

Curtin

UNIVERSITY OF TECHNOLOGY

National Drug Research Institute

Preventing harmful drug use in Australia

**The Harm Reduction
Needs of Aboriginal
People Who Inject Drugs**

Formerly National Centre for Research into the Prevention of Drug Abuse

FUNDED BY THE NATIONAL DRUG STRATEGY



**National Drug Research Institute
Curtin University of Technology**

**The Harm Reduction Needs of
Aboriginal People Who Inject Drugs**

**Dennis Gray,¹ Sherry Sagers,² David Atkinson³
May Carter,¹ Wendy Loxley,¹ Dennis Hayward⁴**

September 2001

1. National Drug Research Institute, Curtin University of Technology
2. Institute for the Service Professions, Edith Cowan University
3. Centre for Aboriginal Medical and Dental Health, University of Western Australia
4. Noongar Alcohol and Substance Abuse Service

Copies of this report can be obtained from:

The Administrative Assistant
National Drug Research Institute
Curtin University of Technology
GPO Box U1987
PERTH WA 6845

Telephone: (08) 9426 4222

Facsimile: (08) 9486 9477

Email: enquiries@ndri.curtin.edu.au

Web: <http://www.curtin.edu.au/curtin/centre/ndri>

ISBN 1 74067 141 4

Contents

List of Tables	vi
List of Figures	viii
Acknowledgments	ix
1. Introduction	1
2. Methods	7
3. The prevalence of injecting drug use	14
4. Patterns of drug use	35
5. Harms associated with injecting drug use	48
6. Services for Aboriginal people who inject drugs	59
7. Summary and recommendations	82
8. Appendices	93
9. References	102

List of Tables

Table 3.1	Drugs ever tried and currently used, Aboriginal and Torres Strait Islanders and the general population, Australia, 1994 and 1993	15
Table 3.2	Number of hospital admissions for all drug-related conditions (other than alcohol and tobacco) by Aboriginality, Western Australia, 1994–2000	16
Table 3.3	Percentage increases in hospital admissions for drug caused conditions (other than alcohol or tobacco) among Aboriginal people by gender, Western Australia, 1994–2000	18
Table 3.4	Number of opioid use related admissions and opioid use admissions as a percentage of all drug-related admissions (other than alcohol or tobacco), by Aboriginality, 2000 and 1996–2000	18
Table 3.5	Hospital admissions for conditions potentially related to injecting drug use (Opioids, Psycho-stimulants, Drug psychoses and Intravenous Drug Use conditions), by Aboriginality by year, Western Australia, 1994–2000	20
Table 3.6	Aboriginal admissions for selected drug-related causes, by health region by gender, 1994–2000	22
Table 3.7	Mean Aboriginal crude admission rates per 1000 person years for all drug-related causes other than alcohol and tobacco, by males and females by health region, 1996–2000	23
Table 3.8	Admissions to Next Step Specialist Drug and Alcohol Services by Aboriginality, 1998–2000	24
Table 3.9	Hepatitis C notifications by Aboriginality by year, Western Australia, 1993–2000	25
Table 3.10	Hepatitis C notifications by Aboriginality by age category, Western Australia, 1999	26
Table 3.11	Hepatitis C notifications by Aboriginality by health region, Western Australia, 1999	27
Table 3.12	All drug offences by Aboriginality, Western Australia, 1996–1999	28
Table 3.13	Drug offences where Aboriginality was specified by gender, Western Australia, 1996–1999	28
Table 3.14	Drug offences by gender, Aboriginality and local government area, Western Australia, 1996–1999	30
Table 3.15	Percentage of drug-related offences committed by Aboriginal people by region and percentage of all offences committed in each region, Western Australia, 1996–1999	31
Table 3.16	Estimates of the numbers of Aboriginal people aged ≥ 15 years in metropolitan and non-metropolitan health regions who have injected drugs for non-medical purposes	33
Table 3.17	Estimated numbers of Aboriginal people aged ≥ 15 years who have injected drugs for non-medical purposes by Statistical Division	34

Table 4.1	Percentage of people using various categories of drugs, the frequency with which they used them and the time of last use	37
Table 5.1	Harms associated with injecting drug use most frequently identified by users and harms identified as 'main harms'	48
Table 5.2	User knowledge of blood borne viruses that may be contracted through injecting drug use	51
Table 5.3	Self-reported test status for blood borne viruses among Aboriginal people who inject drugs	52
Table 5.4	Perceived risk to self and friends of contracting a blood borne virus	53
Table 5.5	Experience of overdose among Aboriginal people who inject drugs and knowledge of how to respond	54
Table 5.6	Organisational representatives' perceptions of drug-related harms	56
Table 6.1	Services currently available for people who inject drugs by study location	60
Table 6.2	Potential sources of injecting equipment identified by Aboriginal people who inject drugs by study location	63
Table 6.3	Services currently accessed for advice about drug use by study location	64
Table 6.4	Services currently accessed for general health care by study location	65
Table 6.5	Number of people who inject drugs that identified services they would not use	66
Table 6.6	Additional services proposed by Aboriginal people who inject drugs	67
Table 6.7	Current health services for Aboriginal people who inject drugs identified by organisational representatives	70
Table 6.8	Current counselling and treatment services for Aboriginal people who inject drugs identified by organisational representatives	72
Table 6.9	Education and training services for Aboriginal people who inject drugs proposed by organisational representatives	75
Table 6.10	Counselling and treatment services for Aboriginal people who inject drugs proposed by organisational representatives	76
Table 6.11	Community and family support services for Aboriginal people who inject drugs proposed by organisational representatives	77
Table 6.12	Proposed access to injecting equipment for Aboriginal people who inject drugs proposed by organisational representatives	78

List of Figures

Figure 3.1	Crude hospital admission rates per 10 000 person years, all drug-related conditions (other than alcohol and tobacco), by Aboriginality, Western Australia, 1994–2000	17
Figure 3.2	Crude hospital admission rates per 10 000 person years for opioid caused conditions, by Aboriginality, Western Australia, 1994-2000	19
Figure 3.3	Crude hospital admission rates per 10 000 person years for psycho-stimulant caused conditions and drug psychoses, by Aboriginality, Western Australia, 1994–2000	21

Acknowledgements

First, we would like to thank the Aboriginal people who inject drugs and the representatives of the various service agencies who agreed to be interviewed as part of the project. We would like to thank Adele Cox and Vanessa Poelina from Broome, Cindy Whitby from Geraldton, Shirley Bennell and Jody Websdale from Bunbury, Nancy Hampden, Diana Rems, Bill Herdigan and Jade Maddox from Noongar Alcohol and Substance Abuse Service for assistance in contacting Aboriginal people who inject drugs and for their assistance in undertaking the project. Similar support and assistance was also provided by Tamara Speed and staff from the Western Australian Substance Users Association. Adrienne Moloney and Deirdre Bourbon conducted many of the interviews, and Deirdre Bourbon also acted as project manager. Susan Carruthers and Kim Hargreaves, our colleagues at the National Drug Research Institute, were unstinting in providing us with information and advice.

Support for the project was given by Derbarl Yerrigan Aboriginal Health Service (Perth), South West Aboriginal Medical Service (Bunbury), Bega Garnbirringu Health Service (Kalgoorlie), Geraldton Regional Aboriginal Medical Service, and Broome Regional Aboriginal Medical Service, the Kimberley Aboriginal Medical Services Council and the Western Australian Aboriginal Community Controlled Health Organisation. The project also benefited from discussions with Jodie Shoobridge, and with Scott Wilson and staff from the Aboriginal Drug and Alcohol Council of South Australia.

John Fernandez of the Crime Research Centre at the University of Western Australia, and Dr Sandy Thomson, Jude Bevan, Heath Greville and Liz Unwin from the Health Department of Western Australia were all extremely helpful in providing us with statistical data. The Social Science Data Archives at the Australian National University provided the original data file from the *National Drug Strategy Household Survey: Urban Aboriginal and Torres Strait Islander Peoples Supplement 1994* (Commonwealth Department of Human Services and Health 1994) used to establish the baseline of prevalence of injecting drug use. Those who carried out the original analysis and collection of that data bear no responsibility for further analysis and interpretation that we have made.

The project was funded by the Health Department of Western Australia (now the Department of Health). The National Drug Research Institute is funded by the National Drug Strategy.

1. INTRODUCTION

This study is the first to look specifically at injecting drug use among Aboriginal people in Western Australia. It was commissioned by the Health Department of Western Australia and was conducted with the cooperation of a number of Aboriginal community-controlled health services. The objectives of the study were to:

- conduct research into the nature and extent of illicit intravenous drug use by the Aboriginal population of Western Australia; and,
- determine the needs for harm reduction services for Aboriginal people who inject drugs illicitly.

In this context, 'harm reduction services' are an aspect of 'harm reduction strategies', which are defined in the *National Drug Strategic Framework 1998–99 to 2002–03* as strategies '... designed to reduce the impacts of drug-related harm on individuals and communities' (Ministerial Council on Drugs Strategy 1998:46). Harm reduction, and the complementary strategies of demand and supply reduction form the three pillars of the harm minimisation approach taken by Australian governments to reducing drug-related harm (Ministerial Council on Drugs Strategy 1998:15–16).

A good deal is now known about Aboriginal use of alcohol and tobacco and the harms associated with such use (McLennan & Madden 1999; Perkins, Sanson-Fisher, Blunden *et al.* 1994; Siggers & Gray 1998). Much less is known of Aboriginal illicit drug use, including injecting drug use (Larson, Shannon & Eldridge 1999). This is partly a consequence of the illegal nature of the activity and the stigma attached to it by many people in the wider community. It is also a consequence of the acknowledged greater threat to health and well-being that legal drugs pose for Aboriginal people and—until recently—was also a consequence of the relatively few public expressions of disquiet either by Aboriginal communities or health professionals. However, over the last decade injecting drug use among Aboriginal people has attracted increasing interest and concern.

The understandable anxiety about injecting drug use and the harms associated with it should not obscure the reality that the legal drugs tobacco and alcohol continue to pose far greater health and social risks to all Australians; and among some sections of the Aboriginal population, use of prescription drugs and volatile drugs are also having a significant impact (Siggers & Gray 1998; McLennan & Madden 1999; Western Australia, Community Drug Summit Office 2001). Furthermore, injecting drug use among Aboriginal people has to be considered and addressed in the context of a

framework which acknowledges the common factors underlying the use and misuse of all drugs.

As in the wider community, Aboriginal people use illicit drugs for many of the same reasons that they smoke tobacco and drink alcohol—because they find it relaxing, it helps them to socialise, it is pleasurable and it may help them forget, at least temporarily, personal pain and misfortune. As with alcohol for example, not all illicit drug use constitutes misuse, and many people who inject drugs, will not experience severe health or social consequences as a result of their drug use. These people are unlikely to see their drug use as problematic and consequently will tend not to seek any advice about it or treatment for it (Saggers & Gray 1998).

It is to those sections of the Aboriginal community whose drug use—whether illicit or licit—poses problems for them and members of their communities, that attention needs to be directed. Much research has been focused on questions relating to the demand for alcohol and other drugs. Why is it that some Aboriginal people's lives appear to be dominated by drugs? Explanations for such use in the past have included: postulations of biological 'inferiority', psychological susceptibility, loss of culture and culture change, or traditional values and social behaviours. Others, however, have located the causes for substance misuse firmly within the context of colonisation and dispossession and the consequent economic, social and political marginalisation of Aboriginal people (Kahn *et al.* 1990; Hunter 1993; Saggers & Gray 1998). This is certainly the position taken by many Aboriginal organisations and individuals (National Aboriginal Health Strategy Working Party 1989; Royal Commission into Aboriginal Deaths in Custody 1991a; 1991b; Aboriginal Legal Service of Western Australia 1995; Collard 2000; Lette *et al.* 2000; Western Australia, Community Drug Summit Office 2001). In particular, the removal of Aboriginal children from their families and cultural settings has been identified as a key factor in much substance misuse (Human Rights and Equal Opportunity Commission 1997; Aboriginal Legal Service of Western Australia 1995).

Aboriginal inequality still exists, despite more than three decades of government intervention to address the problem. This is apparent in a number of social indicators which demonstrate that in terms of income, employment status, educational attendance and post-school qualifications, Aboriginal people remain considerably worse off than the general population (Australian Bureau of Statistics 1998; McLennan & Madden 1999). As with the non-Aboriginal population, such social disadvantage is associated with poorer health, generally, and with licit and illicit drug use (Macintyre 2000; Najman & Smith 2000). As well as being associated with inequalities vis-à-vis the wider population, a 1994 household survey of urban dwelling Aboriginal and Torres Strait Islanders found that alcohol and other drug misuse is

also associated with economic inequalities within the Aboriginal and Torres Strait Islander population (Commonwealth Department of Human Services and Health 1996). This then is the context in which injecting drug use by Aboriginal people must be considered.

In 1989 the National Aboriginal Health Strategy Working Party (1989) made reference to the use of heroin by Aboriginal people in inner Sydney, but illicit drug use *per se* was not highlighted in the recommendations of the Working Party's report. The Royal Commission into Aboriginal Deaths in Custody (1991a) also cited reports of heroin use among Aboriginal offenders and some sections of Sydney's Aboriginal community, and reported Aboriginal deaths from heroin overdoses in Adelaide. While acknowledging the need for a primary emphasis on alcohol and tobacco, the report of the Royal Commission noted that illicit drug use was a factor leading to custody and to increased vulnerability to death in custody.

Since the time of the Royal Commission, there have been indications that injecting drug use is becoming more prevalent among Aboriginal people, and concerns about this have been expressed by Aboriginal community representatives (Edwards, Frances & Lehmann 1999; Larson & Currie 1995; Shoobridge 1998; Shoobridge, Vincent, Allsop & Biven 1988). HIV and hepatitis infection rates are increasing among Aboriginal people, and the Third National HIV/AIDS Strategy noted that injecting drug use is believed to be a more common mode of transmission among Aboriginal people than in other Australian populations (Commonwealth Department of Health and Family Services 1996).

Despite these concerns, there have been few population-based surveys among Aboriginal people of the extent and nature of illicit drug use in general, or injecting drug use in particular. The largest study of drug use among Indigenous Australians—and one that grew out of the recommendations of the Royal Commission into Aboriginal Deaths in Custody—has been the *National Drug Strategy Household Survey: Urban Aboriginal and Torres Strait Islander Peoples Supplement 1994* (Commonwealth Department of Human Services and Health 1996). (Hereafter this is referred to simply as the 1994 Household Survey.) With specific regard to injecting, the survey found that 3.0% of urban Aboriginal people acknowledged ever having injected drugs for non-medical purposes (compared with 2.0% of the general population) and that 2.0% reported having injected drugs in the previous 12 months (compared to 0.5% of the general population) (Commonwealth Department of Human Services and Health 1996:24). Subsequently, there has been a number of smaller studies of injecting drug use among Aboriginal people in Brisbane (Larson 1996; Larson, Shannon & Eldridge 1999), Melbourne (Edwards, Frances & Lehmann 1999),

and Murray Bridge in South Australia (Shoobridge 1997). However, the results of the 1994 Household Survey remain the best available estimate of prevalence.

Injecting drug use is a major risk factor in the transmission of blood borne viruses (BBVs) such as human immunodeficiency virus (HIV) and hepatitis. Public health attempts to reduce the transmission of BBVs among people who inject drug users have focused on the availability of sterile injecting equipment through needle and syringe programs. While needle and syringe programs have contributed to a decline in HIV transmission among people who inject drugs in the wider population, incidence rates of hepatitis remain high. In addition, between 1992 and 1998, the HIV notification rate in Australia's Aboriginal population increased, whereas it decreased in the non-Aboriginal population (NIASHS 1997:2). The National Indigenous Australian Sexual Health Strategy 1996–1997 to 1998–1999 recommended action-based research into Indigenous injecting drug use—particularly research into the recruitment of individuals into injecting drug use (NIASHS 1997:99). This call came from a Working Party of the Australian National Council on AIDS and Related Diseases which, while initially concerned about HIV/AIDS in Indigenous communities, broadened its brief to examine other sexually transmissible diseases, blood-borne viruses and sexuality.

The few studies that have been conducted among Aboriginal people indicate areas of concern with regard to risk factors. A study of 77 Aboriginal people in Brisbane who inject drugs reported that: few people personally obtained injecting equipment from pharmacists or needle exchanges; that 39% of the sample, and 63% of those aged less than 20 years shared needles; and needles were disposed of unsafely (Larson, Shannon & Eldridge 1999). Similar unsafe injecting practices were reported from a South Australian study of 25 Aboriginal people who injected drugs (Shoobridge 1997). The authors of these reports made no comparisons of the injecting practices of their Aboriginal informants with those of non-Aboriginal people who inject drugs. However, Crofts and his colleagues suggest that sharing injecting equipment may be higher in rural and regional areas among both Aboriginal and non-Aboriginal users (Crofts, Webb-Pullman & Dolan 1996).

Other risk factors identified among Aboriginal people who inject drugs include inadequate knowledge of BBVs (particularly hepatitis and the availability of vaccination for HBV); unsafe sexual behaviour; and tattooing and body piercing (Crofts *et al.* 1996; Edwards *et al.* 1999; Larson 1996; Meyerhoff 2000; Putnins 1997). With regard to knowledge of BBVs, new users were identified as especially being at risk. In any case, for many users, obtaining drugs was identified as being of greater priority than the risk of contracting BBVs (Edwards *et al.* 1999). Excessive alcohol use has been acknowledged as contributing to unsafe sexual practices and higher rates of

sexually transmitted diseases among Aboriginal Australians, but much less is known of the role of injecting drug use in these behaviours (NIASHS 1997).

A number of studies have identified prisons and juvenile detention centres as risky environments. The disproportionate number of Aboriginal people in custody, combined with unsafe injecting and sexual practices may be a lethal mixture (Brady 1992; Crofts *et al.* 1996; NIASHS 1997). In Murray Bridge, Shoobridge and her colleagues found that 21 of the 25 people they interviewed had been in prison, and that 12 of these people continued to inject while incarcerated (Shoobridge *et al.* 1997). Tattooing and, to a lesser extent, body piercing is common among Aboriginal people, and its frequent occurrence in unsafe prison environments has also been implicated as a risk factor in the spread of BBVs (Crofts *et al.* 1996).

Researchers have also identified what they describe as 'cultural issues' (but which include social factors) impacting upon drug-related harm and harm reduction strategies. These include denial by some communities that illicit drug use is a problem; opposition to harm reduction strategies because they are perceived by some to promote drug use; shyness and 'shame' experienced by Aboriginal users, leading them to avoid families while using; and most significantly, cultural concepts of sharing, which are purported to extend to sharing injecting equipment (NIASHS 1997; Edwards *et al.* 1999; Larson & Currie 1995; Perkins *et al.* 1994; Shoobridge 1998). Another issue is the extent to which a focus on Aboriginal cultural values should be incorporated into service provision, particularly among young people, many of whom report extensive interaction with non-Aboriginal friends (Larson *et al.* 1999).

In the 1994 Household Survey (Commonwealth Department of Human Services and Health 1996) 70% of Aboriginal respondents indicated that they had never sought assistance from an alcohol or other drug agency. It is not simply mainstream services that are avoided. Virtually none of the Aboriginal injectors in the Brisbane study had sought help from an Aboriginal Health Service (Larson 1996). Reasons for this are complex, but may involve concerns about confidentiality, perceptions of the effectiveness of these services, and feelings of 'shame' (Brady 1992; Edwards *et al.* 1999). Although alcohol services for Aboriginal people are now comparatively widespread, there are very few Aboriginal-specific intervention programs for people who inject drugs (Meyerhoff 2000).

As this review of the literature indicates, injecting drug use among Aboriginal people in Australia has been the subject of little systematic research. Consequently, knowledge of the extent of injecting drug use, the harms associated with it, and of appropriate strategies to minimise those harms is limited—particularly in Western Australia. Given the apparent increase in injecting drug use among Aboriginal people,

strong calls have been made by members of the Aboriginal community—and the organisations that represent them—for action to be taken to address such use and related harms. These calls were made with particular clarity at the Western Australian Aboriginal Community Drug Forum held at Derbarl Yerrigan Aboriginal Health Service in June this year. This report provides some indication of the magnitude of the problem and gives voice to the views of users themselves and those in both Aboriginal and non-Aboriginal organisations who provide services for them.

2. METHODS

Research design

As indicated in the previous chapter, the objectives of this study were to:

- conduct research into the nature and extent of illicit intravenous drug use by the Aboriginal population of Western Australia; and,
- determine the needs for harm reduction services for Aboriginal people who inject drugs illicitly.

To meet these objectives, a cross-sectional study design was employed in which statistical data were reviewed, and semi-structured interviews conducted with Aboriginal people who inject drugs, representatives of government and Aboriginal and non-Aboriginal community organisations that provide services for users, and a limited number of people from major Aboriginal family groupings.

Study sites

The geographical extent of the study was limited by both the budgetary and time constraints specified in the 'request for tender' document. On the basis of discussion with representatives of Aboriginal health agencies, the Western Australian Police, and our own experience, it was decided to conduct the study in Perth and Bunbury—the largest cities in Western Australia—and in Kalgoorlie, Geraldton and Broome. The latter sites were selected because they are respectively associated with the mining, fishing and tourist industries—industries with which it is often suggested higher levels of illicit drug use are associated.

Local Aboriginal research assistants, familiar with the injecting drug scene, were employed in Broome, Geraldton, Kalgoorlie and Bunbury to assist with the identification of organisations and people who inject drugs. In Perth, staff from Noongar Alcohol and Substance Abuse Services provided this assistance.

Study participants

Informants in each location were selected purposively from two groups: Aboriginal people who inject drugs and representatives of both Aboriginal and non-Aboriginal agencies that provide services to people who inject drugs.

Aboriginal people who inject drugs

We defined Aboriginal people who inject drugs as those who had done so within the previous 12 months and—for ethical reasons—excluded from the study anyone under the age of 16 years. The relatively small proportion of people who inject drugs in any population and the illicit nature of the activity means that it is extremely difficult to obtain a random sample of users. This problem is exacerbated in the Aboriginal community. Accordingly we used a ‘snowballing’ technique to recruit users to the study.

Depending upon the location, people who inject drugs were initially referred to members of the study team by staff of service agencies such as the Noongar Alcohol and Substance Abuse Service (NASAS), the Western Australian Substance Users Association (WASUA), Aboriginal health services, regional public health units, and youth services. In recruiting users—on behalf of the research team—staff from these agencies distributed a flyer which outlined the aim of the study, assured confidentiality, and offered a small payment to reimburse them for their participation. It is important to note that those people referred were known to be current or recent users, not only people who were in treatment. In turn, people thus referred were asked to refer other users from within their own social networks. In addition, a small number of users were referred by members of the Aboriginal family groups interviewed. Following what has become usual practice in studies of people who inject drugs (eg. Larson *et al.* 1996; Loxley 1998), users were paid an amount of \$20 to reimburse them for their participation and to acknowledge their expertise. In Perth, some people who inject drugs were also paid a \$10 ‘finders-fee’ for helping us to contact other users.

We originally aimed to interview a total of 100 Aboriginal people who inject drugs: 40 in Perth and 15 in each of the other centres. These targets were met in Bunbury and Geraldton and we interviewed 42 people in Perth. However, we fell short of them in Kalgoorlie and Broome. In Kalgoorlie at the time the interviews were to be conducted, it was rumoured that there was a police crackdown on illicit drug use and users were understandably reluctant to risk inadvertent identification. As a consequence, only two users were interviewed in that location. In Broome—although there is evidence of wide-spread illicit drug use—there was little evidence that any of these drugs were injected by Aboriginal users. As a result, we were unable to obtain any interviews with Aboriginal people who inject drugs in that town. Thus, in total, we interviewed 74 Aboriginal people who inject drugs.

Given the way in which they were recruited, it cannot be claimed that the those users we interviewed are representative of Aboriginal people who inject drugs. However, this

is the largest group of Aboriginal users interviewed in Western Australia thus far, and the information they have provided is the best that is currently available.

Representatives of service organisations

In each location, any agency providing health or welfare services to—or the staff of which might otherwise have knowledge of—Aboriginal people who inject drugs was identified. The process of identification commenced with a list of local Aboriginal controlled services and government agencies having statutory responsibilities in the general area, and the list was expanded at the local level by asking staff from those agencies to identify other service providers.

All of the agencies thus identified were approached and requests made to interview staff having some knowledge of the local injecting drug use scene and available services. These representatives were interviewed either individually or in groups within their respective agencies. In total, we interviewed 275 people from such agencies—167 of whom were Aboriginal. A list of all organisations from which these people came is included as Appendix A.

