of private organisations<sup>6</sup> were approached to discuss N&S disposal issues (refer to Section 8 for summaries). From these discussions, it appears that the inappropriate disposal of N&S on private property is also a significant and growing issue. This is supported by discussions with organisations conducting “sweep” programs. Opportunities for private organisations to feed into the database discussed in recommendation 19 should be evaluated.

Some councils have developed innovative programs to assist private organisations in recognising and then implementing solutions to discarded N&S. The City of Melbourne is one such council. They have developed a specific training program for small businesses within the central business district to assist them in recognising the issue and what each organisation can do to minimise impacts of discarded N&S.

## 21. Stakeholder groups to appoint a responsible officer to coordinate N&S management issues.

### Recommendation 18



*To ensure that the data management system discussed in recommendation 18 is effective, each stakeholder group would require a responsible officer to coordinate and manage the collection and reporting of relevant data. Following development of the data management system, it is recommended that each of the stakeholder groups establish such a position.*

Based on the conduct of the surveys and interviews, there is no consistency between like organisations as to who to approach in regards to information on the management of discarded N&S. For example within local governments, environmental health officers, waste managers, operations staff, health services coordinators, planning and development managers and senior administrators completed surveys, (the council plumber completed one survey). In addition, it was reported that some surveys, while completed by a responsible and appropriate officer, did not collect data from the total council operations such as from parks and outdoor staff management.

The appointment of a responsible person would ensure that the correct data is collected consistently and that there are correct management procedures within the organisation for the use and dissemination of this information both internally and externally.

## 22. Develop a consistent data recording and validation process for information collected by NSPs.

### Recommendations 18 and 19



*It is recommended that a review be undertaken of NSP surveys of IDU, to ensure consistency in language, definitions and the use of unambiguous terms. The outcomes of these surveys can then be used to track changes in attitudes and practices and measure impacts of strategies. The information could also be used to support further education programs.*

Articles have questioned the accuracy of self-reporting data collected by a variety of sources, including NSPs. This view is supported by a number of NSP coordinators, due primarily to the wording and interpretation of questions.

For example, when an IDU states that they have disposed of used N&S safely, there is no real determination as to what “safe” means. Some research in this area has suggested that, when questioned, an IDU may indicate that depositing a used N&S into a drain, waste bin or burning is a safe disposal practice. However, these practices are not deemed by agencies and the wider community to constitute safe disposal, as appropriate harm minimisation outcomes have not been achieved.

### **23. Conduct an analysis of all data collected and distributed by needle Hotline services and other services collecting N&S disposal data.**

#### **Recommendations 18, 19 and 21**



*Hotline coordinators, where such services exist, be requested to provide information on data and data collection mechanisms. The responsible officer (as per recommendation 21), could then analyse information in regards to types of data, accuracy and dissemination mechanisms to make recommendations as to how the process could be improved.*

The State and Territory Hotlines, where they exist, collect detailed data on discarded N&S. While some local governments use this data to plan location of N&S disposal units, anecdotal evidence suggests that most do not. As identified in the surveys, there are also a significant number of calls in regards to discarded N&S that are made direct to local governments, the Police and other community bodies. This data, in many instances, is not being captured or used in the planning of management of discarded N&S.

### **24. Identify the differences and/or variations between the data collected.**

*The responsible officer should highlight any variations in the type and quality of data collected and make recommendations as to what could be considered “the minimum information requirements”. Hotline services should then be requested to comply with these requirements.*

While some Hotlines gather very detailed data, the value of this detail should be determined. An analysis of how the data can be used and what data is required will assist in standardising what should be captured. Once this analysis has been undertaken, data management activities can be streamlined to ensure relevant data, without any potential bias or capacity to be misinterpreted, is collected and fed into NSP and local government planning and review processes.

## **2.7 Community Perceptions**

### **25. Conduct evidence based research to determine public perceptions of the role of NSPs, and in particular the impact of establishment of NSPs on changes to patterns of discarded N&S in public areas. This information can be used when planning the siting of new NSPs.**

#### **Recommendations 7, 8, 13, 34 and 35**



*This research could be contracted out to an organisation with an understanding of the role of NSPs and the current approaches to how used N&S are generated and disposed of. A core component of this research should be the conduct of focus groups within all States and Territories to gain a perception of the issues concerning all public stakeholder organisations.*

There are recorded examples in the literature of public opposition to the siting of a NSP due to the perception that there will be an increase, or possible commencement, of the discarding of N&S in public areas. This perception is supported by anecdotal comments that there is a fear that the establishment of a NSP will act as a “honey pot” to attract those who will wilfully discard used N&S into public areas such as schools, parks and playgrounds.

Any publicity associated with discarded N&S, particularly if a needlestick injury has resulted, implies that the N&S came from the “careless” habits of an IDU. This type of publicity continues to support the community’s perceptions of the IDU stereotype being irresponsible in regards to disposal of used N&S.

#### **26. Evidence based research be undertaken in relation to the role NSPs have on the quantities and locations of discarded N&S.**

*Research could be commissioned to consider the issue as it applies to Australia. This research will assist in the development of community education and communication programs to provide a factual basis to future discussions on this topic. Fact sheets should be prepared from the results of the research and disseminated to the wider community.*

The literature review indicates that despite public concerns to the contrary, the establishment of NSPs does not actually result in increased incidences of discarded N&S in public areas, both within Australia and internationally. In fact data suggests the reverse, that there is a reduction in discarded N&S.

## **2.8 Legislative Impacts**

#### **27. Review and achieve consistency and clarity across all State and Territory governments in both the legislation and its application in relation to management of used N&S.**

*A working party comprising representatives from all relevant sectors (eg., environment and health agencies, Police, WorkCover, NSPs and IDU representatives), could be convened to review the State and Territory legislation in regard to use and disposal of N&S in non-medical environments, to develop options to be considered in regards to harmonising legislation across the country.*

*A process similar to the National Environment Protection Measure (NEPM) methods of achieving consistency for environmental regulations could be adopted. As a minimum, the consultation processes used for the development of these NEPM could be followed.*

The legislation review undertaken for this project has clearly demonstrated significant differences in the definitions of clinical waste, requirements for disposal of clinical waste from both NSPs and IDU (in the community), and possession of N&S. In most instances where clarification is required, NSPs rely on administrative determinations made by State and Territory agencies rather than clear guidance within the legislation.

In essence, the same types of materials (N&S) are generated by the same type of individuals and organisations and pose equal risk across the country. To have different legislative requirements does not assist in proper management and harm reduction.

NSPs and other organisations such as local governments, Diabetes Australia, and pharmacists are generally in the position of advising clients as to appropriate disposal pathways for used N&S. When the legislation is not specific, advice may not be provided, or an interpretation, correct or otherwise, may be given.

#### **28. Review the implications of disposing of N&S in the domestic waste stream, in the context of State and Territory legislative requirements.**

##### **Recommendation 27**



*Conduct a stakeholder workshop to review the impacts of used N&S being deposited into the domestic waste stream. The waste industry, State environment departments, State and Territory DOH and WorkCover should be included. Following such a review, this working group prepare recommendations that could be considered at the same time as progress in recommendation 27.*

The cost of disposing of N&S as clinical waste is significantly greater than the cost of disposing of N&S in the domestic waste stream. In many jurisdictions, N&S generated outside healthcare facilities are not classified as clinical waste and are not required to be managed in the same way as N&S generated within the healthcare sector. For this reason, N&S are found in significant quantities at waste facilities and in general waste systems. The growing number of incidents of needlestick injury in the waste industry requires that this situation be addressed at a national level.

The real risks need to be fully understood and as a minimum best practice standards developed that NSPs follow.

## 29. Develop suitable programs aimed at minimising loose N&S found at landfills, transfer stations and materials recovery facilities.