As we and/or our colleagues have done in similar research projects (Sputore, Gray, Bourbon, Baird 1998; Sputore, Gray, Sampi 2000), we also aimed to conduct interviews with representatives major family groups in each location—to give them an opportunity to contribute and make comments relevant to the study. We identified such people with the assistance of local Aboriginal community organisations. While we initially conducted a small number of these interviews, we found that we were often referred back to members of the family groups who worked in community organisations as they were seen as the people being the most knowledgeable about injecting drug use and what should be done to address any related problems. For this reason and, to a lesser degree because of time constraints, we discontinued these interviews and have not included the small number that were conducted in our analysis.

Data collection

The prevalence of injecting drug use

There is a range of problems encountered in attempting to estimate the prevalence of illicit drug use. These are exacerbated in trying to do so among Aboriginal people where there is often a sense of 'shame' attached to such use and where they form a small minority in major urban centres such as Perth. Under such circumstances it is extremely difficult to use anything closely approximating standard survey approaches. Any such a survey would also be prohibitively costly, very time consuming and even

with a large budget and sufficient time it would still be difficult to ensure accurate results.

To address this problem we decided to use the results of the 1994 Household Survey referred to in the previous chapter as a baseline approximation of the level of injecting drug use among Aboriginal people in Western Australia. We then identified a number of indicators of illicit drug use which, to a greater or lesser degree are associated with injecting drug use—drug-related hospital admissions (other than for alcohol or tobacco), hepatitis C (HCV) notifications, admissions to Next Step Specialist Drug and Alcohol Services programs, and police arrests for drug-related offences. We examined changes in these indicators and used them to estimate probable increases in injecting drug use in both metropolitan and non-metropolitan regions. Using these changes, we then estimated the likely range in the number of Aboriginal people aged ≥ 15 years who inject drugs in each Western Australian statistical division. These methods are discussed in more detail in Chapter 3.

Patterns of injecting drug use

Data on patterns of injecting drug use were obtained through interviews with the 74 people who injecting that were recruited. These interviews included both structured and semi-structured questions. The interviews were conducted by project staff who were familiar with the injecting drug use scene. Data sought in these interviews included:

- use of all drugs;
- frequency of injecting and factors affecting this;
- types of drugs injected;
- when, where, and with whom drugs are usually injected;
- sharing of injecting equipment; and,
- sources and accessibility of equipment.

Questions asked were based on those developed by Shoobridge (1998), in conjunction with the Aboriginal Drug and Alcohol Council of Australia for use among Aboriginal people in the Lower Murray in South Australia and those developed by Loxley, Carruthers and Bevan (1995) for use among a sample from the general injecting population.

User perceptions of risk and harm

Current users were asked for their perceptions of the risks and harms associated with injecting drug use. The checklist for the user interviews included questions specifically on the transmission of BBVs, perceptions of their severity, and knowledge about vaccination for HBV.

Harms associated with injecting drug use

Both the health and social harms associated with injecting drug use among Aboriginal people were documented. Qualitative data was obtained through interviews with people who inject drugs themselves, representatives of Aboriginal community groups, representatives of service agencies and a small number of Aboriginal family groups. Health data included that on the prevalence of BBVs and other physical and psychological morbidity. Data on associated social harms included family and sexual relationships, friendships, work or study, finances, and drug-related crime.

Need for harm reduction services

The need for harm reduction services was assessed by:

- gathering documentary data on services currently provided by Aboriginal and non-Aboriginal agencies and the use that is made of such services by Aboriginal people who inject drugs;
- collecting both documentary and interview data on factors which facilitate or hinder the use of such services; and,
- assessing the need for additional services as identified by people who inject drugs themselves, Aboriginal and non-Aboriginal agencies, and members of the wider Aboriginal community.

Importantly, the acceptability of proposed services was discussed both with people who inject drugs and representatives of service organisations.

Data analysis

Estimates of the number of people who inject drugs in the areas being studied was made from the various sources described above, and from other sources that became apparent during the study. A wider range of sources was used in Perth than in the regional centres where populations are smaller and likely to be more easily identifiable. Estimates were related to ABS population data to calculate rates of use. Two points need to be made with regard to such rates. First, all such efforts face the difficulty of assessing the frequency of occasional, relatively unproblematic recreational use. Second, there is likely to be considerable variation in estimates. Accordingly, for each location a range of rates was calculated.

Data from the structured components of interviews was analysed using SPSS, which enabled cross-tabulated examination and calculation of response frequencies. Detailed notes of all semi-structured interviews were made and thematically coded. Frequency of coded responses were recorded and this data was used to identify gaps in current services and to develop proposals for new and/or improved harm reduction

strategies. Where possible, and relevant, we have included verbatim comments from both users and organisational representatives.

In the development of proposals for harm reduction strategies, particular attention was paid to issues of regional variation in the prevalence of injecting drug use and associated factors, and the need to develop strategies responsive to that variation. We also made use of recommendations from Aboriginal and non-Aboriginal forums on injecting drug use, and the Western Australian Community Drug Summit where these were congruent with our own findings. Prior to the finalisation of these recommendations, they were for approval by those Aboriginal organisations participating in the project

Ethical issues

Ethics committee approval for the project was given by the Western Australian Aboriginal Health Information and Ethics Committee (Ref 37-10/00) and the Curtin University of Technology Human Research Ethics Committee (HR 171/2000). The project was conducted within the framework of the National Health and Medical Research Council's *Guidelines on Ethical Matters in Aboriginal and Torres Strait Islander Health Research* (1991).

One of the principal investigators (Dennis Hayward) is an Aboriginal person and he represented the Noongar Alcohol and Substance Abuse Service, an Aboriginal community-controlled organisation, which was one of the key collaborating agencies in the project. Support for the conduct of the project was given by Derbarl Yerrigan Aboriginal Health Service (Perth), South West Aboriginal Medical Service (Bunbury), Bega Garnbirringu Health Service (Kalgoorlie), Geraldton Region Aboriginal Medical Service, and Broome Region Aboriginal Medical Service, the Kimberley Aboriginal Medical Services Council and the Western Australian Aboriginal Community Controlled Health Organisation.

Organisational representatives who were interviewed were not identified in this report, unless they specifically asked to be named. To ensure the confidentiality of information about users the following referral protocol was established. Staff of referring agencies informed clients/contacts about the study and asked them if they wished to participate. If they did not, no further action was taken. If they did, they were referred to a member of the research team. Following the interviews, each user was provided with a pack containing pamphlets on commonly injected drugs, blood borne viruses, safer injecting practices, procedures to be followed in the case of overdose, and the contact details of various service agencies. Users were also given

the telephone number of the interviewers in case they wanted to follow-up any matters arising from the interviews. No user names were disclosed to the research team by agency staff without the consent of the users themselves; and no other information about users, apart from names, was disclosed to the research team by agency staff.

Upon referral—whether through a service provider agency or through a user network—a member of the research team again explained the purpose of the study. Measures put in place to ensure confidentiality—including assurance that names would not be recorded or divulged to third parties and the right to withdraw permission to participate at any time—were also explained and agreement to participate was sought. Because of the sensitive nature of the subject and associated concerns among users about being named in writing, verbal not written consent was obtained. Interview notes and transcripts were given unique identification numbers and no interviewee names were recorded on either interview notes or transcripts. Furthermore, nothing that could identify third parties was included in the interview notes and transcripts.

3. THE PREVALENCE OF INJECTING DRUG USE

As indicated in Chapter 1, the only large-scale population study of drug use among Aboriginal people was conducted in 1994 by ABG McNair for the Commonwealth Department of Human Services and Health (now the Department of Health and Aged Care). This was a household survey of *urban* dwelling Aboriginal people, designed to supplement the regular household surveys conducted as part of the National Drug Strategy. The survey involved face-to-face interviews with 2993 Aboriginal and Torres Strait Islander people living in both major urban and urban areas as defined by the Australian Bureau of Statistics (although 50 interviews in which the data were of questionable quality were discarded from the analysis). While the findings of the survey cannot be extrapolated directly to the Aboriginal and Torres Strait Islander population as a whole, it provides the most comprehensive study of alcohol and other drug use among Indigenous Australians.

In Table 3.1—reproduced from the 1994 Household Survey report—the results of the survey relating to drugs ever tried and drugs currently used (defined as any use in the previous 12 months) are presented in comparison with similar data from the 1993 National Drug Strategy Household Survey. With regard to illicit drug use, the report states:

... use of marijuana is more widespread among the Aboriginal and Torres Strait Islander community, with nearly double the proportion of current users than in the general urban population, and nearly triple the proportion of those using it at least weekly. (Commonwealth Department of Human Services and Health 1996:33).

Inferences about the remaining drugs are necessarily tenuous because their lower incidences make them subject to greater sampling error, however as a trend it appears that other illicit drug use and experimentation may be slightly higher among the Aboriginal and Torres Strait Islander population, particularly for inhalants and needle use. (Further studies on larger samples would be needed to confirm this trend). (Commonwealth Department of Human Services and Health 1996:35).

Needle use in the past 12 months was reported by only 51 persons in the sample, around half of those who had ever reported injecting themselves with illegal drugs. Among this group 30% had shared needles, and the majority (81%) were injecting speed. Twenty percent reported injecting heroin, 5% cocaine, and 11% other drugs. (Commonwealth Department of Human Services and Health 1996:37).

Copies of the 1994 survey data files were provided to us by the Social Science Data Archives at the Australian National University. We separately reviewed the data for Western Australia. However, although the sample contained 648 people (319 from Perth and 329 from non-metropolitan urban centres), the number of individuals responding positively to questions about the use of particular drugs and injecting was too small to permit valid separate analysis. Using the raw data files, we also compared the level of injecting drug use between all capital cities and all other urban areas. The

results of this analysis suggest that the proportion of people who had ever injected illicit drugs was about 1.5 times greater in the capital cities than in other urban centres, but that the proportion who had injected in the previous 12 months was about the same. Again, because of the small numbers, this finding must be treated as suggestive only.

Table 3.1: Drugs ever tried and currently used, Aboriginal and Torres Strait Islanders and the general population, Australia, 1994 and 1993

	Drugs ever tried (for non-medical purposes)		Drugs currently used (for non-medical purposes)	
	Aboriginal and Torres Strait Islander survey 1994	General population survey 1993	Aboriginal and Torres Strait Islander survey 1994	General population survey 1993
Tobacco	77%	74%	54%	29%
Alcohol	84%	82%	62%	72%
Marijuana	48%	36%	22%	13%
Sleeping tablets	4%	35%	0.9%	0.9%
Pain killers	4%	3%	2%	2%
Petrol sniffing	4%	Not asked in 1993	0.3%	Not asked in 1993
Glue, other sniffing	5%	Not asked in 1993	0.7%	Not asked in 1993
Inhalants generally	7%	4%	0.8%	0.7%
Speed	6%	6%	1.7%	1.4%
Cocaine	2%	3%	0.5%	0.5%
Heroin	3%	2%	0.4%	0.2%
Hallucinogens	7%	8%	2%	1.4%
Designer drugs	1.4%	3%	0.6%	1.5%
Injected illegal drugs	3%	2%	2%	0.5%
<i>None of the above</i>	95%	8%	22%	21%
<i>None of the illicit</i>	46%	58%	71%	82%
<i>Marijuana the only illicit</i>	32%	22%	18%	10%
<i>At least one other illicit</i>	19%	16%	6%	5%
<i>At least one other hard</i>	12%	12%	4%	3%
<i>Don't know</i>	3%	5%	6%	3%

Source: Commonwealth Department of Human Services and Health 1996:24

As indicated previously, although there are some limitations in the results of the 1994 Household Survey, the national data presented in Table 3.1 provide the best baseline estimate of illicit and injecting drug use among Aboriginal people in Western Australia. The resources needed to conduct a study of sufficient magnitude to provide an up-to-date, reliable estimate of the prevalence of injecting drug use among Aboriginal people were not available for the present study. Accordingly, for the period 1994 to 2000, we have reviewed a number of indicators which are suggestive of changes in drug use and used them to extrapolate from the 1994 survey data to provide a crude estimate of the current prevalence of injecting drug use. Data used for this purpose included the following: hospital discharge information for drug-related causes (other than alcohol and tobacco) and hepatitis C (HCV) notifications from the Health Department of Western Australia; new admissions to Next Step Specialist Drug and Alcohol Services programs; and police data on drug-related offences from the Crime Research Centre at the University of Western Australia.

Hospital Morbidity data

The Health Department of Western Australia provided us with hospital morbidity data for Aboriginal people in Western Australia by region and by classification of drug(s) causing admission where this was available (see Unwin, Codde & Swensen 1997 for details of methodology). These admissions for drug-related causes other than alcohol and tobacco were categorised by Unwin and her colleagues into the following 12 groups: Opioids, Sedatives & barbiturates, Tranquillisers, Anti-depressants, Psycho-stimulants, Hallucinogens & cannabis, Other/comboination psycho-trophic agents, Volatile substances, Unclassified drugs, Drug psychoses, Complications of pregnancy/infancy, Intravenous drug use conditions.

Table 3.2: Number of hospital admissions for all drug-related conditions* (other than alcohol and tobacco) by Aboriginality, Western Australia, 1994–2000

	1994	1995	1996	1997	1998	1999	2000
Aboriginal males	61.6	60.4	99.5	91.7	96.5	139.6	136.1
Non-Aboriginal males			1417.2	1486.1	1615.8	1868.5	2143.2
Aboriginal females	100.7	119.3	133.8	124.6	134.9	177.8	145.2
Non-Aboriginal females			1855.5	1954.6	1953.1	2073	2088.6

* The numbers of admissions are based on the aetiologic fraction method and, therefore, are not necessarily whole numbers.

Source: Health Department of Western Australia

Admissions data for these conditions was obtained for the seven years 1994 to 2000 so that trends for Aboriginal people since the 1994 National Drug Strategy household survey could be examined. Similar data for the non-Aboriginal population were also obtained, but only for the five years from 1996 to 2000. These data are presented in Table 3.2. In Figure 3.1, (using 1996 Census figures as the population denominator) these data are also charted as crude admission rates per 10 000 person years. (Only crude rates have been calculated as the numbers are too small to permit valid adjustment for age.)

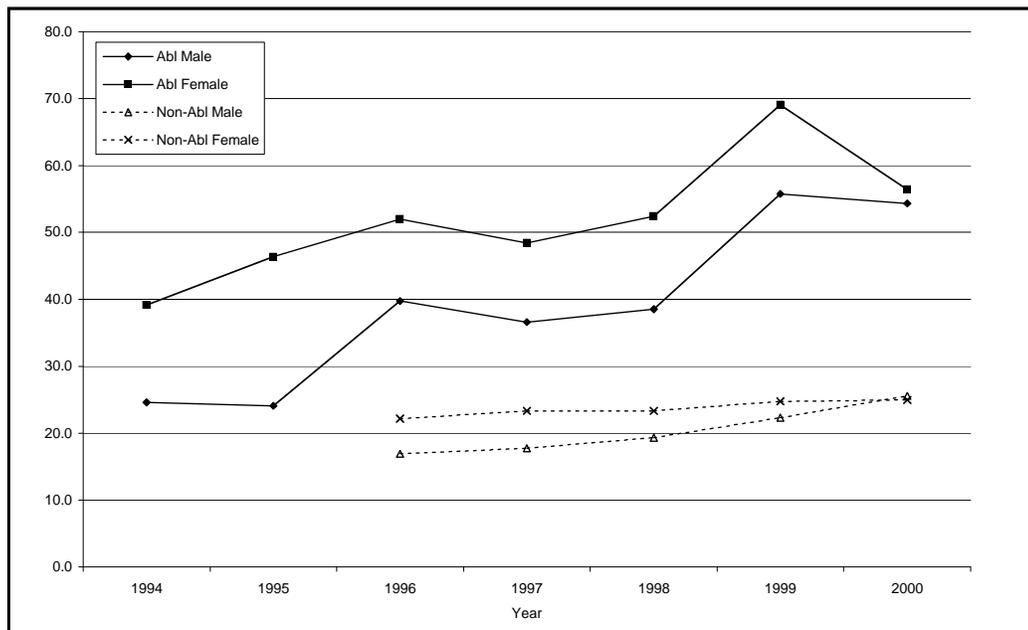


Figure 3.1: Crude hospital admission rates per 10 000 person years, all drug-related conditions (other than alcohol and tobacco), by Aboriginality, Western Australia, 1994–2000

For the five years where comparable data were available (1996–2000) drug-related conditions accounted for 6.2% of Aboriginal male admissions and 6.7% of Aboriginal female admissions. This was over double the percentage of Aboriginal people in the Western Australian population as a whole—which is about three percent. The percentage was somewhat higher amongst younger adults—the age group most likely to be admitted for drug-related reasons. As they are relatively small, the numbers for Aboriginal people are much more volatile than the figures for non-Aboriginal people. In the data presented here, 1996 was a year where admissions were generally above the overall trend for Aboriginal people, while 2000 was a year when admissions were a

little lower. To take these fluctuations into account, additional comparisons were made based on all the available data.

Drug-related admissions for Aboriginal people increased substantially over the seven year period with Aboriginal male admissions increasing by 121% and Aboriginal female admissions increasing by 44% from 1994 to 2000. As a consequence of the volatility of the figures, comparisons using two and three year averages were also made and then divided by the number of years between the mid-points of the time periods to give various approximations of the annual average increase. However, even the most conservative of these approximations of annual percentage increase were little different—7.2% versus 7.3% for males and 17.2% versus 20.2% for females (Table 3.3). The approximate annual increases in Aboriginal male and female admissions over the 1994–2000 period were 2.4 times that among non-Aboriginal men (15%) and 3.5 times that among non-Aboriginal women (13%) in the 1996–2000 period.

Table 3.3: Percentage increases in hospital admissions for drug caused conditions (other than alcohol or tobacco) among Aboriginal people by gender, Western Australia, 1994–2000

	1994–2000		94–95 to 99-00		94-95-96 to 98-99-00	
	Overall %	Yearly %	Overall %	Yearly %	Overall %	Yearly %
Aboriginal female	44	7.3	47	9.4	29	7.2
Aboriginal male	121	20.2	126	25.2	69	17.2

Table 3.4: Number of opioid use related admissions and opioid use admissions as a percentage of all drug-related admissions (other than alcohol or tobacco), by Aboriginality, 2000 and 1996–2000

	2000		1996–2000	
	No of admissions	%age of drug caused admissions	No of admissions	%age of drug caused admissions
Aboriginal females	19	13.1	134	18.7
Non-Aboriginal females	66	24.5	2871	28.9
Aboriginal males	12	8.8	83	14.7
Non-Aboriginal males	74	26.5	2692	31.6

One of the main differences between Aboriginal and non-Aboriginal drug caused hospital admissions is in the proportion of admissions for opioid-caused conditions. While Aboriginal people have higher crude rates of drug-related admissions overall and higher rates of opioid-related admissions in most years (Figure 3.2), a substantially smaller proportion of their admissions are classified as opioid-caused conditions (Table 3.4). Furthermore, in the seven years under consideration, this percentage was lowest in 2000. This was due to a slower increase in admissions for opioid use (and a decrease in 2000) and to a rapidly increasing rate of admission for other categories, most prominently drug-related psychoses.

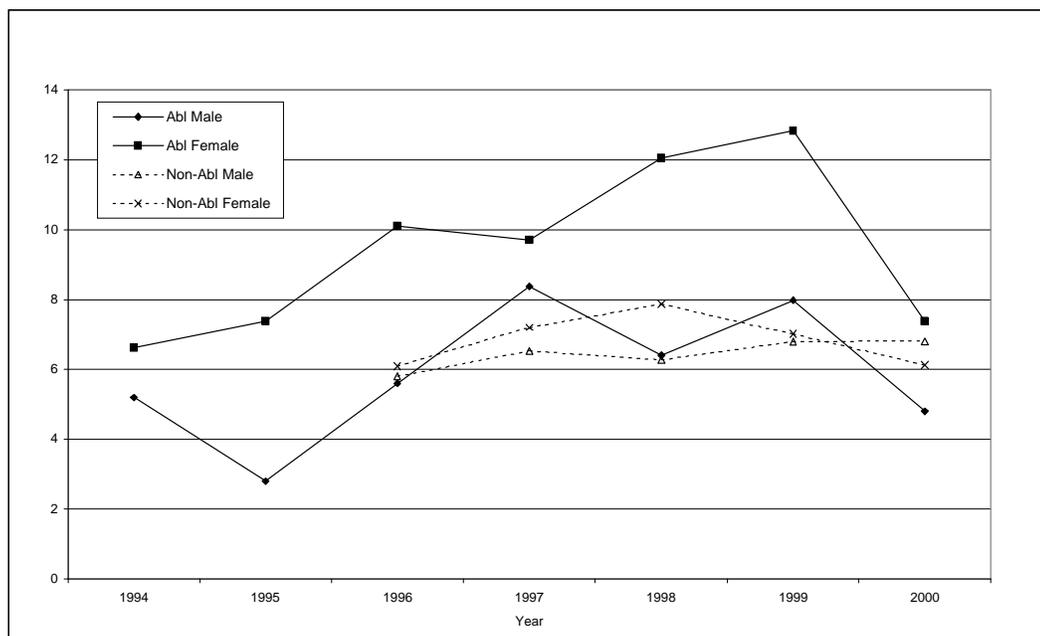


Figure 3.2: Crude hospital admission rates per 10 000 person years for opioid caused conditions, by Aboriginality, Western Australia, 1994-2000

It is not clear from the overall admission data which admissions are specifically related to injecting drug use. However—even though they can be taken by other routes—some categories of drugs are more likely to be injected than others. Data from the 1994 survey and data collected as part of this project both make it clear that drugs injected by Aboriginal people in Western Australia are predominantly amphetamines and related psycho-stimulants, and to a lesser extent opioids. To look more closely at the possible extent of injecting drug use we combined and examined the admission categories of Opioids, Psycho-stimulants, Drug psychoses and Intravenous drug use conditions.

The data in Table 3.5 show that over the period 1996–2000, there has been a 125% increase among Aboriginal females and a 119% increase among Aboriginal males in admissions for conditions likely to be associated with injecting drug use. Furthermore these increases are 6.6 and 2.4 times greater than increases among non-Aboriginal females and males respectively. While these figures only give a broad indication, and while many of the admissions included in this table may relate to other methods of drug administration, the data provide support for the observation made by many people in the Aboriginal community that there has been a dramatic increase in injecting drug use and related harm.

Table 3.5: Hospital admissions for conditions potentially related to injecting drug use (Opioids, Psycho-stimulants, Drug psychoses and Intravenous Drug Use conditions), by Aboriginality by year, Western Australia, 1994–2000

	1994	1995	1996	1997	1998	1999	2000	%age increase 1996-2000
Aboriginal females	29	25	28	32	43	71	63	125
Non-Aboriginal females	N/A	N/A	621	723	830	818	740	19
Aboriginal males	20	13	32	45	36	57	70	119
Non-Aboriginal males	N/A	N/A	675	770	821	928	1015	50

Source: Health Department of Western Australia

Among Aboriginal people, of all the drug-related conditions, the most common reason for hospital admission in 2000 was drug-related psychosis. The 47 male admissions and 33 female admissions in that year accounted for 34.5% of male and 22.7% of female drug-related admissions. Many of these admissions are likely to be related to amphetamine use, although not always administered intravenously. In Figure 3.3, the combined crude rates of admissions for the combined categories of drug-related psychoses and psycho-stimulant use—the categories most likely to be associated with amphetamine use—are charted. For non-Aboriginal men, between 1996 and 2000, the combined rate of admissions for these categories increased 3.4 times from 1.5 to 3.4 per 10 000 person years; and for non-Aboriginal women the rate increased 2.3 times from 0.9 to 2.1. For Aboriginal males and females because of the small number of admissions—especially in the years 1994 to 1996—there is some fluctuation in annual rates. However—as the basis for a more conservative estimate—Figure 3.3

demonstrates that between 1996 and 2000, the rates of admission for these conditions among both Aboriginal males and females has trebled. Furthermore, in 2000, the rates among Aboriginal males and females were three times those among non-Aboriginal males and females.