### Recommendation 28



*The development of such programs should follow the outcomes of the working group as per recommendation 28.*

Needlestick injuries are being reported at landfills, transfer stations and materials recovery facilities. Advising generators to dispose of used N&S in the domestic waste stream may place those involved in managing these streams at risk of needlestick injuries. The systems and infrastructure for the management and handling of domestic waste are incompatible with those required for the management and handling of used N&S.

Waste management contractors in the USA have been estimated by the World Health Organization<sup>7</sup> to receive between 500-7,300 needlestick injuries per annum with seroconversion to HIV to be between 1-15. Another study cited in the literature review has shown that there needs to be further work done on evaluating risks to those potentially exposed to HBV, HCV, HIV, transmitted from a needlestick injury.

## 2.9 Police Activity and Associated Impacts

### 30. Conduct evidence based research to determine the impact of enforcement activities on the incidences, potential increases and locations of discarded N&S.

*A suitable organisation could be commissioned to conduct this research. The research should utilise focus groups to highlight the issues and use data collected from specific clean up services (eg., MINE in Fitzroy).*

It is essential that impacts that are anecdotally claimed, be supported with data linking the Police activity with shifts in discarded N&S locations and quantities. It is also essential that the research discount other factors such as shifts in suppliers/dealers or other changes in the IDU community.

An issue that was raised by a number of stakeholders, and was supported in the literature, was that of the consequences of Police activity resulting in increased incidences of discarded N&S. Police have the responsibility inter alia for addressing the distribution of illicit drugs within the community. However, it is claimed that consequential actions from illicit drug enforcement activities are increased incidences of discarded N&S.

Advocacy groups cite instances of the inappropriate administration of laws governing unsafe disposal while IDU are still in possession of used N&S. This acts only as further encouragement to discard needles. What is required is a well thought out process that enables Police to addresses illicit drug supply, but not through other actions cause IDU to discard used N&S into public areas. This is not a simple task to achieve, however roundtable discussions with all relevant stakeholders may assist in developing a solution that reduces discarded N&S.

## 2.10 Gross Pollutant Traps

### **31. Consult with catchment management authorities, waterways authorities, local government and environmental agencies to determine the effectiveness of Gross Pollutant Traps (GPTs) located within the stormwater system in capturing N&S.**

*Quantify the issue with the above organisations and determine that GPT are in fact a desired management tool for discarded N&S. Following the first stage, environmental agencies could be requested to conduct research into improved design of GPT to capture discarded N&S, without impeding the collection of other litter items.*

The use of gross pollutant traps, (GPT) to prevent litter accessing waterways is growing. While these may have been primarily implemented to trap litter such as paper and beverage containers, their effectiveness in trapping N&S discarded into drains has not been quantified.

With growing incidents of N&S being found in public recreation areas such as beaches and in other waterways following heavy rains, an effective system needs to be developed to trap these items. Water authorities consulted, have indicated that existing GPT are largely ineffective at trapping discarded N&S and better designs are available.

## 2.11 Behavioural Aspects of Disposal Practices

### **32. Conduct evidence based research to determine true causal effects of generators disposing of used N&S inappropriately.**

#### **Recommendation 30**



Causal factors for disposing of used N&S by the differing generator groups needs to be established. This could be conducted by commissioning focus groups to discuss the issues and develop a suite of preferred management systems.

<sup>6</sup> This refers to those privately owned businesses or others that are not part of the public sector.

Many of the strategies aimed at reducing the incidents of discarded N&S are targeted at placement of more disposal facilities. However, effective solutions can only be determined once the actual cause is understood. Is it lack of facilities, embarrassment should the user be identified disposing of N&S, incorrect understanding of what is deemed safe, incorrect advice, the need to avoid harassment from law enforcement agencies or a lack of intent that impacts on the disposal patterns of individuals? A clearer understanding of these issues and their impacts on disposal is required.