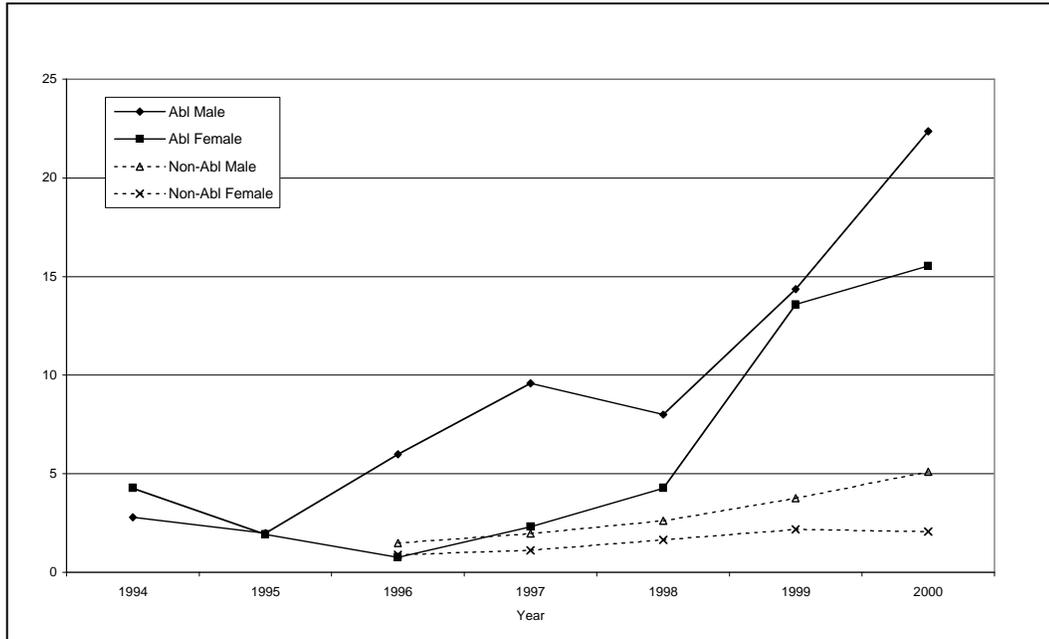


Figure 3.3: Crude hospital admission rates per 10 000 person years for psycho-stimulant caused conditions and drug psychoses, by Aboriginality, Western Australia, 1994–2000

Regional Comparisons

Overall about 52% of the total number of admissions for drug-related conditions (other than alcohol or tobacco) among Aboriginal people were in rural areas and this percentage did not vary substantially over the seven year period under consideration. Non-standardised admission rates were calculated using Health Department of Western Australia population estimates for the Perth metropolitan and other regions within the State. Admission rates for drug-related causes were higher in metropolitan regions for both non-Aboriginal and Aboriginal people. However, the difference was greater for the Aboriginal population, with admission rates in rural areas only about 40% of those in the metropolitan area as a whole. While there is range of reasons why such a difference might exist, it does suggest that drug use and related harm is not as prevalent outside the metropolitan area.

Generally, patterns of admission for drug-caused conditions between health regions were similar. In both metropolitan and non-metropolitan regions, Aboriginal males were more likely to be admitted for drug-related psychosis, whereas females were more likely to be admitted for opioid use. However, a major problem with the data is the large number of people admitted with unclassified drug problems.

Table 3.6: Aboriginal admissions for selected drug-related causes, by health region by gender, 1994–2000

Region	Opioids		Unclassified		Drug Psychoses		Psycho-stimulants	
	Male	Female	Male	Female	Male	Female	Male	Female
East Metro	15	29	39	59	6	10	4	5
North Metro	15	12	30	46	8	10	4	5
South East Metro	19	24	33	60	33	12	11	3
South West Metro	9	14	20	16	18	6	2	7
Metropolitan total	58	79	121	181	65	38	21	20
Goldfields	5	13	16	45	12	7	1	2
Great Southern	9	6	15	19	11	4	2	0
Kimberley	5	24	32	45	22	15	0	0
Midlands	2	6	14	19	8	4	0	0
Midwest	10	22	32	61	10	9	3	0
Pilbara	9	17	10	25	5	7	1	2
South West	5	3	5	17	1	2	1	0
Country Total	46	91	124	231	79	48	8	4

Using 1996 population figures provided by the Health Department of Western Australia as denominators, mean crude Aboriginal admission rates per thousand person years for drug-related conditions (other than alcohol and tobacco) were calculated for the five year period 1996–2000, and are presented in Table 3.7. Of the non-metropolitan regions, the Great Southern Health Region (including Albany) has the highest rates—6.5 and 5.5 per 1000 person years for males and females respectively. This was followed by the Goldfields and the Midlands (including Northam, York and Moora), and the Midwest (including Geraldton and Carnarvon). The Kimberley, Pilbara and South West Health Regions have similarly low rates (just over two admissions per 1000 person years). These figures, while containing a substantial proportion of non-injecting drug use, provide some support for the finding (discussed later) that injecting drug-related problems are lower in the Kimberley and

relatively more frequent in Kalgoorlie and Geraldton. A possible discrepancy is the low rate in the South-West, which includes Bunbury. However the low rate for this region may reflect the relatively small proportion of Aboriginal people in the region, most of whom reside in Bunbury.

Table 3.7: Mean Aboriginal crude admission rates per 1000 person years for all drug-related causes other than alcohol and tobacco, by males and females by health region, 1996–2000

Health Region	Aboriginal Males	Aboriginal Females
Goldfields	4.9	7.7
Great Southern	6.5	5.5
Kimberley	2.4	2.5
Midlands	4.6	5.4
Midwest	3.9	5.0
Pilbara	2.1	4.1
South West	2.0	3.8
All Country Areas	3.3	4.3
Metropolitan	8.3	9.9

Note: Denominators are based on 1996 population figures provided by HDWA. As the population of the Metropolitan region is growing more rapidly than those of country areas, the metropolitan rate is likely to be under-estimated compared with those of other regions.

Next Step clients

The Western Australian Government's Next Step Specialist Drug and Alcohol Services provided us with data on attendance at its various programs. The percentage of Aboriginal clients has until recently been very low (Table 3.8) and it still remains below the percentage of Aboriginal people in the Western Australian population—although, in 2000, the percentage of Aboriginal clients exceeded the percentage of Aboriginal people in the population of the metropolitan area. Many of those attending Next Step are referrals from the legal system and only reflect first attendance, not participation in a particular program or whether the first appointment was followed up.

Staff of the organisation had a clear impression that they saw very few Aboriginal clients and that the increase in the number attending in the last two years may be related almost entirely to an increase in referrals from the justice system. Attendance at drug-related programs has become more commonly required by the legal system and the Aboriginal clients of this service may have a very different drug use profile

from the usual clients of the program who tend to be opiate users, many of whom go on to Methadone programs. While the percentage of Aboriginal people making contact with the service has increased significantly, the figures start from a small base and cover a short time period. For this reason they are not considered in further analysis.

Table 3.8: Admissions to Next Step Specialist Drug and Alcohol Services by Aboriginality, 1998–2000

	1998		1999		2000	
	n	%	n	%	n	%
Aboriginal	19	0.4	61	1.2	124	2.5
Non-Aboriginal	3875	99.6	4920	98.8	4856	97.5
Total	3894	100.0	4981	100.0	4980	100.0

Hepatitis C Notifications

Under the provisions of the Western Australian *Health Act* (1911), all medical practitioners in Western Australia are required to notify the diagnosis of infectious diseases of public health significance, including hepatitis C (HCV); and the Health Department of Western Australia provided us with data on HCV notifications. HCV infection is a good marker of injecting drug use as almost all new infections are the result of injecting drug use. The major problems with using HCV as an indicator of the prevalence of injecting—or at least of unsafe injecting—is that diagnosis is dependent on testing and there is a long symptom free interval for many people from the time of infection. It is possible that testing is higher in Aboriginal populations, and that the enthusiasm for testing varies over time.

Table 3.9 demonstrates, that the total number of HCV notifications in Western Australia was fairly steady over the years 1993 to 1999—averaging 1186 per year. Commencing in January 2000—following an agreement between them and the Health Department—the majority of public and private pathology laboratories also began notifying the Health Department when tests indicated the presence of a notifiable disease. This accounts for the sharp increase in the number of HCV notifications in that year. Whereas, between 1993 and 1999, there had been a steady reduction in the number of notifications in which Aboriginality was not identified, the number of notifications in which it was not recorded increased dramatically in 2000. This was probably a result of Aboriginality not being recorded on the laboratory data. As a consequence, the ‘Aboriginal’ data for that year must be interpreted with caution and, for this reason, have not been included in the analysis below.

Table 3.9: Hepatitis C notifications by Aboriginality by year, Western Australia, 1993–2000

Year of notification	Aboriginal		Non-Aboriginal	Total with Aboriginality identified (Total 1)	Unknown	Overall total (Total 2)	
	n	% of Total 1					% of Total 2
1993	21	2.8	1.8	734	755	364	1119
1994	21	2.3	1.6	909	930	384	1314
1995	41	5.0	3.6	783	824	322	1146
1996	45	4.7	3.9	917	962	184	1146
1997	43	4.2	3.8	981	1024	109	1133
1998	78	6.9	6.2	1059	1137	124	1261
1999	99	9.7	8.4	922	1021	161	1182
2000	55	8.3	3.0	610	665	1147	1812
Total	403	5.1	4.2	7525	7928	2795	10 113

Over the period 1993 to 1999, the number of Aboriginal notifications increased by an annual average of 34.8%, with the number of notifications in 1999 being 4.7 times that in 1993. In that period, Aboriginal notifications increased from 1.8% to 8.4% of all notifications—a significantly larger percentage than the Aboriginal percentage of the total Western Australian population. This difference between Aboriginal and non-Aboriginal notifications is unlikely to be due solely to differences in testing and suggests a significant problem with access to sterile equipment and/or unsafe injecting practices—a problem that is more common than in the non-Aboriginal population.

Age distribution

As the 1999 data presented in Table 3.10 indicate, Aboriginal people notified as having HCV are younger than their non-Aboriginal counterparts. Among Aboriginal people the median and modal age group of notification was 25 to 29 years. This compared with a median in the 30 to 34 year age group, and modal age of notification of 40 to 44 years, for non-Aboriginal people. Only 31% of Aboriginal people notified as having HCV were over 30 years of age compared to 62% of non-Aboriginal people. Non-Aboriginal people have a broader pattern of distribution: including a larger percentage of older people, many of whom have presumably been infected for many years, as well as younger people who are likely to have been more recently infected.

The younger population affected, and the absence of Aboriginal people over 50 being identified as having HCV, suggests that behaviours leading to this infection are more

recent in the Aboriginal than in the non-Aboriginal population. Over 10% of notifications of people in the 15 to 34 year age group were Aboriginal people—again, over twice the percentage of Aboriginal people in the total Western Australian population in this age group.

Table 3.10: Hepatitis C notifications by Aboriginality by age category, Western Australia, 1999

Age category (years)	Aboriginal		Non-Aboriginal	Unknown	Total
	n	% of total			
0 – 4	0	0	6	1	7
15 – 19	13	14	68	10	91
20 – 24	22	12	141	27	190
25 – 29	33	17	130	36	199
30 – 34	17	10	130	27	174
35 – 39	8	4	175	15	198
40 – 44	2	2	148	28	178
45 – 49	3	4	74	5	82
50 and above	0	0	48	11	59
Unknown	1	25	2	1	4
Total	99	8	922	161	1182

Source: Health Department of Western Australia

Regional variation

As among non-Aboriginal people, the vast majority of HCV notifications among Aboriginal people are from the Perth metropolitan area. Of Aboriginal notifications where a region in Western Australia was identified, in 1999, 69% were listed as being in the Perth metropolitan area (Table 3.11)—whereas close to three quarters of the Aboriginal population lives outside that area. This clearly indicates that injecting drug use is more prevalent in the metropolitan area—confirming the pattern identified in the hospital admissions data.

Although most notifications are still from metropolitan regions, there were more notifications from regional areas in 1999 (22) than there were Aboriginal notifications in the whole state in either 1993 or 1994 (21 in each year). Notifications are by the region the person was living in when diagnosed and not necessarily of the region they were living in when they acquired the disease, however clearly HCV infections are increasing fairly rapidly in non-metropolitan regions. Notifications from some regions have increased more than others but because the numbers are still very small and

variations in testing regimes are large it is difficult to draw further conclusions from these figures.

Table 3.11: Hepatitis C notifications by Aboriginality by health region, Western Australia, 1999

Health Region	Aboriginal		Non-Aboriginal		Unknown		Total n
	n	%	n	%	n	%	
East Metro	25	8.1	231	74.8	53	17.2	309
North Metro	16	6.6	175	72.3	51	21.1	242
South Metro	27	10.8	184	73.9	38	15.3	249
Metro total	68	8.5	590	73.8	142	17.8	800
Goldfields	3	15.8	16	84.2	0	0.0	19
Great Southern	3	6.5	43	93.5	0	0.0	46
Kimberley	3	9.7	28	90.3	0	0.0	31
Central	1	5.6	17	94.4	0	0.0	18
Gascoyne	4	28.6	10	71.4	0	0.0	14
Mid-West	3	11.5	21	80.8	2	7.7	26
Pilbara	3	7.0	38	88.4	2	4.7	43
South West	2	1.9	100	95.2	3	2.9	105
Regional total	22	7.3	273	90.4	7	2.3	302
Out of State /Unknown	9	11.3	59	73.8	12	15.0	80
Total	99	8.4	922	78.0	161	13.6	1182

Source: Health Department of Western Australia

Drug Offences

The Crime Research Centre at the University of Western Australia provided figures for drug-related offences by local government area from 1996 to 1999. Unfortunately the offences could not be separated by drug type and hence injecting drug offences could not be analysed separately from other offences, such as possession of cannabis (presumably a significant proportion of offences). Nevertheless drug offences give some indication of the extent of illegal drug use—a proportion of which is injecting drug use.

While the number of drug offences recorded in Western Australia increased by 12.4% between 1996 and 1999, those where the offender was recorded as being Aboriginal increased by 52% over the same period. The proportion of offences where the offender was recorded as being Aboriginal increased from 6.6% of offences where the Aboriginality of the offender was specified in 1996 to 9.2% of offences in 1999 (Table 3.12).

Table 3.12 : All drug offences by Aboriginality, Western Australia, 1996–1999

Year	Aboriginal		Non-Aboriginal		Total where Aboriginality specified n	Aboriginality not specified n	Overall total n
	n	%	n	%			
1996	719	6.6	10 239	93.4	10 958	2 447	13 405
1997	813	7.0	10 757	93.0	11 570	2 730	14 300
1998	1 014	8.6	10 833	91.4	11 847	3 083	14 930
1999	1 093	9.2	10 801	90.8	11 894	3 179	15 073
Total	3 639	7.9	42 630	92.1	46 269	11 439	57 708

The rate of increase among Aboriginal females was substantially greater than among Aboriginal males—increasing by 77% in the period for which data were available, compared to a 45% increase for Aboriginal males (Table 3.13). However, there were still far fewer offences attributed to Aboriginal females than Aboriginal males. Offences attributed to non-Aboriginal males rose less than 3%, while offences attributed to non-Aboriginal females rose 21% in the same period.

Table 3.13: Drug offences where Aboriginality was specified by gender, Western Australia, 1996–1999

Year	Female offenders				Total	Male offenders				Total
	Aboriginal n	%	Non-Aboriginal n	%		Aboriginal n	%	Non-Aboriginal n	%	
1996	162	9.8	1487	90.2	1649	557	6.0	8 752	94.0	9 309
1997	217	11.5	1666	88.5	1883	596	6.1	9 191	93.9	9 787
1998	284	14.3	1700	85.7	1984	730	7.4	9 133	92.6	9 863
1999	286	13.7	1803	86.3	2089	807	8.2	8 998	91.8	9 805
Total	949	12.5	6656	87.5	7605	2690	6.9	36 074	93.1	38 764

In non-metropolitan areas overall, the number of offences attributed to Aboriginal people increased from 350 in 1996 to 599 in 1999, an increase from 9.2% to 15.2% of offences in these areas. Offences attributed to Aboriginal people increased more slowly in metropolitan areas from 369 to 482 over the same period (5.2 to 6.1% of all offences in those years).

In most areas a larger proportion of offences are attributed to Aboriginal people than the proportion of Aboriginal people in the population. This included the Broome area where—according to ABS figures—in 1996 only 25% of the population was Aboriginal, but 34.6% of the offences between 1996 and 1999 were attributed to Aboriginal people. The only region with a significant Aboriginal population where Aboriginal people appear to be clearly under represented in drug offence statistics relative to the non-Aboriginal population is in the remainder of the Kimberley. Even using ABS figures which have been shown to undercount Aboriginal people in the Kimberley, from 1996, 35% of the population in the Kimberley (apart from Broome) was Aboriginal but 31.6% of offences were attributed to Aboriginal people. This under-representation of Aboriginal people in the crime statistics for the Kimberley would be even greater if the higher estimates for the Aboriginal population of the Kimberley developed for the Kimberley Regional Aboriginal Health Plan (Atkinson, Bridge & Gray 1999), or by the Health Department of Western Australia (Codde, Roberts & Gill 1997) were used for comparison.

In all country areas combined 11.7% of drug offences were attributed to Aboriginal people—that is, a little less than double the percentage of Aboriginal people in the population in those areas. In the metropolitan area the percentage of drug offences attributed to Aboriginal people was 6%—over three times the percentage of Aboriginal people in the metropolitan area.

While data on offences is only a rough indication of illicit drug use, these figures do suggest that, in all areas of the state except the Kimberley, Aboriginal people use more illicit drugs than non-Aboriginal people. In the metropolitan area—even taking account of the fact that Aboriginal people are more likely to be apprehended—the rate of use is almost certainly substantially higher than in the non-Aboriginal population. However, how much of this is injecting drug use can not be determined from these data.

Table 3.14: Drug offences by gender, Aboriginality and local government area, Western Australia, 1996–1999

Shire or Area	Female offenders		Male offenders		Male and female offenders	
	Aboriginal	Total	Aboriginal	Total	Aboriginal (no in 1999)	Total
Bunbury City	10	206	38	760	48 (13)	1004
Kalgoorlie-Boulder	23	186	76	855	99 (25)	1041
Geraldton City and Greenough Shire	63	202	143	745	206 (60)	947
Broome Shire	41	106	144	428	185 (72)	534
Remainder of Kimberley	14	77	157	464	171 (65)	541
Albany Town and Shire	12	128	68	676	80 (44)	804
Carnarvon	35	62	97	288	132 (50)	350
Katanning	19	42	50	155	69 (29)	197
Leonora	3	29	34	130	37 (14)	159
Meekatharra	10	23	30	60	40 (12)	83
Narrogin Town and Shire	11	39	20	208	31 (14)	247
Northam Town and Shire	11	69	54	353	65 (7)	422
Port Hedland/ East Pilbara	37	101	118	467	155 (44)	568
Roebourne Shire (includes Karratha, Wickham)	29	108	90	575	119 (44)	683
All other Country areas	93	1223	305	6915	398 (106)	8138
Country Total	411	2601	1424	13079	1835 (599)	15680
Location not specified	5	48	13	208	18 (12)	256
Metropolitan	533	4870	1253	25 004	1786 (482)	29 874
Total	949	7519	2690	38 291	3639 (1093)	45 810

Table 3.15: Percentage of drug-related offences committed by Aboriginal people by region and percentage of all offences committed in each region, Western Australia, 1996–1999

Area within the State	Percentage of offences in region where offender recorded as Aboriginal	Percentage of all WA offences in the area (only for offences where Aboriginality and location specified, n = 45 554)
Metropolitan and near metro areas	6.0	65.6
Kalgoorlie/Boulder	9.5	2.3
Bunbury	4.8	2.2
Broome Shire	34.6	1.2
Remainder of Kimberley	31.6	1.2
Geraldton City and Greenough Shire	21.8	2.1
Albany Town and Shire	10.0	1.8
Carnarvon	37.7	0.8
Katanning	35.0	0.4
Leonora	23.3	0.3
Meekatharra	48.2	0.1
Narrogin Town and Shire	12.6	0.5
Northam Town and Shire	15.4	0.9
Port Hedland/	27.3	1.2
East Pilbara		
Roebourne Shire (includes Karratha, Wickham)	17.4	1.5
Other Rural areas	4.9	17.9
Total	7.9	100.0

Note: Metropolitan population is about 73% of State population based on Health Department of Western Australia statistics

Estimated prevalence of injecting drug use

The data we have presented in this chapter demonstrate that, since 1994, there have been significant increases in all of the indicators of drug use that we have reviewed. In summary these increases are as follows (see also Table 3.16 below).

- Between 1994 and 2000, hospital admissions of Aboriginal females for all drug-caused conditions (other than alcohol or tobacco) increased by 44% and for Aboriginal males increased by 121%—with a total increase of 73%.

- In the period 1996–2000, as a percentage of all drug-caused conditions, opioid-related admissions comprised 18.7% of Aboriginal female and 14.7% of Aboriginal male hospital admissions for drug-related causes. The number of opioid-related admissions in 2000 was similar to that in 1994, but the proportion of admissions that were for opioid use declined over that period due to other causes of drug-related admission having increased substantially. □
- Between 1996 and 2000, there was a 125% increase in admissions for Aboriginal females, and a 119% increase in admissions for Aboriginal males, for drug-caused conditions potentially related to injecting drug use (i.e. opioids, psycho-stimulants, drug psychoses and intravenous drug use). Overall the percentage increase for these conditions was 122%.
- Between 1996 and 2000, the combined crude hospital admission rates for drug-related psychoses and psycho-stimulant caused conditions trebled for both Aboriginal females and males.
- Outside the metropolitan area admission rates for drug-related causes (except alcohol and tobacco) were approximately 40% lower than in the metropolitan area. Between 1994 and 2000, the rate of increase for these admissions was similar for males in the metropolitan and non-metropolitan regions, and was slightly less among women in non-metropolitan regions than among women in metropolitan regions.
- Between 1993 and 1999, annual notifications of HCV among Aboriginal people increased 4.7 times (i.e. by 371%). Younger people and residents of the Perth metropolitan area were more frequently represented among HCV notifications.
- The number of Aboriginal people charged with drug-related offences increased 52% between 1996 and 2000—77% for women and 45% for men. In the same period the proportion of drug-related offences attributed to Aboriginal people increased from 6.6% to 9.2%.
- Drug-related offences attributed to Aboriginal people are less common in non-metropolitan areas, but have been increasing more rapidly in non-metropolitan areas than in the metropolitan area.

The figures above make it clear that illicit drug use and related harms among Aboriginal people in Western Australia have increased substantially since 1994. There have been increasing numbers of drug-related hospital admissions, HCV notifications, and drug-related offences (Table 3.16). However, generally, the prevalence of these

problems is less in non-metropolitan than in metropolitan regions. Where Aboriginal/non-Aboriginal comparisons can be made, it can be seen that these increases are occurring more rapidly in the Aboriginal population than the non-Aboriginal population. The difference between Aboriginal and non-Aboriginal females appears to be widening more rapidly than the difference between Aboriginal and non-Aboriginal males as indicated by rates of admission for drug-related causes that are potentially related to injecting and by rates of offending.

Table 3.16: Percentage increases in selected indicators of drug use among Aboriginal people in Western Australia, 1994–2000

Indicator	Percentage increase		
	Females	Males	Total
Hospital admissions for all drug-related conditions (other than alcohol or tobacco), 1994–2000	44	121	73
Hospital admissions for conditions potentially related to injecting drug use (Opioids, Psycho-stimulants, Drug psychoses, Intravenous drug use conditions), 1996–2000	125	119	122
Hepatitis c notifications, 1993–1999			371
All drug-related offences, 1996–1999	77	45	52

Data from the 1994 Household Survey suggests that the percentage of Aboriginal people aged 14 years or over who had ever injected drugs for non-medical purposes was 1.5 times larger than the percentage of non-Aboriginal people who had done so (3% compared to 2%); and that the percentage of people who had injected drugs in the previous 12 months was four times greater (2% compared to 0.5%). Although the indicators we have reviewed do not relate specifically to injecting drug use, injecting drug use represents a significant proportion of each. We believe that on the basis of these indicators that, *conservatively, it is plausible to suggest that the prevalence of injecting drug use among Aboriginal people has increased by between 50% and 100% since 1994*. This means that the percentage of the Aboriginal population aged fourteen years or over that has ever injected drugs is now probably between 4.5% and 6%, and that the percentage that has injected drugs in the past 12 months is between 3% and 4%.