## 2.12 Planning Tools

### 33. Integrate sharps management into planning and development application and approvals processes as appropriate.

#### Recommendation 34



*Work could be undertaken with peak local government associations and relevant authorities responsible for planning permits. As part of this process, working with planning agencies and local governments, develop appropriate standard requirements in planning and development applications to manage the disposal of N&S. These should be developed so that they can be adapted to the needs of each State and Territory.*

Management strategies for used N&S can be structured to collect them once discarded, or be put in place to avoid this occurring. By ensuring that all public and private developments address the issues that encourage appropriate disposal of N&S, relevant to identified risks and needs, then the negative health impacts can be minimised. This process should be built into the development application process, similar to recent requirement in NSW, to include a waste management plan with development approvals.

### 34. Integrate sharps management planning into liquor licensing approvals process where appropriate.

#### Recommendations 33 and 35



*Follow a similar approach as per recommendation 33, but conduct the discussions with State and Territory liquor licensing and Police agencies.*

Anecdotal evidence and media articles suggest that N&S are often found at venues where liquor is also consumed. This causes concern to patrons frequenting these venues as well as staff. Queensland has implemented an awareness program for the hospitality industry based on the identified risks to staff employed in this sector.

Ensuring that appropriate public and private venues incorporate a requirement for the development of an appropriate N&S management plan in all applications for liquor licenses is important, given that it would be extremely difficult to exclude N&S from many of these venues.

### **35. Review the location and position of community disposal units.**

#### **Recommendations 4 and 9**



*It is recommended that an organisation be commissioned to undertake consultation with key N&S user groups to identify issues associated with using public N&S disposal units. From this study a set of criteria be developed that meet users needs and the safety needs of the general community. These guidelines to then be distributed to appropriate State and Territory and local government bodies.*

Community disposal units are being used by a number of State and territory bodies as a key element of their used N&S management strategy. In Tasmania a trial of a community bin has been established to gain feedback on its use, visibility and acceptance. Information from this trial and others of a similar type should be included in this review to ensure all aspects of the siting of these units is reviewed.

### **36. Develop maps identifying the location of N&S disposal facilities.**

**Supported by programs to ensure that maps are maintained with up to date information and that appropriate methods of dissemination are utilised.**

*Work could be undertaken in each State and Territory with local government associations and state Diabetes associations to develop disposal maps for all users of N&S. These maps may be produced in hard copy or may be available on web sites.*

These maps should be provided in a range of formats to ensure widespread relevance. A number of successful formats have been encountered in the course of the project including those produced by the City of Melbourne, Wagga Wagga Council and also the DHA current public toilet location map. The South East Sydney Area Health Service, in conjunction with key area stakeholders, is an example of an organisation that has recognised the need for this style of information and is working to achieve it for its jurisdiction.

Development of this form of resource could be undertaken in stages. The first stage could simply be to indicate on the currently available public toilet location map, those public toilets that do have sharps disposal containers in situ. This could be done by the addition of a generic symbol.

Stage two could then be the development of a sharps disposal specific map that includes public toilets as well as all other locations such as other fixed disposal units, healthcare facilities, NSPs, local governments and other sites that have N&S disposal facilities. Care must be taken to ensure that all privacy issues such as identification of NSP and details of pharmacies are appropriately managed. All stakeholder groups should be adequately represented in the development and discussion of the maps.

## 2.13 Expand Work with the Pharmacy Sector

**37. Liaise with national and State and Territory Pharmacy Guilds to explore options to expand the role of pharmacies in the provision of N&S disposal facilities. In particular, to identify current barriers and determine solutions for these.**

### Recommendation 26, 30 and 32



*Using information from this project, and work previously undertaken by the Pharmacy Guild, facilitate a working party to review the opportunities within this sector. A working group could be established to review and develop recommendations that could then be trialled within different regions.*

Pharmacies, on a national basis, represent approximately 20% of N&S supplied to IDU, and are the main suppliers of N&S to people with Diabetes. As such they have the potential to play a critical role in establishing a greater network of disposal facilities for used N&S.

From the survey responses, pharmacies stated that there are a range of reasons for not providing N&S disposal facilities. While a number of pharmacies stated that the disposal of N&S was not their responsibility, the majority of survey respondents provided other issues or barriers to providing N&S disposal facilities.

Among these is the belief that providing services to IDU legitimises the illegal activities. Additionally, approximately 20% of the comments regarding fixed external disposal units stated that these units would have a negative impact on the business.

Based on these comments the major barriers relate to the perception of the types of people who will use the facilities and the behavioural patterns they are believed to exhibit. Further investigation into the legitimacy of these concerns will assist in developing facilities and education programs to address any real issues and other misconceptions.

## 2.14 Comprehensive Overview of N&S Management

### 38. Develop a map showing all areas of responsibility and funding for N&S disposal and management.

#### Recommendations 35 and 36



*A detailed map of all funding and service provisions in relation to used N&S could be developed for regions within each State and Territory. These maps can then be overlaid by an organisation contracted to undertake this task, to determine similarities and differences across each jurisdiction. Organisations such as Diabetes Australia and the Pharmacy Guild could be requested to also provide such information for comparison.*

During the survey many of the stakeholders indicated that there are multiple areas of responsibility with respect to the appropriate disposal of N&S. These include, but are not limited to:

- Local government sponsored immunisation.
- Clean up of public areas for the purpose of public safety and amenity.
- Funding of the disposal of people with Diabetes injecting equipment.
- Management of IDU and other injecting groups equipment.
- Clean up of inappropriate disposal on private property.
- Cost of disposal of N&S by private organisations.

Funding for N&S disposal applies to some of the areas listed above, and not others. Support in terms of appropriate management practices is provided to some and not others. In some local government areas, the same activity is being funded from different sources.

Some local government surveys clearly indicated that while the Australian government funds the provision of new N&S, there is no funding provided to local governments to manage the disposal aspect. Several councils responding in this survey stated that if funding was made available, then they would be more likely to provide disposal facilities.

## 2.15 National Hotline

**39. A common 1300 or 1800 number be established to provide advice to all providers of NSP type services, those who distribute N&S (regardless of reason), generators of used N&S waste and other stakeholders, to obtain the broad spectrum of information necessary to ensure safe, cost-effective and legal disposal.**

*Current Hotline providers be requested to review the benefits of establishing a consistent service across all areas. These organisations be requested to report back with recommendations which include resource implications.*

*This review should also examine mechanisms for achieving consistent data collection and dissemination.*

Most States and Territories have a needle Hotline service in place. In some States more than one service exists, with both State and local government providing on call discarded N&S clean up services. The Hotline service not only provides a genuine service to the community, it is also a primary source of data on locations and numbers of discarded N&S.

In addition to the establishment of a national number, careful consideration should also be given to the promotion of this number. Based on the local government surveys, a significant number of calls in regard to inappropriately discarded N&S are made to local governments. Interestingly, a higher percentage of calls are made in those States where Needle Hotlines exist. This indicates that there is not a high level of awareness of the Hotline service.

## 2.16 Extended Producer Responsibility

**40. A review be undertaken of the implications of Extended Producer Responsibility schemes in the context of the management of used N&S. Specifically the opportunities for such a scheme to part fund disposal services.**

*An organisation could be contracted to review EPR schemes including details of EPR schemes in place for other waste items. Specific focus should be placed on how such a scheme would work, and the potential funding that may flow. Discussions should be held with Environment agencies that have experience with EPR schemes.*

EPR schemes are an established tool in the management of many waste streams. Environmental agencies throughout Australia have incorporated EPR requirements into their legislation and are now supporting this form of product stewardship more. The National Packaging Covenant is an example of a national scheme whereby brand owners are required to fund collection systems for the packaging waste generated from their products.

EPR schemes within the context of N&S would place responsibility for the correct management of the used N&S on the producer of the N&S. This may result in funds being directed to support collection services or to fund disposal containers.