Based on interviews with the police and with health care providers—apart from isolated incidents—it appears that most injecting drug use among Aboriginal people occurs either in the Perth metropolitan area or in regional and larger country towns, not in small or isolated communities. Accordingly, in seeking to estimate the numbers of Aboriginal people who might have injected, or are currently injecting, illicit drugs

the population on which to base them is most appropriately that used in the 1994 Household Survey—*urban dwelling* Aboriginal and Torres Strait Islander people. In estimating such numbers it is also important to take account of the fact that—based on the data reviewed in this chapter—probably about 60% of Aboriginal people who inject drugs reside in the Perth metropolitan region.

Table 3.17: Estimated numbers of Aboriginal people aged 15 years who have injected drugs for non-medical purposes by Statistical Division

Statistical Division	Pop 15 yrs	Urban pop 15 yrs	Estimated number ever injected	Estimated number injected in past 12 months
Perth	10239	9677	543 – 724	362 – 483
Central	3161	1984	69 – 92	46 – 61
Kimberley	6951	2812	–	–
Lower Great Southern	959	675	23 – 31	16 – 21
Midlands	1035	529	18 – 24	12 – 16
Pilbara	3234	1593	55 – 74	37 – 49
South Eastern (WA)	2968	1369	47 – 63	32 – 42
South West (WA)	1517	1262	44 – 58	29 – 39
Upper Great Southern	462	219	8 – 10	5 – 7
Total	30526	20120	808 – 1077	539 – 718

In Table 3.17—based on figures provided to us by the ABS and on the estimated percentage increases in injecting drug use since 1994—for each Statistical Division in Western Australia, except the Kimberley, we present a range of estimates of the number of Aboriginal and Torres Strait Islander people aged ≥ 15 years who have ever or are currently injecting drugs. In total, we estimate the number of people who have ever injected drugs to be between approximately 810 and 1080 people, and the number who have injected in the past 12 months to be between approximately 540 and 720 people. We have not included the Kimberley in these statistically-based estimates for the non-metropolitan statistical divisions. The reason for this is that—according to interviews we conducted with the police and health care providers, and as a result of our own attempts to identify Aboriginal people who inject drugs in Broome—it is likely that there are no more than a handful of Aboriginal people who inject drugs in that statistical division. In the case of the other non-metropolitan statistical divisions, our statistically-based estimates broadly coincide with estimates made by the more knowledgeable service providers in those regions.

4. PATTERNS OF DRUG USE

The information on patterns of drug use that we present in this chapter is based on the interviews we conducted with the 74 Aboriginal people who inject drugs who were recruited to the study. Within the chapter, we have provided readers with comparative data from three other studies of people who inject drugs. Two of these studies involved only Aboriginal people who inject drugs. The first was conducted in Brisbane in 1995 with 77 people who inject drugs (Larson 1996; Larson, Shannon & Eldridge 1999). The second was conducted in 1996 in the Lower Murray area of South Australia with 25 users (Shoobridge *et al* 1998). Of the two, the Lower Murray study is most similar to the current study in terms of methodology. The third study is the Western Australian component of ongoing, Australia-wide research into injecting drug use as part of the Illicit Drug Reporting System (IDRS). This includes interviews with 100 people who inject drugs in the Perth metropolitan area, of whom 5% identified as Aboriginal or Torres Strait Islander (Hargreaves & Lenton 2001).

It is important to note that—as in our own project—participants in these studies were not randomly selected members of the injecting drug user population. Among other factors, the results of these studies may vary as a consequence of the way in which participants were selected, differences in the availability of drugs, and possible regional variations in drug using practice. For these reasons, caution should be exercised in drawing any inferences from the studies with regard to the wider community of people who inject drugs.

Aboriginal people who inject drugs

Of the Aboriginal people who inject drugs interviewed for this project, 42 (57%) were male and 32 (43%) were female. The age of those interviewed ranged from 16 to 48 years—the mean age being 26.0 years and the median 26.5 years. Thirteen (18%) were people aged between 16 and 19 years, 38 (51%) were aged between 20 and 29 years, and 23 (31%) were aged 30 years or more. Of the latter group, all but two—one aged 40 and another 48 years—were in their thirties. There was little difference between the Perth and regional groups in terms of the male-female ratio. However, the median age of the Perth group (26.5 years) was less than that of the regional group (29.5 years). This is due mainly to the fact that in Perth a larger proportion of people were recruited through youth services.

In Perth, Bunbury and Geraldton, the majority were from the place in which they were interviewed. In Perth, 25 (60%) were from Perth itself and a further 11 (26%) were from towns in the south-west of the State. The others were from the Geraldton Mid-West region (4 or 9%) or inter-state (2 or 5%). In Bunbury, seven (48%) of the 15 people interviewed were from Bunbury, six (40%) were from Perth or other south-west towns, and two (13%) were from inter-state. In Geraldton, 13 (87%) of the 15 interviewed were from Geraldton itself, and there was one person from Perth and another from inter-state. Of those people living in a city or town from which they did not originate, there was a more-or-less even spread of people who had been living in those locations for less than one year, for one to five years, and for more than five years.

The majority of those people interviewed had either completed Year 10 (28 or 38%) or less (34 or 46%) of schooling. Of the remainder three had completed Year 12, three a TAFE course, two had a trade qualification, and four had university degrees. At the time the interviews were conducted, two were attending high school, four TAFE, and one university.

Social security entitlements were the source of income for the majority of those interviewed (52 or 70%). In addition, another 13 (18%) received their income through the Community Development Employment Program (CDEP—a work for social security entitlements program). Of the remainder, one received a student allowance, five were in regular paid employment, and three obtained income from other sources (one from prostitution, one from stealing, and one from parental support). Median income for the group was \$350 per fortnight—a figure that reflects the relatively high dependence on social security payments.

There are both similarities and differences between participants in our study and those from the Lower Murray, Brisbane and Perth IDRS studies. The percentage of females interviewed in our study (43%) was higher than that in the other three. In the Lower Murray, Brisbane and Perth IDRS studies the percentage of female participants was 24, 31, and 29 respectively (Shoobridge *et al* 1998; Larson, Shannon & Eldridge 1999; Hargreaves & Lenton 2001). Generally, the age of those who participated in our study (mean = 26.0 years, median = 26.5 years) was greater than in the Brisbane study, but less than in the Lower Murray and the Perth IDRS studies. In Brisbane, the age of those interviewed ranged from 13 to 44 years with half of respondents being 21 years or less (Larson, Shannon & Eldridge 1999). Participants in the Lower Murray study ranged in age from 19 to 42 years with a median age of 30 years (Shoobridge *et al.* 1999). In the Perth IDRS study, the range was from 16 to 51 years with a mean of 28.3 (Hargreaves & Lenton 2001).

Participants in our study were generally less educated than those in the comparative studies. Whereas only 12% of our respondents had undertaken post-secondary education, 60% in the Lower Murray, 49% in Brisbane, and 30% of those in the Perth IDRS study had done so (Shoobridge *et al.* 1998; Larson, Shannon & Eldridge 1999; Hargreaves & Lenton 2001). In this regard, the level of educational attainment of those in the present study more closely matches the profile of the general Aboriginal population than do those of Aboriginal participants in the Lower Murray and Brisbane studies (McLennan & Madden 1999). Although the data are not strictly comparable, the source of income profile of those interviewed in our study was similar to those from the comparative studies where: 88% of the Lower Murray group were receiving some kind of social security benefit (Shoobridge *et al.* 1998); 65% of the Brisbane group were unemployed (Larson, Shannon & Eldridge 1999); and 65% of the Perth IDRS study were unemployed (Hargreaves & Lenton 2001).

Drug use

The drug that was most regularly used by those interviewed in our study was cannabis (Table 4.1). Overall, 66 people (88%) reported ever smoking cannabis and of these all but one had smoked it on a regular basis at some point in time. Forty people (54%) had smoked cannabis on a daily basis in the week prior to interview and another 9 (12%) had smoked on between two and four occasions per week in the week prior to interview. Another six individuals (8%) reported having smoked cannabis on more than two occasions per week between one and four weeks prior to being interviewed but had not smoked it in the previous week.

Table 4.1: Percentage of people using various categories of drugs, the frequency with which they used them and the time of last use (n = 74)

Drug	Daily in previous week	Less than daily but ≥ 2 occasions in previous week	≥ 2 occasions between 1 and 4 weeks previously	Any other level of use in the previous 12 months	No use in the previous 12 months	Not used at all
Cannabis	54	12	8	8	7	11
Amphetamines	9	30	8	50	1	1
Other stimulants	-	-	-	36	15	49
Alcohol	4	31	4	36	3	22
Heroin	-	-	1	30	31	38
Benzodiazepines	1	1	-	36	16	45
Other analgesics	-	-	5	36	12	46
Hallucinogens	-	-	-	19	42	39
Inhalants	-	-	-	5	30	65

While cannabis was the most regularly used drug, amphetamines were the drug which most people had ever used. Seventy-three of the 74 interviewed had ever used amphetamine and all 73 had injected the drug. Seven people (9%) had used it on a daily basis in the week prior to interview, 22 (30%) had used it on between two and four occasions in the week prior to being interviewed, and six (8%) had used it on two or more occasions per week between one and four weeks prior to interview. All but one of the remainder of amphetamine users had used the drug with varying degrees of frequency in the period one to 12 months prior to interview.

In addition to the use of amphetamines, 38 people (51%) reported using other stimulants. Most commonly, these were dexamphetamine, Ritalin, and Ephedrine. Less commonly, they also used 'ecstasy'. Several of those interviewed also claimed to have used cocaine. While some of the latter group (particularly those from interstate) may have used the drug, it is not clear—given the limited availability of cocaine in Western Australia—that what had been sold to them as such actually was cocaine. As one individual qualified his claim to have used cocaine: 'I snorted it. ... But I'm not sure if it was cocaine'. Unlike amphetamines, other stimulants were taken orally as frequently as they were injected—with 19 of the 38 reporting that they had injected these drugs.

Other stimulants were used infrequently amongst this group, and almost half (18 of the 38) reported that they had used them only experimentally—that is, that they had 'just tried it', or used the drugs on a small number of occasions. Furthermore, 11 people (15%) had not used other stimulants in the past 12 months. Of the 27 people (36%) who had used stimulants other than amphetamine in the previous 12 months, three reported having done so daily and two reported having used them on more than two occasions per week at some time during that period. However use by the others was only occasional.

After cannabis and amphetamines, alcohol was the most commonly used drug among those interviewed. Fifty-eight people (78%) reported ever using alcohol and of these three (4%) reported using it daily and 23 (31%) reported using it on between two and four occasions in the week prior to interview. Another three people (4%) reported using alcohol either daily (1) or on two to four occasions per week between one and four weeks prior to being interviewed. A further 27 people (36%) had used alcohol within the previous 12 months—most of whom (23) reported drinking on no more than one or two occasions per month. Of those who reported ever consuming alcohol, six said that they had only used it on a small number of occasions.

Forty-six of those interviewed reported ever having used heroin and all had injected the drug. However, the majority of these people (32, or 70% of the 46) reported that their use of heroin had been experimental, and 23 people (31%) said they had not used the drug within the previous 12 months. Among the comments made by those who had used it experimentally were:

I only ever had two tastes. I'm not too keen on it.
and

I tried it once and didn't like it.

Only one person reported having used heroin on two or more occasions per week in the period between one and four weeks prior to being interviewed. This person said she used it 'every couple of days' but only used 'a little bit' on each occasion. Of the other 22 people (30%) who had used heroin within the past 12 months, two had used it daily and one on more than two occasions per week at some time, but the remainder had used it either less than once per month or experimentally.

Forty-one people (55%) reported ever using benzodiazepines for non-medical purposes. As with stimulants other than amphetamine and other analgesics (see below), most (18, or 44% of the 41) reported their use of benzodiazepines as experimental, and 12 people (16%) had not used them within the previous 12 months. Only one person reported ever using benzodiazepines on a daily basis and only one other had used them on more than two occasions in the week prior to interview. The other 27 (36%) had used them some time in the previous 12 months with varying degrees of frequency. Of the 41 people who had ever used benzodiazepines, only nine had injected them.

The number of people (40 or 54%) who reported ever having used other analgesics—morphine, pethidine and codeine (including 'Panadeine Forte')—was similar to that reporting ever having used benzodiazepines. In a small number of cases these drugs had been prescribed for those interviewed but they had used them recreationally. As was the case with regard to stimulants other than amphetamines, heroin, and benzodiazepines a large proportion (17 or 43% of the 40) of those who had ever used other analgesics reported that their use had been experimental.

No one had used other analgesics in the week prior to being interviewed but four people (5%) reported using them daily (3) or on more than two occasions (1) between one and four weeks prior to being interviewed. Of the other 27 people (36%) who had used other analgesics within the previous 12 months, five had done so on a frequent basis at some time during the period, but the others had used them only infrequently. Twenty-nine of those who had ever used other analgesics reported that at some stage they had injected them. Analgesics tend to be used as heroin substitutes and it is

likely that the low use of these drugs by participants in our study is a reflection of the comparatively low use of heroin (see below).

Forty-five (61%) and 26 (35%) of those interviewed reported ever having used hallucinogens (mostly 'trips') and inhalants respectively. Twenty-six of those who reported ever using the former, and 12 of those who reported ever using the latter, indicated that such use had been experimental. Current use of both these categories of substances was infrequent. Of those who reported ever having used hallucinogens, 31 (42%) had not done so in the previous 12 months, and of those that had used them in that period, no one reported having used them on more than one or two occasions per month. In the case of inhalants, only three people reported having used them in the previous 12 months. One person reported having injected an hallucinogen—LSD.

The data reported above indicates that most of those interviewed are poly-drug users and that their drugs of choice are amphetamines, cannabis, and alcohol. In the week prior to interview, 24 people (32%) had used both cannabis and amphetamines on more than two occasions. Among this group, in addition to cannabis and amphetamines, 11 (15% of the total) had also used alcohol on two or more occasions. Generally speaking—except among a small group of heroin users—drugs other than cannabis, amphetamine and alcohol were used either opportunistically or experimentally.

In contrast to other drugs, heroin was regarded with some ambivalence by members of this group. Several of those who had not used heroin were emphatic that they would not do so. For example, one person said 'I wouldn't touch the shit'. Similarly, several of those who had used the drug experimentally or infrequently said things like 'I don't really like it'. As indicated above, only 14 people had used heroin on other than an experimental basis. During the period in which the interviews were conducted, there was a heroin 'drought' in Western Australia. However, given the pattern of use described above, this is unlikely to have made any appreciable difference to the numbers using the drug or the frequency with which it was used.

The high prevalence of cannabis use among our respondents was similar to levels reported among people who inject drugs in both the Lower Murray and the Perth IDRS studies. Shoobridge and her colleagues (1998) reported that 24 respondents (96%) had ever used cannabis with 22 (88%) having used in the previous 12 months. Hargreaves and Lenton (2001) reported that 98 (98%) had ever used cannabis with 90 (90%) having used it in the previous six months.

Levels of amphetamine use similar to that reported here were also reported amongst Aboriginal people who inject drugs in the Lower Murray and Brisbane. Shoobridge *et al.* (1998) found that 24 respondents (96%) in the Lower Murray had ever used amphetamine with 19 (76%) having used it in the previous twelve months. Of those people, 22 (88%) had ever injected the drug and 19 (76%) had done so in the previous twelve months. In Brisbane, Larson, Shannon & Eldridge (1999) found similar levels of use with 76 out of 77 people (99%) of having injected amphetamine at least once. Use of amphetamine was also high among those in the Perth IDRS study with 97 people (97%) reporting they had ever used the drug and 80 people (80%) having injected it in the previous six months (Hargreaves & Lenton 2001).

The percentage of people in the present study who reported having ever used alcohol (78%) was lower, but the percentage who reported using it in the previous 12 months (75%) was similar to that reported in the Lower Murray (72%) (Shoobridge *et al.* 1998). In both the present study and that in the Lower Murray, the percentage reporting having used alcohol in the previous 12 months was lower than that in the Perth IDRS study (80%) (Hargreaves & Lenton 2001). This latter finding reflects what is known about the difference between Aboriginal and non-Aboriginal drinking in the general population (Saggers & Gray 1998).

The 62% of people in our study who reported ever having used heroin was similar to that reported among Aboriginal people who inject drugs in Brisbane (66%) (Larson, Shannon and Eldridge 1999). However in both these studies the percentage of people who had ever used heroin or who had used it in the previous 12 months was considerably lower than among Aboriginal people in the Lower Murray, where the percentages were 88 and 68 respectively. In turn, while the percentage that had ever used heroin in the Lower Murray was similar to that in the Perth IDRS study (90%) the percentage that had used the drug in the previous 12 months was lower (Shoobridge *et al.* 1998; Hargreaves & Lenton 2001).

The preference for amphetamines over heroin among Aboriginal people in our study group—demonstrated by the data on drug use—reflects data collected in Western Australia as part of the 1994 survey of drug use among Indigenous Australians. This finding is in marked contrast to that found in studies among non-Aboriginal people who inject drugs. In the Perth IDRS study, 57% of respondents nominated heroin as their drug of choice compared to 23% who nominated amphetamine (Hargreaves & Lenton 2001). In the national IDRS study the respective percentages were 61 and 17 (Topp *et al.* 2001).

Injecting behaviour

The criterion for inclusion in the group of users who were interviewed for this study was that they had injected either licit or illicit drugs for non-medical purposes in the 12 months prior to recruitment. While some people in the group had injected particular drugs on an experimental basis, no one had confined their injecting to such experimental use. At some stage during their drug using careers: 18 people (24%) had injected on a daily basis; 32 people (43%) had injected less than daily but on more than two occasions per week; and 24 (32%) had injected no more frequently than once per week.

While 16 people reported only ever having injected one drug (15 amphetamine and one heroin) injecting was not generally confined to one drug. Twenty-seven people reported ever having injected two drugs—usually amphetamine and heroin (17) or amphetamine and either benzodiazepines or other analgesics (7). Eighteen people reported injecting three types of drugs—usually amphetamine, heroin and other analgesics. In addition eleven people and two people reported having injected either four or five different categories of drugs respectively.

Age and place of first injecting

The age at which the 74 people interviewed reported having first injected drugs ranged from eight to 42 years (median = 15 years). Twenty-five people (34%) first injected at the age of 14 years or less, 30 (40%) between the ages of 15 and 19 years, and 19 (26%) at the age of 20 years or more. Among this group of people, there has been a trend for the age of first injecting to decrease—with only 13 percent of those now aged 30 or more years having commenced before the age of 15 years, compared to 47 per cent of those now aged 20 to 29 years. There were no differences in the age at which people first commenced using by gender or between metropolitan and regional sites.

Most people reported first injecting drugs in homes of friends or partners (27 or 37%), in their own homes (13 or 18%), or the homes of other family members (13 or 18%). The remainder generally reported that they had first used in either public places, such as parks or toilets, or in cars. Only one person reported that he had first injected drugs in prison. Reflecting the broad pattern of drug use, 67 people (91%) reported that the drug they first injected was amphetamine and seven (9%) reported first injecting heroin.

Usual place of injecting

Just under half of the group (36 or 49%) said that they usually injected drugs either in their own homes or those of friends. At least some of these places are used as *de*

facto safe injecting places. Of the others, 21 (28%) said that they usually injected in public places (such as toilets or parks) and some combination of other places, and 17 (23%) that they injected 'anywhere'. There was no difference in the usual location in which people injected by gender or frequency of use. However, the place in which respondents usually injected was related to age—with 63 per cent of those aged 29 years or less usually injecting in some combination of public and other places, compared to only 26 per cent of those aged 30 years or more. This suggests that, on at least some occasions, younger people are more likely to inject in locations and situations that are less than optimal in terms of ensuring that injecting equipment is, or remains, clean; and, hence, poses a higher risk for the transmission of BBVs.

Small numbers reported that they usually injected either alone (9 or 12%) or with their partners (9 or 12%). However, for the majority of those interviewed injecting was a social activity: with 51 (69%) reporting that they usually used with some combination of friends, family members and partners; and five (7%) reporting that they injected with 'anyone'. Generally, the size of the groups with which people reported injecting consisted of two to four individuals. Although most people (49 or 66%) reported that the groups with which they injected consisted solely of Aboriginal people, 13 (18%) reported that their injecting groups sometimes included non-Aboriginal people, and 12 (16%) that they injected only with non-Aboriginal people.

For some users, importance of injecting with family members or friends was reflected in the comments made by a 27 year old woman who said:

You always need to do it with a family member because they protect you and won't give you shit

and a 17 year old woman who said that her 'friend' injects her

... because I'm too scared to inject myself.

Sources of injecting equipment

The majority of people (61 or 82%) reported that they obtained their needles and syringes from pharmacists. The reason for this is simply the larger number of these outlets—and, hence, their accessibility—and to a lesser extent their extended trading hours. However—as discussed in the next chapter—while these services are accessible, they are often not affordable and, because of the way Aboriginal people who inject drugs are sometimes treated, they are not acceptable. Sixteen people (22%) identified exchange services as the source of their needles and syringes. Between them, pharmacists and exchange services were the main source of needles and syringes for 66 (89%) members of the group. Of those obtaining needles and syringes primarily from pharmacists and exchange programs, four said that they also obtained them from friends, one from a dealer, and one that he sometimes bought needles from diabetics. Of the eight people who did not obtain needles and syringes from

pharmacists or exchange programs, seven identified 'friends' and one a dealer as their sources of needles and syringes.

Twenty-four people (32%) identified various places that they would not access to obtain needles and syringes. In most cases (16), the reason for this was concern over protecting their anonymity as drug users. In this regard, pharmacies, hospitals and Aboriginal community-controlled health services were specified with equal frequency as places in which their drug use might be exposed to others. In five cases, people cited the negative attitudes of pharmacy (4) or hospital (1) staff for not accessing services to obtain needles and syringes, and three gave other reasons.

Sharing of needles and equipment

Thirty-two people (43%) acknowledged 'normally' sharing needles when they injected. Among these, 10 (14%) said that they only shared needles *after* they had injected themselves—not after someone else had used a needle. Four said that they did not like passing their needles on but did so if others were 'desperate' or 'begged' them to do so. This group included two women in their late twenties both of whom said that they were HCV positive. One of them said:

A few times others have used after me. Late at night and nothing is open. They don't care about harms.

Of the 22 (30%) who reported having shared needles both before and after others had injected, seven said that they only shared with their partners, and another five that they only shared with one or two other people—usually siblings whom they knew to be 'clean'. People within this group appeared to be aware of the risks of sharing in general terms but any concern was subordinated to situational factors with several saying that they shared 'on the spur of the moment' or if there were no 'freshies'. There were no differences in the percentages that shared needles by gender, age, location, or frequency of drug use. However, as Larson, Shannon & Eldridge (1999) found in Brisbane, the percentage of people who shared needles and syringes was lower among those who injected with non-Aboriginal or mixed groups (28%) than it was among those who injected in Aboriginal only groups (51%) ($\chi^2 = 0.05$ df=1).

Seven people (10%) were adamant that, although they had done so in the past, they no longer shared needles. Among the latter group, three said that they had shared only in prison, where there was no alternative, and two said that they no longer shared—one because she was HCV positive and the other because he was both HIV and HCV positive.

Of the 32 people who reported sharing needles and syringes, 26 claimed that they or members of their injecting group 'always' cleaned the needles and syringes between 'hits'. Of the others, two said they cleaned the 'fit' sometimes, one most of the time,

two never, and no information was available on the sixth. We felt that in some cases there was an element of responding in a socially acceptable manner to this question. Three of those who claimed never to have shared, and one person who said that he had shared but never cleaned needles, each commented that they had seen others share needles but not clean them.

Data was obtained from 28 people on the ways in which they cleaned needles and syringes. Thirteen reported cleaning needles with a combination of bleach and water. However, of these people all but one claimed to use hot or boiling rather than cold water (important to prevent blood particles clotting and remaining in the syringe). Thirteen people reported that they cleaned needles and syringes using water only. Of this group, four reported using only cold water and the others reported using boiling, hot and/or cold water at different times. As well as using these methods, three people also reported using alcohol and one detergent to clean 'fits'.

As well as sharing needles and syringes, 39 people (53%) reported 'normally' sharing a bag in which a drug had been mixed with water and from which members of the injecting group each drew a 'hit'. Of these 39 people, 22 made comments such as:

Clean needle will always go in the bag first,

and

Fresh pics go first, used go later.

Twenty-two people (30%) reported that they shared a spoon in which drugs were mixed; 22 (30%) that they shared filters through which drugs were drawn into syringes; and 21 (28%) that they shared water that was used to mix drugs. In addition to this, five people reported that they shared swabs and three that they shared vein cream. There was no difference in the percentages sharing these items of equipment between those who reported sharing needles and syringes and those who did not. The percentages reporting normally sharing various items of injecting equipment varied but in the case of some items (such as bags) were equally as high as the percentage that reported sharing needles and syringes. *These levels of sharing are clearly cause for concern.*

Disposal of injecting equipment

The most commonly reported method of disposing of used needles and syringes was to put them in a 'Fitpack' container and then to deposit the container in a bin or special disposal unit (43 or 58%). In addition 18 people (24%) reported simply disposing of them in rubbish bins and seven (10%) in disposal units. A small number of those who reported disposing of their needles and syringes in bins said that they sometimes placed them in cans and crushed the cans, or incinerated them before placing them

in a bin. Only two people reported exchanging their used needles and syringes for new ones (as opposed to purchasing them). About half the group reported using more than one method of disposing of needles and syringes, depending on circumstances. While only two people reported that they regularly simply discarded their used 'fits', another six (making a total of eight, or 10% of the group) said they had done so at one time or another. As one person said:

Sometimes I chuck it out the window of the car, or leave it in the open so people know they're there. When you're off your face you don't care. Some responsible person 'll pick it up.

Injecting drug use in prison

Of the 74 people interviewed 43 (58%) had spent some time in prison. In addition, seven people (9.5%) had spent brief periods in remand centres, two (3%) in juvenile detention centres, and two in police lock-ups. As would be expected, a smaller percentage of those in the 16 to 19 year age category (23%) than in the older categories (66%) had been in prison. However, there was no significant difference in the number who had been incarcerated by either gender or by location.

Of the 43 who had been in prison, 33 claimed not to have injected drugs in that environment—three of them specifically because they did not want to share needles with other prisoners. Of the ten people (23% of the 43) who acknowledged injecting in prison, three reported using heroin, two amphetamine, four both heroin and amphetamine, and one methadone. The frequency with which they injected while in prison varied. Two claimed to have injected every day (one over a period of six or seven months), and two that they injected between three and four times a week. One woman said that she had taken her own 'fit' into prison, injected about three times a month and '... used it over and over until it was blunt'. Three others reported having injected only one or twice during their periods of imprisonment—one of the latter admitted to having shared a needle '... because there was only one pic between six guys.'

In some Aboriginal communities, concern has been expressed that individuals who do not inject drugs take up the practice when incarcerated in regional or metropolitan prisons. In some instances this concern might be justified. However, the relatively young age at which most users in this group first injected, and fact that only one person reported first injecting in prison, suggests that this concern is exaggerated and that efforts to prevent the uptake of injecting drug use are more appropriately directed at the general rather than the prison population. However, the fact that people do share injecting equipment in prisons—with the resultant risk of contraction of HCV — indicates that prisons should be a focus of harm reduction strategies.

Summary

The people that we interviewed ranged from 16 to 48 years of age, most had no more than year 10 education, and social security benefits were the main source of income for the majority. Most were poly-drug users. Although many had experimented with a range of drugs, those most commonly used were cannabis, amphetamine and alcohol. A considerable proportion of respondents had used heroin at some time or other. However, heroin was the drug of choice for only a minority of participants and was regarded with ambivalence by most. Of these drugs amphetamine and heroin were most commonly injected, although benzodiazepines and other analgesics had also been injected. Three quarters of this group first injected drugs—usually amphetamine—in their mid- to late-teens, in their own communities, in their own homes or those of family and friends.

For those we interviewed, injecting (and other) drug use is a social activity. Only one person aged 19 years or less reported usually injecting alone and only about 30% of those aged 20 years or more reported that they usually injected alone or with a partner. Most reported injecting with small groups of family members or friends—in some cases with mixed Aboriginal and non-Aboriginal groups or with non-Aboriginal people only.

About half the group reported that they usually injected in their own homes or those of friends. The other half of the group reported that they either usually, or at some time, injected in public places—locations which are themselves likely to be less hygienic and in which it is more difficult to ensure the availability and cleanliness of needles and other injecting equipment. As might be expected, it was younger people who were more likely to inject in public places.

There was a general—though not necessarily detailed—awareness of the risks involved in sharing needles and syringes (and to a lesser extent other equipment), and most people expressed a preference for using clean ‘fits’. Nevertheless, they reported fairly high levels of sharing. The reason for this sharing is largely situational. That is, due to the locations and/or times at which they were injecting, clean needles and syringes were not available and, in some cases, they did not have the transport or money to purchase them. In other instances the desire to consume the drug over-rode other considerations. In these situations, the fact that use is a social phenomenon increases the risk that equipment might be shared (as it might among non-Aboriginal users). However, there is no evidence to support the statement, often repeated by non-Aboriginal people, that Aboriginal people share injecting equipment because ‘sharing is part of their culture’.

5. HARMS ASSOCIATED WITH INJECTING DRUG USE

User perceptions of harms

Users were asked a series of questions about their experiences of drug-related social impacts and harms. These included specific reference to family, sexual relationships, friendships, work or study, finances, health, and criminal behaviour. They were then asked to indicate which of these harms had had the most impact on them. While users identified a wide range of harms, they were most concerned about a smaller number of issues.

Table 5.1: Harms associated with injecting drug use most frequently identified by users and harms identified as 'main harms'

	No.	%
Harms identified		
Finances	56	76
Family	52	70
Health	50	67
Friendship	42	57
Criminal behaviour	37	50
Relationships	33	44
Work and study	31	42
Identified as main harms		
Family	33	44
Relationships	10	13
Criminal behaviour	9	12
Finances	8	11
Health	7	9

It was clear from people's responses that the issues they most frequently confronted were not necessarily the ones they regarded as most harmful in their lives. As Table 5.1 illustrates people who inject drugs reported a wide range of harms associated with their drug use. The harms most frequently cited (by 56 people or 76%) were financial difficulty. These included 'always being broke', and the need to resort to crimes such as stealing and/or prostitution to obtain money. In the words of one person:

I've lost houses, cars, everything. I've got nothing now.

All of those who spoke about this issue made clear connections between their financial state and their drug use.

Next in frequency (52 or 70%) were problems associated with families. These included conflict with their parents and with their children. Users spoke about being 'kicked-out' of home and of the anguish expressed by parents about their drug-related behaviour. Ten people (13%) claimed they had lost access to or custody of their children because of their drug use (although four were from two couples). As indicated below, reactions of families to injecting drug use and user's inability to maintain stable family lives were a paramount concern for many.

Many users (50 or 67%) reported health problems. Those associated with blood-borne viruses and overdose are reported separately below. Most frequently cited was weight loss, with users describing themselves as 'skinny', but many also mentioned becoming less fit. Others were concerned about their mental health, having experienced what they described as 'paranoid' and 'schizo' behaviour. These health conditions are probably amphetamine and possibly cannabis related, and have been reported elsewhere among the general and Aboriginal populations of people who inject drugs (Loxley, Carruthers & Bevan 1995; Shoobridge 1998; Shoobridge *et al.* 1998).

Forty-two people (57%) reported a breakdown in friendships as a result of their drug use. Such breakdowns were primarily with 'straight' or 'real' friends who they did not see while they were heavily into drugs. A small number indicated that they had no friendships as a consequence of their drug use. As one person said:

You can't be a drug addict and be friends. People do the sly on each other.

Nevertheless, as indicated in the previous chapter, for most people injecting drug use was a highly social activity. This is consistent with the results of research among non-Aboriginal people who inject drugs and among Aboriginal people who inject drugs in Murray Bridge which found that between half and three quarters of those people reporting injecting drug use had friends who were also part of their injecting drug use scene (Shoobridge *et al.* 1998).

Half (50%) of those we interviewed stated that they had resorted to crime in order to obtain drugs. These crimes included stealing, breaking and entering, fraud, assault, possession of stolen goods, armed hold-up, and dealing. Some spoke about significant crime careers, including one person who claimed 20 years of criminal activity which had resulted in ten years in gaol.

Partner and sexual relationships were subject to strains, with many (33 or 44%) reporting difficulty in maintaining intimate relationships while using. Some spoke

about mood swings and paranoia, and others about the impact of 'speed' on sexual performance.

For a significant number of users (31 or 42%) work or study commitments were impeded by their drug use. This included an inability to hold down a regular job, and difficulties concentrating while studying. Thirteen informants reported losing jobs or leaving their studies 'because of their drug use.

These findings relating to the range of harms cited are quite similar to those reported among Aboriginal people who inject drugs in the Lower Murray region of South Australia (Shoobridge *et al.* 1998), and in much less detail, in Melbourne (Lehmann & Frances 1998).

In spite of the actual and potential seriousness of many harms, family issues were overwhelmingly cited as the most *serious* drug-related issue. Thirty-three people (44%) talked about the way in which their drug use and life-style impacted negatively on their families. Some were aware of concerns about their welfare among other family members:

They are worried about me. I've never asked for money or steal from them, but they worry because I'm out stealing to get a 'shot'.

Others reported arguments with, and rejection by, their families due to their aggressive and/or violent behaviour. One young woman was very distressed about the fact that she had been 'kicked out of home' three times in the previous month.

Relationships with their own children was also problematic for users who, as indicated above, were forced or chose to give up their children because of their chaotic lifestyles. They spoke about not being able to feed their children or provide for them in a way they felt was adequate. As one woman said:

Mum looks after the kids. At this time of my life it's just not right for them to be with us.

It should be said, however, that four (5%) of the female users said that the presence of their children had positively modified their injecting use. One woman said she made sure that she bought food for the children before getting drugs, and ensured that her use does not impact badly upon them. Other research has illustrated the way in which some women who inject drugs try to do so in a way that has the least negative impact on their children (Klee 1992).

There is a large gap between the level of concern expressed by users about the impact of their drug use on their families, and concerns about all other harms. Together, problems associated with close relationships and those relating to families were the main concerns of almost 60% of those people who inject drugs that were interviewed. Given the prominence of concern about drug-related crime and health issues by

professionals and the general public, it is interesting to note that these were cited among the main problems they faced by a relatively small number of users. Nine people (12%) cited criminal behaviour as the main harm facing them, eight people (11%) were mainly concerned about their financial situation, and only seven (9%) stated a primary anxiety with their health. It should not be surprising, that most people were worried about maintaining good relationships with their parents, partners and children. Certainly this finding is consistent with other research among Aboriginal people who inject drugs (Shoobridge *et al.* 1998; Shoobridge 1998; Lehman & Frances 1998).

Blood borne viruses and overdose

We were particularly interested in exploring users' knowledge of BBVs. Those interviewed were asked: to identify the diseases associated with injecting drug use; whether they had been tested for HIV/AIDS, HBV and HCV; and whether they thought that they or their friends were at risk of contracting these viruses (Table 5.2).

Sixty (81%) of those interviewed identified HBV, 62 (84%) HCV, and 69 (93%) HIV/AIDS as diseases contractible through injecting drug use. Based on statements about the level of risk—including those associated with sharing equipment—the level of knowledge among users appeared to be relatively unsophisticated. Again, this is consistent with the findings of research among Aboriginal people who inject drugs in Melbourne (Edwards, Frances & Lehmann 1998), and Brisbane (Larson, Shannon & Eldridge 1999).

Table 5.2: User knowledge of blood borne viruses that may be contracted through injecting drug use

Virus	Yes		No	
	No.	%	No.	%
Hepatitis B	60	81	14	19
Hepatitis C	62	84	12	16
HIV	69	93	5	7

As indicated in Table 5.3, 50 (67%), 51 (68%), and 52 (69%) people reported that they had been tested for HBV, HCV, and HIV respectively (although we have no information on where most of them were tested). Of the people tested, four, six and one reported that they had tested positive for those infections (Table 5.3). The percentages tested

are significantly lower than those reported among non-Aboriginal people who inject drugs in a study conducted by Loxley, Carruthers and Bevan (1995). In that study the comparative percentages were 81.2% for HBV, 78.7% for HCV, and 91.3% for HIV (Loxley, Carruthers & Bevan 1995). The percentages tested are also lower than those reported among Aboriginal people who inject drugs in the Lower Murray region of South Australia. In that study, 96% of respondents reported having been tested for both HIV and HBV (although only 76% had been tested within the previous 6 months), and 72% reported having been tested for HCV in the past 6 months (Shoobridge *et al.* 1998).

In the case of each virus, the percentage of those who had been tested and who reported that they had tested positive among this Western Australian group was approximately half the percentages reported among non-Aboriginal users (Loxley, Carruthers & Bevan 1995). However, given that these are self-reports, the apparent differences need to be interpreted with caution.

As comparison of Tables 5.2 and 5.3 indicate, most of those who reported that they had not been tested for BBVs did not know about the risk of contracting them associated with injecting. However, as comparison of the tables also indicates, for a small number of people knowledge about BBVs did not necessarily lead to being tested for them. Reasons given by these people for not having been tested included not knowing where or how testing was done, assuming negative status because a partner tested negative, and being frightened of knowing the results.

Table 5.3: Self-reported test status for blood borne viruses among Aboriginal people who inject drugs

Test status	HBV		HCV		HIV	
	No.	%	No.	%	No.	%
Tested negative	46	62	45	60	51	68
Tested positive	4	5	6	8	1	1
Not tested	18	24	17	23	17	23
Don't know if tested	4	5	4	5	3	4
No response	3	4	3	4	3	4

Although the size of the group interviewed was too small for statistical analysis, the data suggest that knowledge of blood born viruses, and in particular, testing for them may be lower amongst those aged 16–19 years. This is similar to the results of research among the general population which demonstrates that this age group has

the lowest level of knowledge about BBVs and is least likely to have been tested for them (Loxley, Carruthers & Bevan 1995; Larson, Shannon, & Eldridge 1999).

While users generally rated their risks of contracting a BBV as low, they thought their friends' chances were much higher (Table 5.4). Fifty-seven people (74%) rated themselves at very low or low risk of contracting such diseases. For some, the reasons given for this assessment were linked to harm reduction strategies such as not sharing equipment. However, only 31 people (42%) stated categorically that they did not share injecting equipment, and only 6 (8%) reported having regular health checks or testing. There are obvious difficulties in determining the veracity of data related to sharing, but a study of people attending needle and exchange programs across Australia reported that 69% claimed not to have shared equipment in the previous month (MacDonald *et al* 1997). Among Aboriginal people who inject drugs in Brisbane, 61% of those 20 years and over claimed not to have shared in the past month, but this was much lower in those under 20, with only 37% claiming they had not shared in the past month (Larson, Shannon & Eldridge 1999).

Table 5.4: Perceived risk to self and friends of contracting a blood borne virus

Level of risk	Risk to self		Risk to friends	
	No.	%	No.	%
Very low	51	69	5	7
Low	6	8	5	7
Medium	7	9	10	14
High	3	4	11	15
Very high	2	3	27	36
Don't know	4	5	14	19
No response	2	3	2	3

Errors due to rounding

Others attributed their low level of risk to what they regarded as safe injecting behaviour. This included knowing the people they share with, such as partners, siblings and friends. Others spoke about being 'very careful' whenever they injected. These results accord with those of studies in the broader injecting community, and among Aboriginal users, that demonstrate greater sharing behaviours among friends and lovers, among whom such sharing might be seen as rational (Klee 1992; Loxley & Owendon 1995; Larson 1996; Shoobridge *et al.* 1998; Larson, Shannon & Eldridge 1999).

Perhaps just as revealing as the self-assessments made by users in our study are the comments they made about the injecting behaviours of their friends. Thirty-eight (51%) rated their friends as being at high or very high risk of contracting BBVs (Table 5.4). When asked to explain why this was the case, the primary reason given was because of sharing injecting equipment, with 49 (66%) describing a variety of sharing behaviours. Others spoke about the 'greedy' use of their friends, which led them to take more risks. Given the negative statements that some respondents made about friends who inject, it is perhaps not surprising that these people were perceived by those interviewed as much less careful than they were themselves. It is important to bear in mind, however, that it is often difficult to admit to one's own risky, and socially frowned-upon, behaviour and in fact their own behaviours might more closely reflect those attributed to their friends.

Users were asked if they had ever overdosed on any drug themselves, or been with a friend who had overdosed, and to describe those episodes. They were also asked if they knew what to do when someone overdosed. Responses to these questions varied, from sketchy to graphic accounts.

Table 5.5: Experience of overdose among Aboriginal people who inject drugs and knowledge of how to respond

	No.	%
Overdosed self		
Yes	18	24
No	54	73
No response	2	3
With friend who overdosed		
Yes	32	43
No	40	54
No response	2	4
Knowledge of what to do if a person overdoses		
Yes	21	28
Partial	15	20
No	32	43
No response	6	8

Eighteen people (24%) reported that they had overdosed at some time. This is less than half of the 58.4% of Perth respondents who reported having overdosed in the study of non-Aboriginal users conducted by Loxley, Carruthers & Bevan (1995). It is also about half the fifty-two per cent of Aboriginal heroin users in the Brisbane study who reported having personally experienced at least one overdose (Larson 1996). The comparatively low figure among people in the present study can be attributed to the lesser use of heroin.

Of those who reported having overdosed, the majority (14 or 78% of the 18) reported more than one experience. A variety of drugs were implicated in overdose episodes, including heroin, amphetamine, and diverse cocktails of some combinations of heroin, amphetamine, morphine, ecstasy, LSD, methadone, and assorted pills. One 32-year-old woman who reported overdosing twice described one of these occasions.

I got greedy. I already had two \$50 hits and then ran into a dealer who owed me \$100. He didn't have the money so he paid me in heroin. He told me it was strong, but I didn't realise how strong and I'd also been drinking. I went to Royal Perth Hospital but then left because I wanted to die at home, not in hospital. I haven't touched heroin since then because I don't want to die.

Seven of those who reported having overdosed either took themselves to hospital for treatment or were taken by friends or family members. Six others recalled waking up in hospital and knowing little about how they got there. Two people mentioned receiving Narcan, once by ambulance officers and the other in hospital.

Given the discrepancy between self-assessed risk and perceptions of friends' levels of risk, it is perhaps not surprising that descriptions of overdose experiences by friends were both more numerous and more lurid. Thirty-two people (43%) claimed to have been present when a friend overdosed and of these, two allegedly resulted in death.

We all shot up. Left. He was sitting in the chair when we left, and I found out the next day that he'd died (male, 48).

When reporting overdoses by friends, 15 people (20%) reported that someone present called an ambulance, while 14 (19%) stated that some form of resuscitation was attempted. However six reported leaving the scene immediately after a friend overdosed because they were 'out of it', 'didn't know what to do', or were scared to become involved. Only 21 people (28%) claimed to know what to do in the event of an overdose, while 15 (20%) thought they 'sort of' knew what to do. Nine people (12%) reported they had first aid certificates and could resuscitate. Of these, a 32-year-old man stated that he helped keep one person alive until an ambulance arrived. These findings are similar to those reported by Larson (1996) in Brisbane, who found 35% of participants claiming to have been present when someone overdosed. Of those who remained at the scene (42%), the assistance they gave was unlikely to have helped in a serious case.

Service providers' perceptions of harms

As well as asking users themselves about the harms they perceived to be associated with injecting drug use, we asked similar questions of service providers. As indicated previously, individual and small group interviews were conducted with representatives from 96 organisations (40 Aboriginal and 56 non-Aboriginal). In total, 150 interviews were conducted with 275 people (167 Aboriginal and 108 non-Aboriginal). The figures presented in the following table indicate the number of organisations in which at least one representative identified a particular type of harm associated with injecting drug use.

While users ranked family issues as the primary harm associated with their injecting drug use, service providers were much more likely to cite problems associated with crime and health. The frequencies in Table 5.6 include some double counting as many organisational representatives cited a number of specific harms to family, or different types of crime. This table makes clear that users' perceptions of drug-related harms differ from those of their families and the wider community in some ways.

Table 5.6: Organisational representatives' perceptions of drug-related harms

Harms	No. of responses
Crime	164
Health	132
Family	120
Finances	72
Culture	14
Work and study	6
Friendships	6
Relationships	2

With respect to crime, although many users reported engaging in criminal activity in order to support their drug use, there was little mention by them of crime against their families. However, 23 organisational representatives made specific comments about stealing and violence perpetrated by Aboriginal people who inject drugs against their own families. They cited violence against partners, children and the elderly, damage to family homes, 'standover' tactics to obtain money, and stealing from family members. Thirteen people also mentioned imprisonment and the consequences of this on users and their families. This is consistent with findings from studies of Aboriginal

people who inject drugs in Brisbane (Larson & Currie 1995), Melbourne (Lehmann & Frances 1998), and the Lower Murray, South Australia (Shoobridge *et al.* 1998).

Health concerns were also ranked highly among the harms cited by this group of respondents. The health issues identified were diverse, but included, in order of concern: psychological and mental health problems, including psychotic behaviour; the risk of contracting BBVs as a result of sharing needles and equipment; general health deterioration; vein damage; risk of overdose; and immune system damage.

Sharing behaviour was described as very common by most respondents, including those with first hand knowledge of injecting use. One non-Aboriginal service provider talked about this in terms of a 'culture of sharing', or of being 'one blood', which excused or even required people to share drugs and equipment. This view of sharing among Aboriginal people who inject drugs appears to have wider currency. However, it is not consistent with the reports of users themselves. As indicated in the previous chapter, users are generally aware of the risks of sharing and appear to share for situational reasons or because they are 'hanging out'—rather than from some underlying ethic of sharing.

Of particular concern, are knowledgeable accounts of sharing injecting equipment among Aboriginal people in prison. Three people spoke about wide-spread sharing in Western Australian prisons, where the possession of one's own syringe was allegedly regarded as a prize because it meant access to drugs. According to another source insisting on using one's own equipment for personal use in prison was seen as selfish and anti-social. One outreach worker was concerned about people learning bad injecting practices in prison. There is now a considerable literature which documents such risky using practices in prison among Aboriginal and non-Aboriginal people (Brady 1992; Shoobridge *et al.* 1998; Crofts *et al.* 1996; Loxley *et al.* 1992; Larson & Currie 1995; Larson 1996; Australian National Council on AIDS 1995).

These respondents also spoke eloquently about the harms injecting drug use inflicted on family life. Twenty-two people mentioned the removal of children from their injecting parents, usually into the care of the extended family. Others spoke about children going without the essentials of life and sometimes witnessing their parents' injecting behaviour. A number also talked about disagreements within families about how to deal with users, with 'hard' versus 'soft' approaches vehemently debated, but most families struggling with insufficient information and support. The financial effects of injecting use, according to respondents, included: inability to pay rent; 'sponging' off relatives; not providing for children; the selling of household items to get money for drugs; and, in one case, the loss of a successful business. Elsewhere across

Australia service providers and families have reported similar concerns among Aboriginal people (Shoobridge *et al.* 1998; Lehmann & Frances 1999).

Summary

Aboriginal people who inject drugs and service providers acknowledge a wide range of harms associated with drug use. Although much emphasis was placed by service providers on the health consequences of injecting, users' primary concerns were about the impact of their use on their immediate and extended families. Service provision needs to take this priority into account. However, our respondents and other knowledgeable service providers report considerably less knowledge about, and more risky behaviour connected with, injecting drug use among these Western Australian Aboriginal people who inject drugs than among both other Aboriginal and non-Aboriginal injecting groups elsewhere in Australia. As well as the priorities of users, service provision must also address these serious health risks.

6. SERVICES FOR ABORIGINAL PEOPLE WHO INJECT DRUGS

An important objective of this research project was to examine existing and proposed services from the perspectives of both Aboriginal people who inject drugs and service providers. In the first section we examine current services available for people who inject drugs. While some issues relating to the availability of services are discussed here, those issues relating to service accessibility and appropriateness are examined in more detail in the following sections where the perceptions of people who inject drugs and organisational representatives are discussed.

In the second section, services identified by users are discussed, followed by proposals for new and expanded services put forward by users. It should be noted, again, that no user interviews were conducted in Broome, and only two in Kalgoorlie. Finally, we discuss the level of awareness of service provision in each region as identified by organisations involved in providing services or working with people who inject drugs. As with users, this group was asked for comments and suggestions for new and expanded services for Aboriginal people who inject drugs.

Services were grouped into a number of categories—health, education and training, injecting equipment, counselling and treatment, emergency and after hours, alternatives to use, community and family support services, and those provided by other organizations not specifically focused on drug and alcohol issues—and were further distinguished into Aboriginal and non-Aboriginal services. As can be seen in Table 6.1, each of these categories is broken down further into specific types of services provided.

Services currently available for people who inject drugs

Perusal of the services directories published by the Western Australia Drug Abuse Strategy Office (2001) and Next Step Specialist Drug and Alcohol Service (2001), show a range of services for drug users available across Western Australia. An overview of types of services available in each region involved in this study is shown in Table 6.1. Details of services available in each of these regions is provided in Appendix B. While the number and type of services available may initially appear adequate, few of the services presented in these publications address issues of injecting drug use and even fewer address issues relating to injecting drug use by Aboriginal people.

Table 6.1: Services currently available for people who inject drugs by study location

Service	Perth	Kalgoorlie	Broome	Bunbury	Geraldton
<i>Health</i>					
Aboriginal health services	•	•	•	•	•
Mainstream health services	•	•	•	•	•
Hospital based services	•	•	•	•	•
Mental health services	•	•	•	•	•
<i>Education and Training</i>					
Drug education for users	•			•	
Drug education for the community	•		•	•	•
Drug education for service providers	•				
Cultural education and training for staff					
<i>Injecting Equipment</i>					
Distribution through mainstream health service	•	•	•		•
Needle exchange services	•			•	
Vending machines		•			
Pharmacies	•	•	•	•	•
<i>Counselling and Treatment</i>					
Community Drug Service Team	•	•	•	•	•
Aboriginal A&D counselling	•		•		
Non-Aboriginal A&D counselling	•	•	•	•	•
Aboriginal residential treatment			•		
Non-Aboriginal residential treatment	•	•			•
Pharmacotherapies	•	•			•
Prison education and treatment	•	•	•	•	•
<i>Emergency and after hours services</i>					
Refuges and emergency accommodation	•	•	•		•
Day care centres	•				
Street and bus patrols	•	•	•		•
Telephone information and counselling	•	•	•	•	•
After hours crisis care	•				
<i>Alternatives to use</i>					
Youth services	•	•	•		
Aboriginal alternatives					
Non-Aboriginal alternatives	•				
<i>Community and Family Support</i>					
Community and family support services (other than CDST)	•				
Other Aboriginal organisations	•				

Health related services are the most readily available, with both Aboriginal and mainstream services being available in each region. However the role undertaken by different service providers and the level of involvement in providing services specific to injecting drug use, such as distribution of Fitpacks, varies between each region.

Counselling and treatment services are available in some form state-wide with Community Drug Service Teams (CDST) operating in Perth and each of the locations involved in this study. The role of the CDST is stated as providing a prevention and treatment focus through general alcohol and other drug counselling services; support to other health and welfare agencies; and support to the local community to prevent alcohol and other drug problems (Western Australia Drug Abuse Strategy Office 2001). Like government operated health services, the role that each CDST takes in its community differs between regions. In Perth, few users or organisational representatives referred to the CDST, whereas in regional areas, particularly Bunbury and Geraldton, the CDSTs were often identified as providing useful services to assist people who inject drugs. This may be a reflection of how each CDST is managed with service provision in regional areas put out for tender. The tendering process has resulted in CDST being managed by Centrecare in Kalgoorlie, Community Mobilisation for the Prevention of Alcohol Related Injury Incorporated (COMPARI) in Geraldton and St John of God Healthcare in Bunbury. In Broome, the CDST operates as part of the Northwest Mental Health Service.

Aboriginal counselling services for those with alcohol and other drug-related problems are only available through the Noongar Alcohol and Substance Abuse Service (NASAS) in Perth and through Pinakarra Counselling Service, a one-person agency in Broome. Milliya Rumurra Aboriginal Corporation operates as a residential treatment facility for Aboriginal people in Broome, and like most other residential treatment facilities, its primary focus is alcohol-related rehabilitation. Similarly most refuges, emergency accommodation and patrol services focus on prevention of alcohol-related harm and may not have the facilities or staff trained to deal with clients who have injecting drug-related problems. In addition, access conditions may apply—for example, particular emergency accommodation services may only be available to single men or young people, and people who use drugs may not be admitted.

Mainstream outpatient, residential treatment and counselling services are available in Perth through organisations such as Next Step, the Palmerston Association, Salvation Army, Cyrenian House and Mission Australia. People in regional areas are often referred to Perth for residential treatment.

Next Step Specialist Drug and Alcohol Service provides telephone information and counselling services state-wide through the Alcohol and Drug Information Service (ADIS) and the Parents Drug Information Service (PDIS). After hours crisis care is provided through the Department of Community Development. A 'Freecall' number is available for people outside of the Perth metropolitan area.

The areas least well served appear to be education and training, youth services and community and family support. Only limited services in these areas are available outside of the metropolitan region and are largely provided through local Community Drug Service Teams.

Other organisations identified as providing services to people who inject drugs include Yorgum, an Aboriginal counselling service, and the Department of Justice, where clients are referred through the court system to counselling, treatment and education services. Officers from the Department of Community Development may also provide referrals and counselling to families affected by injecting drug use.

Services currently accessed by Aboriginal people who inject drugs

In interviews with Aboriginal people who inject drugs, all were asked about their knowledge of available services. In general, they had limited knowledge of the specific services for people who inject drugs available in their regions except for services that distributed injecting equipment. The mobile needle and syringe exchange van operated by the WA AIDS Council was well known in Perth, though the fixed site needle and syringe exchange service offered by the WA Substance Users Association (WASUA) in Northbridge was less well known.

People who had undergone some form of counselling or other treatment were much more aware of the range of services available. Overall, most people who inject drugs were aware of at least one counselling or treatment service in their region, particularly NASAS in Perth and COMPARI in Geraldton.

It should be noted that most of the users who had accessed counselling and treatment services, also reported having had contact with the Police Service or the Department of Justice because of their drug use. It could be surmised that access to counselling and treatment may occur more as a requirement of parole or as an alternative to conviction rather than through voluntary admission.

Specific questions relating to access to injecting equipment, advice about drug use, general health services, and problems with service provision were discussed in some

detail with each person who injected drugs. The demonstrated importance of clean needles and other injecting equipment to harm reduction prompted our first question about the sources through which people *could* obtain equipment (Table 6.2). It should be stressed that this does not mean that this is where people *do* obtain equipment. Overwhelmingly, in Perth and regional areas pharmacies were identified. Free needle and exchange services operating in Perth were also identified. Geraldton was the only locality in which people reported the availability of free needles through the local Community Drug Service Team (COMPARI); but, even there, more identified pharmacies as a potential source. Much less commonly identified as sources were hospitals, followed by local Aboriginal health services. This pattern reflects the findings of research in Lower Murray, South Australia (Shoobridge *et al.* 1998) and Brisbane (Larson, Shannon & Eldridge 1999) where pharmacies were reported as the most common source of needles. Unlike those in the Brisbane study (Larson, Shannon & Eldridge 1999), the young people we interviewed in Western Australia were not apparently reluctant to visit a pharmacy for needles—although only two people under twenty reported accessing needle exchanges.

Table 6.2: Potential sources of injecting equipment identified by Aboriginal people who inject drugs by study location

Service	Perth	Kalgoorlie	Bunbury	Geraldton	Total
Pharmacies and vending machines	40	2	15	15	72
Needle exchange	21	0	0	0	21
Hospitals	5	2	2	3	12
Mainstream health services	0	1	0	10	11
Other	4	0	1	2	7
Aboriginal health services	4	1	0	1	6
General practitioners	2	0	0	0	2
Youth services	1	0	0	0	1
Community & family support	1	0	0	0	1
Total	78	6	18	31	133

We also wanted to know what services people used if they wanted advice about their drug use—including either reducing it or stopping altogether—or problems arising from it (Table 6.3). The results illustrate the differences in availability of services between Perth and the other localities. In the metropolitan area the services most frequently accessed were Aboriginal alcohol and other drug or general counselling services (29%), such as the Noongar Alcohol and Substance Abuse Service and

Yorgum. These were followed by non-Aboriginal treatment providers (25%) such as Next Step Specialist Drug and Alcohol Service or Mission Australia (Yirra), and then Aboriginal health services (13%).

Table 6.3: Services currently accessed for advice about drug use by study location

Service	Perth	Kalgoorlie	Bunbury	Geraldton	Total
Other non-Aboriginal treatment	14	1	0	2	17
Aboriginal A&D counselling	16	0	0	0	16
Aboriginal health services	7	0	6	1	14
Non-Aboriginal A&D counselling	1	1	5	5	12
Other	5	0	0	3	8
Family counselling	4	0	1	1	6
General practitioners	1	0	4	0	5
Youth service	3	0	0	0	3
Hospitals	1	0	1	0	2
Mental health	2	0	0	0	2
Mainstream health services	1	0	0	0	1
Pharmacotherapies	0	0	1	0	1
Total	55	2	18	12	87

In the regional centres, the most diverse list of providers was recorded in Bunbury, with most people (33%) identifying the local Aboriginal health service, followed by non-Aboriginal counselling services (28%) such as the local Community Drug Service Team and a local general practitioner (22%). In Geraldton, most people (42%) identified non-Aboriginal counselling services such as COMPARI, which runs the Community Drug Service Team, and non-Aboriginal residential treatment services (17%) such as Midwest Alcohol Rehabilitation Service Inc which manages Rosella House.

These results differ from those reported in Lower Murray, South Australia and Brisbane. In both those studies, Aboriginal people who inject drugs were more likely to access a non-Aboriginal health service such as a general practitioner or methadone program than an Aboriginal health service (Shoobridge *et al* 1998; Larson, Shannon & Eldridge 1999).

There were somewhat different results when we asked what services people accessed for their general health (Table 6.4). In Perth and Bunbury most people (63% and 64%, respectively) reported consulting a general practitioner, followed by their local Aboriginal health service (33% and 29%, respectively). In Geraldton, this was reversed with most people (71%) stating that they used their Aboriginal health service, with general practitioners being next in importance (29%).

Table 6.4: Services currently accessed for general health care by study location

Service	Perth	Kalgoorlie	Bunbury	Geraldton	Total
General practitioners	27	1	9	4	41
Aboriginal health services	14	1	4	10	29
Hospitals	2	0	1	0	3
Total	43	2	14	14	73

In order to explore the variation in service use we asked people whether there were any services they would not use and why (Table 6.5). In Perth 34% of those interviewed indicated that there were some services they would not use. Aboriginal alcohol and drug counselling services such as NASAS were most frequently cited, with most people being concerned about confidentiality issues and protecting their anonymity as drug users. Those people stating they would not use a general Aboriginal health service did so for the same reasons. However some people said they solved this dilemma by using the Aboriginal health service for counselling (which was seen as confidential) but not for obtaining needles and syringes (where they could be more easily identified by others).

These issues of confidentiality and anonymity were expressed more keenly in regional areas where people were more likely to be recognised when accessing a particular service. Forty per cent of those interviewed in Bunbury and 73% of those interviewed Geraldton indicated there were some services they would not use. In both Bunbury and Geraldton Aboriginal people who inject drugs indicated that they knew people who worked in the Aboriginal health services and that they would not want those people to know of their drug use. The five respondents in Geraldton who said that they would not use an Aboriginal counselling service did not specify a particular service. They were merely emphasising their concerns about perceived lack of confidentiality and anonymity. Three people in Bunbury said they would not go to the hospital, citing concerns that they would be reported to the police or that no one there could assist them with drug issues.

Table 6.5: Number of people who inject drugs that identified services they would not use

Service	Perth	Kalgoorlie	Bunbury	Geraldton	Total
Aboriginal health services	6	0	4	7	17
Aboriginal A&D Counselling	7	0	0	5	12
Hospitals	0	0	3	1	4
Needle exchange	2	0	0	1	3
Non-Aboriginal A&D Counselling	0	0	1	1	2
Non-Aboriginal residential treatment	0	0	0	2	2
Aboriginal residential treatment	0	0	0	1	1
Pharmacotherapies	1	0	0	0	1
Other non-Aboriginal treatment services	1	0	1	0	2

There is an apparent disparity in the results displayed in Tables 6.3 and 6.5 that needs to be noted. While Aboriginal-specific services are those most likely to be cited as those not used because of fears of confidentiality, they are also the services most likely to be contacted by those wanting to do something about their drug use, at least in Perth and Bunbury. What we appear to be seeing here is a complex interplay of push and pull factors with important implications for service delivery.

This ambiguity is also reflected in research among Aboriginal people in the Lower Murray, Brisbane and Melbourne. These studies report: under-utilisation of, and ambivalence about, Aboriginal services because of fears about possible breaches of confidentiality (Larson, Shannon & Eldridge 1999; Shoobridge *et al.* 1998); or that Aboriginal services were regarded as under-resourced, and staff were perceived to lack the knowledge and skills to deal with drug problems (Lehmann & Frances 1998). Of these studies, that from Brisbane reported the strongest objections to the use of Aboriginal services. Participants there showed considerable scepticism about the expertise, confidentiality and sensitivity of Aboriginal health services towards the needs of people who inject drugs (Larson, Shannon & Eldridge 1999). However, it is important to note that in spite of people's concerns about Aboriginal health services most would prefer to access these rather than mainstream services. As stated elsewhere, there exists an opportunity for Aboriginal health services to gain the trust of people who inject drugs (Larson, Shannon & Eldridge 1999; Meyerhoff 2000).

Services proposed by Aboriginal people who inject drugs

Respondents were asked to identify the services they would like to see for people who inject drugs, and who they thought should manage those services. Responses to the question about proposed services are summarised in Table 6.6. As some informants identified more than one response in each category, in some instances, the number of responses exceeds the number of people interviewed in a particular location.

Table 6.6: Additional services proposed by Aboriginal people who inject drugs

Service	Perth	Kalgoorlie	Bunbury	Geraldton	Total
Counselling/treatment	38	3	28	28	97
Injecting equipment	32	3	17	14	66
Education & training	18	2	1	9	30
Community family support	17	1	5	2	25
Alternatives to use	10	0	5	1	16
Emergency/after hours	2	0	5	1	8
Health	1	1	0	0	2

The need for counselling and/or other treatment was identified more frequently by those who inject drugs than any other service type—with roughly half identifying the need for counselling, and the other half being concerned with the need for residential rehabilitation services. Slightly more people (48) said they wanted these services to be Aboriginal controlled than did those (44) who said they thought counselling/treatment services should be available to the whole community and managed by a non-Aboriginal service. Comments about Aboriginal specific residential rehabilitation services focused on the need for services to accommodate Aboriginal people, rather than for Aboriginal people to accommodate to the services.

Needs to be somewhere Aboriginal people feel comfortable. Currently they're expected to operate within white rules and act like a white person ... Residential centre for entire family to avoid taking kids away from parents (female, 33).

Others were more concerned about services being run by people who were knowledgeable about drugs and non-judgmental. In the words of a 30-year-old male informant from Geraldton, the service should be:

... for everyone and all drugs. Don't care who runs it as long as staff are understanding of where we come from.

Next in importance—identified by people in both Perth and the regional centres—was the need for more services to dispense injecting equipment. By far the largest number

of people (45) wanted access to *free* Fitpacks, and given the evidence that most are currently purchasing needles from pharmacists, this should not be surprising. A further 12 said that safe injecting rooms would reduce the number of needles lying around and make injecting less dangerous for them, both in terms of the law and their health. The remainder (9) wanted better access to needles in vending machines. They said that they did not mind paying for them, but wanted the vending machines to be full and accessible 24 hours each day. Many identified better access to injecting equipment as the most effective way of reducing sharing. When asked what was required, one person replied:

Free Fitpacks in more places available 24 hours. ... Needles are hard to access. That's why they're (users) sharing. Haven't got the money or transport to get freshies (female, 23).

While vending machines do not meet the stated need of users for free needles and syringes, they do meet the need expressed by users for both increased access and confidentiality. Some may argue that use of vending machines removes the opportunity for counselling that is provided when people who inject drugs must obtain them from a pharmacy or needle exchange service. However, the level of counselling that is actually provided in these situations is open to question and it may turn some people away. It is likely that greater health gains could be achieved by providing users with increased accessibility.

An increase in education and training services was identified as necessary by 30 people. The majority of these (23) wanted this to be directed to users—rather than to service providers or the broader community. There were a number of different suggestions as to what would be effective. These included better knowledge about available services through drop-in centres or mobile vans, more help and support for young people, education about managing use and lifestyle, advertising of services, and school-based education.

The next priority for increased services among people who inject drugs were services which provided support for family and community members (25). This included family counselling, so that parents could receive assistance with their children who were using. Sixteen people spoke about the need for alternatives to drug use. These included more youth services and 'cultural' activities, so that young people in particular could do more than 'sitting around waiting for drugs'.

Only eight people identified the need for emergency services such as refuges, patrols, or after hours services. However, it should be noted that in Bunbury three people cited the need for an after hours service and two wanted a patrol. Only two people said that they thought more health services were necessary. Overall, the data indicate that people want more drug-specific services, delivered by people who understand and

are non-judgmental about drug taking, and who are knowledgeable about services available for people who use.

Experiences of seeking treatment by Aboriginal people who inject drugs

We were interested to know about people's experiences of treatment and asked if they have ever received treatment and, if they had, to recount that experience. Responses were fairly limited, with a few exceptions. Almost a third of those interviewed (31%) claimed to have undergone treatment of some kind for their drug use. Not everyone identified where that treatment was provided, but services that were named included Palmerston (2), NASAS (2), Holyoake (2), Bridge House (1), Swan Health (1), Teen Challenge (1), Narcotics Anonymous (1), Graylands Hospital (1), Harry Hunter's (1), Bunbury Community Drug Service Team (1), and the Geraldton Regional Aboriginal Medical Service (1). Other treatments named but not linked to a particular provider were counselling, hospital for detoxification, naltrexone treatment, and visits to a general practitioner for medication.

Of those people interviewed, 26% indicated that they had sought, or at least wanted, treatment in the past but had been unable to obtain it. The reasons given for their inability to access treatment included: absence of services (5), not knowing where to go (5), services were unable to assist (3), and services could not respond in time (3). The group included one person who had unsuccessfully sought treatment in gaol, but he reported that '... they don't give a shit about drug users who go to gaol'.

It is important to note that most of the those interviewed (50 or 68%) stated that they had never sought, nor wanted treatment, for their drug use. People in this group did not see their drug use as problematic. As a group, people we interviewed are likely to be heavier drug users than would be found in a population survey. Nevertheless, this finding reflects the finding of the 1994 Household Survey in which 70% of Aboriginal respondents reported that they had never sought help for their drug or alcohol use from any service (Commonwealth Department of Human Services and Health 1996).

Identification of current service provision by organisational representatives

Interview questions for the representatives of service organisations focused on identification of services currently available for people who inject drugs in general and for Aboriginal users in particular, and upon issues related to the accessibility and appropriateness of services. In addition, all organisational representatives were asked

to propose new or expanded services for Aboriginal people who inject drugs. The figures presented in the following tables and discussion indicate the number of organisations in which at least one representative identified or proposed a particular type of service.

As found among users, most organisational representatives had limited knowledge of the services currently available either for people who inject drugs in general or Aboriginal users in particular. Part of the reason behind this relates to geographical location. In Bunbury, for example, the majority of organisational representatives was only able to identify health related services, and only a small number was aware of non-Aboriginal counselling and treatment services and telephone information services. However, as only a small number of services for people who inject drugs operate in the town, this is not surprising. It should also be noted that the large number of people who identified mental health services in Broome (Table 6.7) reflects the fact that the Northwest Mental Health Service accommodates the CDST, and organisational representatives may simply be identifying these services as one and the same.

Overall, health services were most readily identified (Table 6.7), with organisational representatives able to name a range of services including Aboriginal health services, publicly funded health agencies, general practice clinics, hospitals and specialist mental health services. However, it was noted that few of the health services identified were specifically for people who inject drugs and, at best, offered primary health care only or acted as a distribution point for injecting equipment. This is consistent with findings from Lower Murray, South Australia (Shoobridge *et al.* 1998) and Brisbane (Larson & Currie 1995).

Table 6.7: Current health services for Aboriginal people who inject drugs identified by organisational representatives

Service	Perth	Kalgoorlie	Broome	Bunbury	Geraldton	Total
Aboriginal health services	8	11	10	8	4	41
Hospitals	2	8	11	0	4	25
Mainstream health services	5	8	2	2	2	19
Mental health	3	4	19	3	2	31
General practitioners	1	2	7	2	1	13

Aboriginal health services were nominated as a current service for Aboriginal people who inject drugs by at least 30% of organisational representatives in all centres

except Geraldton. In Bunbury, representatives from seven of eleven non-Aboriginal organisations named the South West Aboriginal Medical Service (SWAMS) as a source of services for Aboriginal people who inject drugs. However, what appears to be an assumption that Aboriginal health services are able to provide specific services for people who inject drugs may be incorrect. Two members of SWAMS staff reported that they would need to 'ring around to find out' or 'ask people' about local services for people who inject drugs as specific services were not provided by SWAMS.

A similar situation appears to exist in Geraldton. Knowledge of health services for Aboriginal people who inject drugs appeared limited to services such as Geraldton Regional Aboriginal Medical Service (GRAMS) and Geraldton Regional Hospital. One informant employed by GRAMS reported that Aboriginal people who inject drugs tended to present at the hospital for assistance rather than GRAMS, as GRAMS provides no IDU specific services.

Injecting equipment distribution practices vary between individual Aboriginal and mainstream health services in each region. Awareness of which services were actively involved in distribution of injecting equipment was limited, with several organisational representatives being unsure whether their local health services chose to distribute injecting equipment or whether other services undertook this role. Even in Perth, where two needle exchange services operate, representatives from only nine of 25 organisations identified WASUA or the WA AIDS Council mobile van as services for people who inject drugs.

Interestingly, given the data from Aboriginal people who inject drugs, pharmacists were identified as a source of injecting equipment by only a small percentage of organisational representatives (8%). It may be that users are more aware of sources of injecting equipment whilst organisational representatives are more concerned with health and treatment services. However, there were several disparaging comments made by organisational representatives about the services provided by pharmacists and the attitudes of pharmacists towards people who inject drugs. For example, two informants who had worked with young people in an outer Perth suburb stated that a local pharmacist raised the usual price of Fitpacks from approximately \$5.00 to \$9.00 after hours in an attempt to discourage 'druggies' from frequenting his premises. An informant in Geraldton stated that the negative attitude of pharmacists towards people who inject drugs did not encourage users to purchase new injecting equipment, and suggested that these negative attitudes might be contributing to disposal and needle reuse problems that have been noted in that locality.

Similar results were found among organisational representatives interviewed in the Lower Murray (Shoobridge *et al.* 1998), where respondents reported relatively low use

of pharmacists by Aboriginal people who inject drugs. The high use of pharmacists made by people who inject drugs who were part of this in this study does not necessarily refute these allegations about the attitudes of pharmacists towards Aboriginal people who inject drugs. However, it does mean that more attention needs to be directed to the education and training of this important group of injecting equipment providers.

Identification of counselling and treatment services differed between each locality (Table 6.8). Non-Aboriginal drug counselling services such as those provided by Next Step Specialist Drug and Alcohol Services, the Palmerston Association, Centrecare and community based organisations in Perth, and by the Community Drug Support Teams in each locality, were most often nominated. The only Aboriginal specialist drug counselling service identified was the Noongar Alcohol and Substance Abuse Service (NASAS) in Perth. There was also limited identification of Pinakarra Counselling Service in Broome. This agency operated part-time only, and as well as providing general counselling to the community, its only staff member managed the Aboriginal Visitor's Scheme at Broome Prison. In Bunbury, there was some acknowledgment of limited drug and alcohol counselling being offered through SWAMS. The Drug Information and Counselling Service, a mainstream counselling service that operates in Bunbury, was identified by only a very small number of respondents. A worker at this agency stated that they rarely saw Aboriginal clients and that perhaps only one or two had presented over the previous six-month period.

Table 6.8 Current counselling and treatment services for Aboriginal people who inject drugs identified by organisational representatives

Service	Perth	Kalgoorlie	Broome	Bunbury	Geraldton	Total
Non-Aboriginal A&D counselling	10	10	7	8	18	53
Non-Aboriginal residential treatment	9	1	0	1	8	19
Aboriginal A&D counselling	13	0	2	1	0	15
Pharmacotherapies	2	1	2	2	5	12
Aboriginal residential treatment	1	0	10	0	0	11
Prison-based education & treatment	3	0	0	0	0	3
Counselling by family members	1	0	0	0	1	2

Apart from counselling that may be offered by the Aboriginal Health Services, there was no Aboriginal counselling service identified in Kalgoorlie or Geraldton. However, in Geraldton, representatives from 18 of 20 organisations identified counselling

services offered by COMPARI (CDST) as being available to Aboriginal people. The CDST in this region appeared to be highly regarded by both users and organisational representatives and provided a range of services for people who inject drugs including education and counselling.

Less than half of the organisational representatives interviewed in Perth could identify residential treatment facilities. Of the people who were aware of such services, several stated that treatment services available through organisations such as Bridge House, Next Step Specialist Drug and Alcohol Services and the Palmerston Association were difficult to access and often inappropriate for Aboriginal people who inject drugs. In this context, some respondents made the point that there no residential detoxification facilities were available and that these were needed—especially for amphetamine users. One representative from Derbarl Yerrigan Aboriginal Health Service stated that because there was no other option, a small number of Aboriginal people who inject drugs underwent home-based detoxification with assistance from this service and family members.

There were also concerns raised that the majority of residential treatment facilities were alcohol focused and did not always meet the needs of people who inject drugs. This situation was apparent in Geraldton and Broome where organisational representatives identified residential treatment services available at Rosella House (managed by the Midwest Alcohol Rehabilitation Service Inc) and Milliya Rumurra Aboriginal Corporation as being available to people who inject drugs. However the primary focus of both of these facilities is alcohol rehabilitation and they do not specifically cater for the needs of people who inject drugs. One informant in Geraldton also noted that Rosella House was ‘not a good place for women’, but did not elaborate on the reason why she thought this was the case.

Organisational representatives in Kalgoorlie and Bunbury could not name any residential treatment facilities in their area—although one informant in Kalgoorlie stated that in-patient detoxification was managed by the hospital. (There is one residential treatment facility in Kalgoorlie—Prospect Lodge—but it is alcohol focused.) In Bunbury, there is no local residential treatment facility and, when asked about the availability of such services, informants stated that any people who inject drugs requiring residential treatment had to be referred to services in Perth.

Awareness of the availability of pharmacotherapies in all areas was very low. Only one or two organisational representatives in all areas except Geraldton identified the local availability of methadone or other pharmacotherapeutic programs. However, in Geraldton five organisational representatives knew that methadone and naltrexone programs were available.

Very few people were aware of services for prisoners in Western Australia. Only representatives from three Perth-based organisations who were involved in service delivery discussed current BBV education programs within prisons. One of these representatives also identified a post-release program that was conducted for ex-prisoners as part of their parole arrangements.

Other services identified by organisational representatives included education and training, emergency and after hours services, youth services and community and family support services. However, awareness of these services and their availability was uneven in each locality, with only representatives in Perth being able to identify services across the whole range.

Proposals for new and expanded service provision by organisations

Organisational representatives were also asked to identify service gaps and make suggestions for improved service provision for Aboriginal people who inject drugs. A need for expansion of education and training programs was most frequently identified by organisational representatives in each locality (187 proposals), followed by expansion of counselling and treatment services (94), community and family support (66), and alternatives to use (66). Less frequently identified were better access to injecting equipment (48), and emergency and after hours services (34), with health services (10) being accorded a much lower priority. These proposals are somewhat different to those of Aboriginal people who inject drugs whose main priorities were counselling and treatment service and better access to injecting equipment (Table 6.6).

Other than a small number of proposals to increase the availability of Aboriginal Medical Services in Perth, Kalgoorlie and Broome (8 proposals), expansion of existing health services was not often suggested (10 proposals overall). In Perth, staff from Derbarl Yerrigan Health Service suggested that expansion of community-based mental health services would be beneficial.

As indicated above, in all localities, among organisational representatives, proposals for education and training services had the highest level of support (Table 6.9). Forty-six proposals were made for education for users focusing on: safe injecting practices, potential physical and psychological outcomes of extended injecting drug use, and increased awareness of services. Three community workers who provided BBV education in prisons stated that current health promotion materials were inappropriate for many users—in the words of one ‘... they’re wordy and rely on a high level of literacy’. These workers recommended that future health promotion materials

for Aboriginal people who inject drugs should be visually engaging, culturally appropriate, and recognise that generally the literacy level of this group is not high. It was also suggested that peer education programs would be more beneficial than those offered by community workers, particularly for prisoners, as it was felt that peers have a better rapport with users and a higher level of understanding of drug-related issues.

Table 6.9: Education and training services for Aboriginal people who inject drugs proposed by organisational representatives

Service	Perth	Kalgoorlie	Broome	Bunbury	Geraldton	Total
Education for the community	13	11	35	15	11	85
Drug education for users	18	14	18	10	9	69
Cultural education & training for staff	17	9	19	11	3	59
Drug education for service providers	10	5	23	13	2	53

There were 62 suggestions for increased community education, including 'hard-hitting' and 'graphic' school-based education beginning in primary school. Education for the general community and families regarding user behaviours and service awareness was also included in this category. Support for community education was particularly high in Broome with 23 representatives from 26 organisations proposing an expansion of current programs. As indicated previously, this region had the lowest level of injecting drug use by Aboriginal people, and community education and awareness was proposed to prevent the emergence of problems relating to it. In the words of one Aboriginal health professional in Broome:

We have a good window of opportunity at present for prevention and education—amongst young people in particular—in both Broome and remote communities, but it will be too late if we don't address the issues now (Andrew Amor, Coordinator, Milliya Rumurra).

Thirty-eight representatives identified the need for drug education for service providers. Suggestions included educating teachers, health, youth and community workers to recognise injecting drug use behaviours, improving counselling skills and increasing awareness of drug-based issues so that they could respond appropriately to situations as they arose.

Employment of Aboriginal staff and cross-cultural awareness training for service providers was also frequently suggested (41 proposals), particularly in Perth and Broome. A number of organisational representatives made the point that mainstream service providers were often unaware of cultural issues or lacked the knowledge and experience of how to work with Aboriginal people. Again, this reflects research

findings from elsewhere in Australia (Shoobridge *et al.* 1998; Larson, Shannon & Eldridge 1999; Edwards, Lehmann & Frances 1999).

Ninety-four people suggested that there is a need to improve access to counselling and residential treatment services for Aboriginal people who inject drugs (Table 6.10). The most frequent suggestions in this category were for Aboriginal controlled or managed services.

Table 6.10: Counselling and treatment services for Aboriginal people who inject drugs proposed by organisational representatives

Service	Perth	Kalgoorlie	Broome	Bunbury	Geraldton	Total
Aboriginal residential treatment	7	9	0	3	7	26
Non-Aboriginal residential treatment	3	7	0	2	13	25
Aboriginal A&D counselling	9	3	4	1	4	21
Prison education & treatment	5	1	1	2	1	10
Non-Aboriginal A&D counselling	2	3	0	1	2	8
Pharmacotherapies	1	0	1	0	1	3
Counselling by family	0	0	0	0	1	1

There was strong support for the expansion of residential treatment facilities in Geraldton with representatives from all 20 organisations in that locality putting forward proposals. Thirteen non-Aboriginal representatives supported the idea of a facility which was open to both Aboriginal and non-Aboriginal clients but which was flexible enough to meet the cultural needs of Aboriginal clients. Arguments put forward in favour of this were that injecting was a problem for both Aboriginal and non-Aboriginal people and that the numbers of Aboriginal injectors was too small to warrant a separate facility. However, residential treatment services that were controlled or managed and staffed by Aboriginal people were proposed by seven representatives from both Aboriginal and non-Aboriginal organisations (including staff from Rosella House). This group of respondents felt strongly that many Aboriginal people did not feel comfortable accessing mainstream services. Some also pointed out that accessing treatment services located outside of their 'country' (such as those in Perth) could be problematic for local Aboriginal people.

A counsellor working with Aboriginal people in Perth reported that current requirements for admission to residential treatment facilities such as the need to pay 'up-front' made admission difficult for people who were reliant on social security

payments or had low levels of income, particularly if they had dependents. This person felt that this factor, coupled with the current situation where most treatment facilities deal with only one type of drug problem (often alcohol), further precluded Aboriginal people who inject drugs from seeking admission to residential treatment facilities.

Only three informants proposed more ready availability of pharmacotherapies—including methadone programs. Better access to treatment for prisoners was proposed by representatives from seven organisations—in particular those organisations involved in providing BBV education in prisons—supporting the call for similar services elsewhere in Australia (Meyerhoff 2000). A senior officer from the Health Department of Western Australia stated that, at present, unless prisoners are incarcerated for longer than a six-month period, they are unable to access any form of drug counselling or treatment. □

Fifty-one proposals were made for improvement of services to assist and support families and members of the general community (Table 6.11). Proposed services included community centres with drop-in facilities where people could talk with community workers about how to deal with drug-related issues within their families, access information, and seek referrals to other agencies as required. Other suggestions included employment of Aboriginal community outreach workers and development of services that offer intervention and support programs to family members before a drug-related crisis occurred. Research among Aboriginal family, community groups and service providers in Brisbane and Melbourne resulted in similar recommendations (Larson & Currie 1995; Edwards, Frances & Lehmann 1999).

Table 6.11: Community and family support services for Aboriginal people who inject drugs proposed by organisational representatives

Service	Perth	Kalgoorlie	Broome	Bunbury	Geraldton	Total
Community & family support	17	6	11	7	10	51
Addressing underlying issues	7	2	3	3	0	15

Fifteen proposals addressed underlying socio-cultural and socio-economic issues relating to drug use, such as unemployment, dispossession and marginalisation (Table 6.11). Several informants suggested that until these issues are addressed, the level of drug use and related harm, especially among young people, will continue. These comments confirm what is known about the social determinants of Aboriginal

health in general, and substance misuse in particular (Saggers & Gray 1998; Lehmann & Frances 1999). The proposals are also supported by the recommendations made at the Western Australian Aboriginal Community Drug Forum.

Services for young people and services that offered alternatives to drug use were frequently suggested with 62 proposals being made overall. Proposed alternatives to drug use, especially for young people, included programs that encourage active participation in recreational activities, sport, employment, education and training. Several proposals included suggestions that these services should include some form of cultural education or appreciation. Of the 35 people who specifically called for programs to provide alternatives to drug use, 27 called for them to be Aboriginal controlled or managed.

Thirty-one proposals were made for enabling better access to free injecting equipment (Table 6.12). Most suggestions related to expanding current needle exchange programs by increasing hours of operation and improving services to outlying suburbs in Perth and communities outside of regional centres. The need to increase the number of facilities from which needles can be purchased—particularly 24-hour pharmacies—was made by only a small number of people (6) in Perth and Geraldton.

Safe injecting rooms with access to clean injecting equipment and medical supervision were proposed by at least one organisational representative in each region (11 overall). It was suggested that provision of safe injecting rooms could provide opportunities to offer counselling and other support services to people who inject drugs. In this regard, it is instructive to note that there are some privately owned or rented houses in the Perth suburbs which act informally as 'safe injecting' places. Given both the high cost involved in establishing a formal safe injecting room in a central location and the high risks involved for people injecting in public places, it might be less expensive and more beneficial to develop safe injecting places along the lines of those already operating but with the ability to provide better peer support and clean equipment.

Table 6.12: Proposed access to injecting equipment for Aboriginal people who inject drugs proposed by organisational representatives

Service	Perth	Kalgoorlie	Broome	Bunbury	Geraldton	Total
Needle exchange services	11	5	4	6	5	31
Safe injecting rooms	3	3	2	1	2	11
Pharmacies & vending machines	3	0	0	0	3	6

As noted above, better access to injecting equipment was a much higher priority for Aboriginal people who inject drugs (Table 6.6) than it was among organisational representatives. It is clear that there is considerable ambivalence about this and other harm reduction strategies which are seen by many service providers as condoning drug use. It is illustrative to look at some of the eastern states research with Aboriginal community workers, many of whom have shifted their position on this issue. In Melbourne, for instance, when asked about their views on needle exchanges, one worker said:

I was against it, a long time ago. Because I thought it would encourage drug users, but since I've had a bit more education in it, my attitude's changing a little bit, but not all that quick! I was totally against it, because you know, I just thought they were advertising drug use...I can talk about it now, where before it was definitely a no (cited in Edwards, Frances & Lehmann 1999:31).

The need for improved emergency and after hours services was reported in all localities though overall the number of suggestions for new or expanded services in this category was not particularly high (34 proposals). Considering that relatively few of these services exist in regional areas it is perhaps not surprising that more than half of these proposals related to after hours crisis care. Proposals for new and expanded services offering 24-hour emergency health, counselling and accommodation services were made by 18 organisational representatives.

Given the relatively low numbers of users who perceived their own risk of contracting a BBV as low, it is perhaps not surprising that they did not identify a need for more testing services. However, in light of their concern about health-related issues, it is interesting that service providers did not identify such a need. Despite that—given the high levels of unsafe injecting practices and the need monitor the spread of BBVs, as well as the opportunity testing provides for the delivery of health promotion services—we are of the view that an expansion of testing services is warranted. Probably, such testing could most effectively be provided through outreach services at places such as drop-in centres or needle exchange services.

Perceived obstacles to service provision

Following discussion of suggestions for new and expanded services for Aboriginal people who inject drugs, organisational representatives were asked to identify any potential obstacles to the implementation of such services. In general, the majority of responses related to community attitudes, funding issues and to a lesser extent, issues of organisational structure, staffing and policy.

Community attitudes to drugs and the 'not in my backyard' syndrome were seen as the greatest obstacle to the development of new or expanded services. Responses from organisational representatives also suggested that community attitudes to race, community or family politics, lack of recognition of drug-related problems, lack of parental concern and general community apathy were obstacles that would need to be overcome. One informant stated that while community attitudes had an impact on service provision:

There's a lack of political will within the community as a whole and therefore funding 's not a high priority in these areas as it's not necessarily a vote winner.

Insufficient funding for services and lack of access to long term funding caused concern for representatives from approximately one-third of organizations involved in the study. Funding policies were characterised as 'short-sighted' and were criticised as being 'piece-meal' in their approach to reducing the harmful effects of drug use and were accompanied by unrealistic expectations of a 'quick fix'. It was suggested that intervention and support programs needed time to become established and accepted by users and that was not always possible under current funding arrangements.

The manager of one metropolitan-based youth based agency stated that most of its resources were allocated in annual funding rounds, with the exception of one grant that extended over a three-year period. Under these circumstances, maintaining continuity of programs and staffing was difficult and the level of assistance the agency was able to provide was sometimes restricted. Continuity of quality service is important and was highlighted in interviews with three young Aboriginal people who inject drugs who attended this centre. These young people commented that they turned to staff at the youth centre for information, support and assistance—rather than those of any other agency—because they had known them for several years, they trusted them and had a good level of rapport.

Organisational structure was discussed by a number of organisations with claims that the current system of service provision was ineffective. It was suggested by several informants that a more holistic approach was needed with improved collaboration between service providers and better links between government departments. Until this occurred, it was felt that people would continue to 'fall between the gaps'. Obstacles relating to organisational policy and staffing issues that were identified by informants included bureaucratic and inflexible management, staff attitudes and staff availability.

Summary

It is clear that current services for Aboriginal people who inject drugs are perceived by users and service providers as deficient in a number of ways. Given the apparently low levels of knowledge and high levels of risky drug using behaviour, harm reduction strategies specifically related to the availability of injecting equipment, and education for users are urgent. Both Aboriginal people who inject drugs and service providers see appropriate counselling and treatment for drug use as a high priority, and this needs to be delivered by a mix of Aboriginal and non-Aboriginal service providers whose staff are culturally aware, knowledgeable and non-judgmental about injecting drug use, and sensitive to issues of confidentiality. Service providers want to see much more education and training of users, staff and the community. They also think more needs to be done to support families struggling to cope with the health and social consequences of injecting drug use. Attention needs to be directed at alternatives to drug use, especially among young people

7. SUMMARY AND RECOMMENDATIONS

Prevalence

Among Aboriginal people in Western Australia, hospital admissions for drug-related conditions (other than alcohol and tobacco), hepatitis C notifications, and police arrest data for drug-related crime have all increased significantly over the past seven years—and have increased at rates greater than in the non-Aboriginal population. While not all of these increases are specifically related to injecting drug use, a significant proportion is. On the basis of the increase in these indicators we estimate, conservatively, that the percentage of Aboriginal people aged ≥ 15 years and residing in urban and major urban areas who have ever injected drugs for non-medical purposes is now between 4.5% and 6%, and that the percentage who have injected drugs in the past 12 months is between 3% and 4%. That is, we estimate that between 810 and 1080 Aboriginal people have ever injected drugs and between 540 and 720 have injected in the past 12 months. About 60% of these people reside in the Perth metropolitan area and the remainder are spread across regional Western Australia—with the exception that there are few Aboriginal people in the Kimberley region who have injected drugs.

Patterns of use

We were able to interview 74 Aboriginal people who inject drugs. Their median age was 26.5 years, 84% had education to Year 10 level or less, and 88% were dependent upon social security entitlements or CDEP payments. This group of people tended to be poly-drug users. Among them, there were high levels of cannabis use and many consumed alcohol on a regular basis. Amphetamine and heroin were the drugs commonly injected. Amphetamine was clearly the drug of choice among this group. Ninety-eight percent had ever used amphetamine and about 40% had used the drug on more than two occasions in the previous week. Although about 60% had ever used heroin, only 30% had done so—usually on an infrequent basis—in the previous 12 months.

The median age at which the group we interviewed first injected drugs was 15 years. Seventy-three percent first injected in the homes of family and friends and 27% in public places. Half of the group usually injected drugs in their own homes or those of family or friends. As well as injecting in these places, the remainder also injected in various public places—places where it was difficult to ensure hygienic injecting

conditions. For most people in this group, injecting was a social activity usually undertaken with small groups of friends.

As a consequence of their accessibility, pharmacies were reported as the usual source of new needles and syringes by 82% of those we interviewed. However, for some people there are cost barriers to obtaining from this source new needles and syringes each time they inject. There are also issues relating to the acceptability of pharmacists as a source of injecting equipment. After pharmacies, needle exchange services were the most common source of new needles and syringes.

Forty-three percent of those users we interviewed acknowledged 'normally' sharing needles and syringes when they injected. While, generally, they were aware of the risks involved in sharing, concerns about this were subordinated to situational factors associated with the time and place of injecting. Of those who reported sharing needles and syringes, most reported cleaning them between 'hits'. However, the methods they reported using were generally unlikely to kill or flush away all blood and viral particles that might be present. We also believe that there was an element of reporting what was believed to be socially acceptable in the number of positive responses to questions about cleaning needles and syringes. As well as reports of sharing needles and syringes, respondents also reported various—but sometimes equally high—levels of sharing other items of injecting equipment. These levels of sharing are clearly cause for concern.

The majority of those people we interviewed (about 60%) reported disposing of used needles and syringes by putting them in a Fitpack container and depositing the container in a bin or disposal unit. However, other users reported a variety of less satisfactory methods. Although only two people reported routinely discarding used needles and syringes wherever they may be, 10% of the group said that they had done this at one time or another.

Fifty-eight percent of the users that we interviewed had spent some time in prison. While only one person reported commencing to inject drugs while in prison, 23% of those who had been in prison admitted to injecting drugs and to sharing needles and syringes while incarcerated. Again this level of sharing is cause for concern. Although not explored as part of this study, tattooing in prisons also poses a risk for the spread of BBVs.

Harms related to injecting drug use

Both those people who inject drugs and organisational representatives acknowledged a wide range of health and social harms related to injecting drug use. For people who inject drugs the harms most frequently identified included those associated with finances, family, health, friendship, criminal behaviour, intimate relationships, work and study. Overwhelmingly, it is family relationships that users identify as their main concern, with only 9% identifying health as a primary concern. Together, problems associated with close relationships and those relating to families were the main concerns of almost 60% of those people who inject drugs that were interviewed.

There is good reason to be concerned about the health of Aboriginal people who inject drugs. The users we interviewed reported considerably less knowledge about BBVs, and more risky behaviour connected with, injecting drug use than has been reported among both other Aboriginal and non-Aboriginal injecting groups elsewhere in Australia. Those we interviewed reported lower testing rates for BBVs than elsewhere in Australia and their reports of their own and their injecting friends' behaviour include a range of unsafe practices, primarily sharing of needles and equipment. Lower reported rates of opiate overdose among this group probably related to the lesser use of heroin among those we interviewed, than is reported among users elsewhere. This is, perhaps, fortuitous as few (28%) thought they knew what to do in case of overdose.

While users identified damage to their family relationships as the main harm associated with injecting, service providers were much more likely to cite problems associated with crime and health. Many spoke of stealing and violence perpetuated by Aboriginal people who inject drugs against their own families. Providers were also more likely to identify health concerns, specifically psychological and other mental problems, including psychotic behaviour; risks of contracting BBVs because of sharing behaviours; general health deterioration; vein damage; risk of overdose; and immune system damage.

Service providers claimed sharing was common in the Aboriginal injecting community, and were particularly concerned about drug use and tattooing in prisons, where there was no reliable access to clean equipment. While some non-Aboriginal people attributed this sharing to cultural attributes, this is not consistent with the reports of users themselves, who appear to share for situational reasons. Like the users, service providers spoke eloquently about the harms injecting drug use inflicted on family life, including stories of the removal of children.

Services for Aboriginal people who inject drugs

It is clear that current services for Aboriginal people who inject drugs are perceived by users and service providers as deficient in a number of ways. Services currently available for users were categorised into those relating to health, education and training, injecting equipment, counselling and treatment, emergency and after hours services, alternatives to use, and community and family support. Health-related services are those most readily available throughout the state, and counselling and treatment are offered in some form state-wide, largely through the Community Drug Services Teams outside the metropolitan area. Aboriginal-specific alcohol and other drug services are only available in Perth (through NASAS), and in Broome.

Most services, both Aboriginal and non-Aboriginal, tend to focus on prevention and treatment of alcohol-related harm and few have staff trained to deal with injecting drug use. The areas least well served appear to be education and training, youth services and community and family support. Only limited services in these areas are available outside Perth and are largely provided through the Community Drug Service Teams.

When users were asked what services they currently accessed, it was clear that most had limited knowledge of any service, other than those related to the distribution of injecting equipment. Most obtained their equipment through pharmacies. If they wanted advice about their drug use (or were required to seek treatment through the judicial system) Aboriginal people in Perth were likely to access Aboriginal alcohol and other drug or general counselling services (29%) such as NASAS, or non-Aboriginal treatment providers (25%) such as Next Step Specialist Drug and Alcohol Service. In regional areas the most diverse list of providers was recorded in Bunbury, with most people (33%) identifying the local Aboriginal health service, followed by non-Aboriginal counselling services (28%).

Between 34% and 73% of Aboriginal people who inject drugs reported an unwillingness to use particular services—including both Aboriginal alcohol and drug counselling services and general Aboriginal health services—with most people citing confidentiality issues as their main concern. This was particularly the case in regional areas where people were more likely to be recognised when accessing a particular service. These concerns, as well as problems associated with lack of drug-specific knowledge among staff, and general under-resourcing, have been reported among Aboriginal people who inject drugs elsewhere in Australia. It is important to note that while people are concerned about Aboriginal specialist and general health services, they would prefer to access these, rather than mainstream services, if their anxieties about confidentiality could be allayed.

When asked to identify the services they would like to see for people who inject drugs users prioritised counselling/treatment, better access to injecting equipment, education and training (largely for users), community and family support and alternatives to use. They thought counselling and treatment should be delivered by a mix of Aboriginal and non-Aboriginal service providers who are culturally aware, knowledgeable and non-judgmental about injecting drug use, and sensitive to issues of confidentiality. It should be noted, however, that 68% of the users interviewed indicated that they had never sought nor wanted treatment for their drug use, and did not see their use as problematic.

As among users, most service providers had limited knowledge of the services currently available either for people who inject drugs in general or Aboriginal users in particular, and this was exacerbated by geographical location. Health services, including Aboriginal services, were most readily identified but most noted that few offered services specifically for people who inject drugs. There was limited knowledge of the distribution of injecting equipment by service providers, even in Perth, and very low awareness of the availability of pharmacotherapies.

Service providers prioritised new and expanded services in the following areas: education and training (of users, staff and the community), counselling and treatment (by a mix of Aboriginal and non-Aboriginal providers), community and family support, and alternatives to use. They were much less likely than users to identify the need for better access to injecting equipment. Obstacles to the provision of new services identified by providers included community attitudes, funding issues and, to a lesser extent, issues of organisational structure, staffing and policy.

Recommendations

1. We recommend that—since the harm minimisation needs of Aboriginal people who inject drugs cannot effectively be addressed in isolation, and as most Aboriginal people who inject drugs are poly-drug users—a comprehensive strategy be developed to address the misuse of both licit and illicit drugs among Aboriginal people in Western Australia.
2. We recommend that the comprehensive strategy be developed collaboratively by a group comprised of representatives of Aboriginal alcohol and other drug agencies, the Western Australian Aboriginal Community Controlled Health Organisations, the Department of Health, the Western Australian Drug Abuse

Strategy Office, the Department of Justice, the Department of Indigenous Affairs the Commonwealth Department of Health and Aged Care's Office of Aboriginal and Torres Strait Islander Health, and user representatives.

3. We recommend that the comprehensive strategy should include the following components:
 - supply reduction;
 - demand reduction, including attention to the under-lying social determinants of drug misuse, provision of alternatives to drug use, and health promotion and education;
 - treatment;
 - harm reduction;
 - community education and support; and,
 - program and staff development.(Below, under these headings—and where relevant to issues considered in this report—we make specific recommendations regarding injecting drug use).
4. We recommend that—as part of the comprehensive strategy and in accordance with the wishes of Aboriginal people who inject drugs—a range of services be provided, by both Aboriginal community-controlled and mainstream agencies
5. We recommend that services provided as part of the comprehensive strategy should be based on models of best practice, including:
 - Aboriginal control and management;
 - addressing community needs;
 - adequate resourcing;
 - project continuity;
 - integrated project development;
 - technical competence;
 - development of effective management structures;
 - appropriate staff development and training;
 - sensitivity to Aboriginal cultural practices, identity, history and cultural security;
 - sensitivity to issues of confidentiality; and,
 - non-judgemental, non-discriminatory service provision.

Demand reduction

6. We recommend that—given the young age at which drugs are first used—prevention based education about drugs should be introduced at primary school level, with harm reduction approaches introduced in secondary school. As

recommended by the Community Drug Summit, school-based drug education must be comprehensive, and include student, family and community input.

7. We recommend that—as school attendance by many Aboriginal children may be interrupted or sporadic—attention should be given to provision of drug education outside of school settings. Alternative providers of drug education could include youth workers, peer educators and staff of juvenile detention centres.
8. We recommend that drug education materials developed for Aboriginal people:
 - cater to Aboriginal diversity;
 - be mindful of the concerns expressed by Aboriginal people who inject drugs; and,
 - take account of low levels of literacy among a large proportion of the population.Reliance on pamphlets may be inappropriate and information should be also delivered through a wide range of non-print media.
9. We recommend that substantially increased support be made available for activities that provide young people with alternatives to drug use—including provision of culturally secure drop-in centres staffed by people knowledgeable about drug use.

Harm reduction

10. We recommend that appropriate and accessible health promotion materials be developed by and for Aboriginal people who inject drugs. Such materials should include information about:
 - safer injecting practices, the risks of BBV infection, and the availability of testing and vaccination services;
 - access to sterile injecting equipment;
 - safer disposal of needles and syringes—including more information about needle exchange services; and,
 - what should be done in case of drug overdose and drug induced psychotic episodes.
11. We recommend that appropriate health promotional materials on safe injecting practices should be distributed with Fitpacks. (At present materials distributed with Fitpacks focus on disposal of used needles and syringes when the greater public health risk is in sharing injecting equipment.)

12. We recommend that—given the significant level of injecting which occurs in risky public environments—safe injecting places should be established in areas with high concentrations of Aboriginal people in the metropolitan area and in regional centres where justified by the numbers of injectors. Such safe injecting places should provide sterile injecting equipment, peer support, health promotional materials, and referrals for those wishing to take advantage of other services.
13. We recommend that, where Aboriginal specific safe injecting places are not justified in terms of the likely number of users, consideration should be given to the provision of safe injecting places for the broader population of people who inject drugs which make provision for the needs of Aboriginal people.
14. We recommend that—given that the sharing of needles and syringes is largely situational and a matter of accessibility—all effort should be made to minimise financial and other barriers to the availability of sterile injecting equipment. Steps to achieve this should include:
 - free provision of equipment through Community Drug Service Teams, Community and Public Health units, and mobile vans;
 - staffing these services with both Aboriginal and non-Aboriginal workers;
 - minimising the cost of injecting equipment from other sources, such as pharmacies and vending machines; and
 - wider provision of needle and syringe vending machines with 24 hour access in both metropolitan and rural locations (specific locations should be determined on the basis of identified need and in consultation with local communities).
15. We recommend that materials promoting the safe disposal of needles and syringes be supported by the targeted provision of additional disposal units—especially in areas where discarded needles are known to be a problem.
16. We recommend that—as it provides both the opportunity for both monitoring the spread of BBVs and for providing health promotion services—testing programs for BBVs be expanded, particularly through the provision of outreach services.
17. We recommend that—as the prevalence of unsafe injecting in prisons represents a significant risk for the transmission of BBVs—Aboriginal prisoners should be provided with the full-range of services proposed in this report. With specific regard to harm reduction strategies we recommend that:

- a bleach availability program be implemented immediately (bearing in mind, that while this can be effective against HIV, it may not be effective against HBV and HCV);
- clean tattooing equipment be provided to prison inmates;
- planning commences for the introduction of the provision of sterile injecting equipment in prisons; and,
- a peer education program be developed.

Treatment

18. We recommend that an improved range of best practice treatment services be provided for Aboriginal people who inject drugs. These services should include family-centred counselling and support, and appropriate pharmacotherapies and should be delivered by a mix of Aboriginal and non-Aboriginal agencies.
19. We recommend that there be an expansion of readily available detoxification services for Aboriginal people who inject drugs—including an Aboriginal controlled facility in the metropolitan area.
20. We recommend that counselling program components should be developed, which specifically aim to help Aboriginal people who inject drugs to address the family problems arising from such use.
21. We recommend that a better range of mental health services be made available for Aboriginal people who inject drugs. These services should: address issues of co-morbidity; include integration of mental health services and drug and alcohol services where appropriate; and be based on principles of best-practice.
22. We recommend that an improved range of culturally secure prison-based drug detoxification and rehabilitation programs involving the Aboriginal therapeutic community should be provided in major metropolitan prisons and all regional prisons with significant Aboriginal populations. These should be linked to both the personal development programs in prisons and the Western Australian Drug Court, and should be supported through service delivery links with Aboriginal community organisations and the Substance Use Resource Unit, Prison Health Services.

Community education and support

23. We recommend that services to support families struggling to cope with the health and social consequences of injecting drug use should be developed and that these and existing services should be made more accessible to Aboriginal people. Such services should include counselling which provides realistic

knowledge of drug use and its effects on people, and strategies to deal with these issues.

24. We recommend that health education and training for Aboriginal families and communities about injecting drug use—including the rationale for a harm reduction approach—be developed. This could be achieved, in part, by the establishment and resourcing of an ongoing forum on Aboriginal drug issues, conducted by Aboriginal drug and health services and related agencies.

Staff development

25. We recommend that programs be developed to train the staff of Aboriginal and non-Aboriginal agencies to provide appropriate services for Aboriginal people who inject drugs. These programs should be developed collaboratively by representatives of Aboriginal drug and alcohol agencies, Aboriginal community-controlled health services, Department of Health, educational institutions such as Marr Mooditj and the Centre for Aboriginal Studies at Curtin University of Technology, and people who inject drugs. Such program development should include consultation with the Aboriginal Drug and Alcohol Council of South Australia which is currently developing resources to enhance the education and training of Aboriginal and Torres Strait Islander workers in the illicit drug field.
26. We recommend that both mainstream and Aboriginal health services staff be provided with education and training about drug use, and how to provide best practice services for Aboriginal people who inject drugs. This should include: information on the rationale for a harm reduction approach; safe injecting practices; overdose; a variety of intervention models, including brief intervention; the current availability of support and treatment services, and user perspectives
27. We recommend that resources be allocated to train and employ adult and youth peer educators to disseminate information about safer injecting, the availability of needle and syringe programs, and treatment services for Aboriginal people who inject drugs; and that these educators be placed in environments where they are supported.
28. We recommend that education and training be provided for pharmacists and hospital workers about injecting drug use and the need to provide a non-judgmental service to Aboriginal people—particularly in locations where a local pharmacy or hospital is the only place where needles and syringes can be obtained.

29. We recommended that—as the staff of all health care agencies have a duty of care to assist in efforts to reduce the transmission of disease—agencies conducting needle and syringe programs should provide staff training which ensures delivery of services in a manner free from personal or philosophical biases against harm reduction strategies.
30. We recommend that—given rapidly changing notions of best practice—all staff providing services to Aboriginal people who inject drugs should be provided with continuing education, with at least annual updates.
31. We recommend that, wherever possible, provision of education and training for staff delivering services to Aboriginal people who inject drugs should be contracted to appropriate Aboriginal organisations.
32. We recommend that investment in developing Aboriginal expertise in the area of services to Aboriginal people who use drugs be made a priority. Strategies could include:
 - development of career paths for Aboriginal people who wish to work in the area of services for people who use drugs illicitly;
 - scholarships for Aboriginal people wishing to undertake formal studies in the drug field;
 - providing the opportunity for Aboriginal drug workers to visit, and gain expertise from, inter-state agencies that provide harm reduction and drug treatment for Aboriginal people; and,
 - strengthening efforts, and providing resources, to recruit Aboriginal Health Service staff into existing training in the illicit drugs area.

8. APPENDICES

Appendix A: organisations from which representatives were interviewed

Organisation	Type of organisation	Number of people interviewed		
		Aboriginal	Non-Aboriginal	Total
PERTH				
Derbarl Yerrigan Health Services	Health	12	7	19
Health Department of WA	Health	5	1	6
Hepatitis C Council	Health	0	2	2
WA AIDS Council	Health	0	2	2
Family and Children's Services	Welfare	0	1	1
Swan Patrol (Kuljak Aboriginal Employment Centre Incorporated)	Alcohol & drug agency	1	0	1
Noongar Alcohol and Substance Abuse Service	Alcohol & drug agency	4	1	5
Noongar Patrol (Aboriginal Advancement Corporation)	Alcohol & drug agency	12	0	12
Next Step Specialist Alcohol and Drug Services - Opiate Overdose Prevention Service (OOPS)	Alcohol & drug agency	0	4	4
Palmerston Association	Alcohol & drug agency	0	1	1
Salvation Army - Bridge House	Alcohol & drug agency	0	1	1
WA Substance Users Association	Alcohol & drug agency	0	2	2
Kwinana Youth Service	Youth	0	2	2
Swan City Youth Service	Youth	1	2	3
Mission Australia (YIRRA)	Youth	0	1	1
Karnany Aboriginal Corporation	Community	1	0	1
Manguri Corporation	Community	1	0	1
Noongar Language and Culture Centre Aboriginal Corporation	Community	4	0	4
Hills Community Support Group	Community	0	1	1
Karawara Community Centre	Community	0	1	1
Aboriginal Legal Service	Police/Legal	2	0	2
WA Police Service	Police/Legal	1	0	1
KALGOORLIE				
Bega Garnbirringu Health Service Aboriginal Corporation	Health	6	1	7
Nyunyutu Tjitji Pirni Aboriginal Corporation	Health	5	0	5
Community Public Health Unit	Health	4	1	5
Kalgoorlie Regional Hospital	Health	1	1	2
Family & Children's Services	Welfare	2	0	2
Salvation Army - Golden Mile Youth Hostel	Welfare	0	1	1

Wunngagutu Patrol (Kalgoorlie Indigenous Housing Developments)	Alcohol & drug agency	1	1	2
Community Drug Service Team (Goldfields Centrecare)	Alcohol & drug agency	0	4	4
Aboriginal Affairs Department	Funding body	2	1	3
Aboriginal and Torres Strait Islander Commission	Funding body	1	0	1
Eastern Goldfields Aboriginal Advancement Council	Community	1	0	1
Iragul Aboriginal Corporation - Norseman	Community	1	0	1
Nooda Ngulegoo CDEP	Community	1	0	1
Ministry of Housing - Homeswest	Other	1	2	3
Aboriginal Legal Services	Police/Legal	0	1	1
WA Police Service	Police/Legal	0	2	2
BROOME				
Broome Regional Aboriginal Medical Service	Health	5	2	7
Kimberley Aboriginal Medical Services Council	Health	4	0	4
Broome District Hospital	Health	1	0	1
Kimberley Public Health Unit	Health	0	1	1
Pinakarra Aboriginal Counselling Service	Welfare	1	0	1
Marnja Jarndu (Women's refuge)	Welfare	4	1	5
Men's Outreach Service	Welfare	1	0	1
Centrecare	Welfare	0	2	2
Kullari Patrol (Mamabulanjin Aboriginal Corporation)	Alcohol & drug agency	3	0	3
Milliya Rumurra Aboriginal Corporation	Alcohol & drug agency	1	0	1
Community Drug Service Team (North West Mental Health Service)	Alcohol & drug agency	4	1	5
Burdekin Youth in Action	Youth	2	0	2
Garnduwa Kimberley Youth Sport & Recreation	Youth	2	1	3
Broome Senior High School	Education	0	1	1
Broome Primary School	Education	0	1	1
Catholic Education Office	Education	1	0	1
Roebuck Primary School	Education	0	1	1
St Mary's College - Primary and Secondary	Education	1	1	2
Aboriginal Affairs Department	Funding body	1	0	1
Aboriginal and Torres Strait Islander Commission	Funding body	5	0	5
Broome Youth Support Group	Community	5	1	6
Bugarrigurra-Nyurdany Aboriginal Corporation	Community	0	1	1
Jarndu Yawuru Resource Centre	Community	1	0	1
Nirrumbuk Aboriginal Corporation	Community	1	1	2
Broome Shire Council	Other	1	0	1
WA Police Service	Police/Legal	1	1	2

BUNBURY				
South West Aboriginal Medical Service	Health	10	3	13
General Practitioner - Methadone Program	Health	0	1	1
Bunbury Regional Hospital	Health	0	3	3
Bunbury Health Services	Health	0	2	2
South West Mental Health Services	Health	0	2	2
South West Population Health Unit	Health	0	2	2
Family and Children's Services	Welfare	0	1	1
South West Refuge	Welfare	0	2	2
Community Drug Service Team	Alcohol & drug agency	5	1	6
Drug & Information Counselling Service	Alcohol & drug agency	0	3	3
Aboriginal Legal Service	Police/Legal	1	1	2
WA Police Service	Police/Legal	1	3	4
GERALDTON				0
Geraldton Regional Aboriginal Medical Service	Health	4	3	7
Community Health Service	Health	2	1	3
Geraldton Regional Hospital	Health	2	1	3
Mid-West Public Health Unit	Health	0	1	1
Women's Health Resource Centre	Health	0	1	1
Geraldton Family Advocacy Service—Yamatji	Welfare	1	1	2
Family and Children's Services	Welfare	1	1	2
Wonthella House Inc (Women's refuge)	Welfare	0	2	2
Community Drug Service Team (COMPARI Inc. - Community Mobilisation for the Prevention of Alcohol Related Injury Incorporated)	Alcohol & drug agency	0	1	1
Geraldton Aboriginal Yamatji Community Patrol	Alcohol & drug agency	1	0	1
Mid-West Alcohol Rehabilitation Service (Rosella House)	Alcohol & drug agency	0	2	2
Geraldton Streetwork Aboriginal Corporation	Youth	9	0	9
Education Department of WA	Education	1	0	1
Bundiyarra Community Aboriginal Corporation	Community	2	0	2
Wila Gutharra Aboriginal Corporation CDEP	Community	10	2	12
Aboriginal Boomerang Youth Hostel	Other	2	0	2
Geraldton City Council	Other	0	3	3
Aboriginal Legal Service	Police/Legal	0	1	1
WA Police Service	Police/Legal	0	3	3
Town Magistrate	Police/Legal	0	1	1
Total number of people interviewed (excluding family interviews)		167	108	275

Appendix B: services available for people who inject drugs

SERVICES AVAILABLE IN PERTH

Health services

Aboriginal health services	Derbarl Yerrigan Health Services—operates in East Perth, Mirrabooka, Maddington and until recently, Midland
Mainstream health services	Public health services provided in each of five metropolitan zones – Perth (East Perth); North Metropolitan (Subiaco); North East Metropolitan (Midland); South Metropolitan (Fremantle); and South East Metropolitan (Armadale)
Hospital based services	Royal Perth Hospital; Fremantle Hospital; King Edward Memorial Hospital for Women—Antenatal Chemical Dependency Clinic
Mental health services	Derbarl Yerrigan Mental Health Services; Graylands Hospital; HDWA funded outpatient Mental Health and Child and Adolescent Mental Health Services in each of the five metropolitan zones

Education and training

Drug education for users	Next Step—Opiate overdose prevention strategy (OOPS); WA Substance Users Association (WASUA)—peer education and outreach program; Keeping Safe program offered in prisons by WA AIDS Council, HDWA and Hepatitis C Council
Drug education for the community	School based education provided through EDWA; Life Education Australia provides health education program to primary school students and parents
Drug education for service providers	Community and Youth Training Services—provides training for services providers working with young people; Health Department of WA—Youthlink provides education and training for youth workers; Next Step Clinical education and training; WA Police Service Alcohol and Drug Co-ordination Unit

Cultural education and training for staff

Injecting equipment

Needle exchange/distribution services	WA AIDS Council Inc- mobile needle and syringe exchange van; WASUA—fixed site needle and syringe exchange program
Vending Machines	East Perth vending machine no longer operational
Pharmacies	Available all areas—24hour chemist in Mt Lawley well know by users

Counselling and treatment

Community Drug Service Team	CDSTs operate within the Perth area and are based in five metropolitan zones—Perth (East Perth); North Metropolitan (Subiaco); North East Metropolitan (Midland); South Metropolitan (Fremantle); and South East Metropolitan (Armadale)
Aboriginal A&D counselling	Noongar Alcohol and Substance Abuse Service (NASAS); Winjan Aboriginal Corporation, Mandurah; Manguri, Queens Park
Non-Aboriginal A&D counselling	Next Step (East Perth and Fremantle); Narcotics Anonymous; Australian Institute on Alcohol and Addictions Inc—Holyoake; Mission Australia—Yirra; Palmerston Association Inc; Cyrenian House Drug Rehabilitation Centre; YMCA—Lynks program; Drug Arm; Perth Women's Centre—Women's Health Care Association Substance Abuse Program; counselling offered through community centres such as Karawara Community Centre
Aboriginal residential treatment	-

Non-Aboriginal residential treatment	Next Step—Central Drug Unit (CDU); Palmerston Association Inc—Palmerston Farm; Salvation Army—Bridge House and Harry Hunter Adult Rehabilitation Centre; Teen Challenge; Cyrenian House (WA Council on Addictions Inc)—Saranna residential centre; Serenity Lodge
Pharmacotherapies	Next Step—Methadone Clinic; Australian Medical Procedures Research Foundation—Naltrexone program; Naltrexone-Buprenorphine Group Therapy Clinic
Prison education and treatment	Keeping Safe—compulsory BBV education provided in prison; Outcare—counselling and support services for ex-prisoners and their families
<i>Emergency and after hours services</i>	
Refuges and emergency accommodation	NASAS crisis accommodation for women and children; Anawim for homeless Aboriginal women unaccompanied by children; Boomerang House for short term accommodation; Association for the Care and Rehabilitation of Alcoholics, Drug Addicts and Homeless Persons Inc (ACRAH); Salvation Army—Lentara Hostel (males only); St Bartholomew's House and Night Shelter (males only); Ebenezer House; Joondalup Youth Support Service Inc.; Perth Inner City Youth Service, YMCA Streetsyde program (young people); Wanneroo Accommodation and Support Services (young people and couples); Swan Emergency Accommodation Inc (young people, couples and families)
Day care centres	Daughters of Charity Services (WA) Ltd—Marillac Centre—day care program for people aged over 20; Mission Australia—Day program centre and residential house for young people; Wesley Mission—Tranby Day Centre; St Patrick's Care Centre
Street and bus patrols	Noongar Patrol; NASAS Patrol; Swan Patrol (all primary focus on alcohol)
Telephone information and counselling services	Next Step—Alcohol and Drug Information Service (ADIS) and Parents Drug Information Service (PDIS)—operates statewide; Hepatitis C Council; Therapeutic Drug Information Service, Sir Charles Gardiner Hospital; WA AIDS Council
After hours crisis care	Crisis Care Unit (Department of Community Development—Family and Children's Services); Salvation Army Care Line
<i>Alternatives to use</i>	
Youth services	Next Step—Youth service; Mission Australia—Yirra; NASAS—activities and education centre; Palmerston Association Inc; Teen Challenge; Wesley Mission—Trinity Youth Options; Step One Streetwork program; Whitfords Youth Service; Health Matters Mandurah; Joondalup Youth Support Services Inc.; Centrecare; Anglicare; other youth services throughout Perth offer formal and informal counselling and needle and syringe distribution services.
Aboriginal alternatives	
Non-Aboriginal alternatives	Mission Australia—Yirra provides employment and training and wilderness adventure therapy program;
Community and family support services	Hepatitis C Council; Palmerston Association Inc—education and community support; Wesley Mission—Hearth program for families; Cyrenian House—family program
Other Aboriginal services	Yorgum—counselling service funded through Department of Community Development, Family and Children's Services

 SERVICES AVAILABLE IN KALGOORLIE
Health Services

Aboriginal health services	Bega Garberringu Health Services Aboriginal Corporation
Mainstream health services	Public health services provided through Northern Goldfields Health Service and Goldfields Public and Community Health Services
Hospital based services	Kalgoorlie Regional Hospital—Fitpacks available through vending machine
Mental health services	Kalgoorlie-Boulder Community Mental Health

Education and training

Drug education for users	
Drug education for the community	
Drug education for service providers	
Cultural education and training for staff	

Injecting equipment

Needle exchange/distribution services	Fitpacks available through Goldfields Public and Community Health Service
Vending machines	Kalgoorlie Regional Hospital
Pharmacies	

Counselling and treatment

Community Drug Service Team	Managed through Centrecare
Aboriginal A&D counselling	
Non-Aboriginal A&D counselling	Centrecare (CDST)
Aboriginal residential treatment	
Non-Aboriginal residential treatment	Eastern Goldfields Halfway House Inc—Prospect Lodge (primary focus is alcohol rehabilitation)
Pharmacotherapies	Methadone program
Prison education and treatment	Community Drug Service Team

Emergency and after hours services

Salvation Army Golden Mile Youth Hostel; Sobering Up Shelter; Women's Refuge; Ninga Mia Village Aboriginal Corporation (primary focus on alcohol)
 Wungagutu Patrol
 Next Step—Alcohol and Drug Information Service (ADIS) and Parents Drug Information Service (PDIS)—operates statewide

Alternatives to use

Youth services	YMCA—Youth engagement program
Aboriginal alternatives	
Non-Aboriginal alternatives	
Community and family support	
Other Aboriginal services	

 SERVICES AVAILABLE IN BROOME
Health Services

Aboriginal health services	Broome Regional Aboriginal Medical Service (BRAMS)
Mainstream health services	Public health services provided by Kimberley Public Health Unit (office based in Derby).
Hospital based services	Broome District Hospital
Mental health services	Northwest Mental Health Services

Education and training

Drug education for users	
Drug education for the community	Healthworks (Kimberley Aboriginal Medical Services Council); School based drug education
Drug education for service providers	
Cultural education and training for staff	

Injecting equipment

Needle exchange/distribution services	Broome District Hospital does distribute Fitpacks (since June 2001). Kimberley Public Health Unit does not distribute to public. CDST does stock Fitpacks but has not distributed to the public.
Vending machines	
Pharmacies	

Counselling and treatment

Community Drug Service Team	Managed through Northwest Mental Health Services
Aboriginal A&D counselling	Pinakarra Counselling Service
Non-Aboriginal A&D counselling	Northwest Mental Health Services (CDST); Centrecare; Men's Outreach
Aboriginal residential treatment	Milliya Rumurra Aboriginal Corporation (primary focus is alcohol-related rehabilitation)
Non-Aboriginal residential treatment	
Pharmacotherapies	Informal agreement by Broome GPs not to prescribe methadone
Prison education and treatment	Counselling for prisoners provided by Pinakarra Aboriginal Counselling Service

Emergency and after hours services

Refuges and emergency accommodation	
Street and bus patrols	Kullari Patrol (alcohol focus)
Telephone information and counselling	Next Step—Alcohol and Drug Information Service (ADIS) and Parents Drug Information Service (PDIS)—operates statewide
After hours crisis care	

Alternatives to use

Youth services	Burdekin Youth in Action
Aboriginal alternatives	
Non-Aboriginal alternatives	
Community and family support services	

 Other Aboriginal services

SERVICES AVAILABLE IN BUNBURY
Health services

Aboriginal health services	South West Aboriginal Medical Service (SWAMS)
Mainstream health services	Public health services provided through South West Population Health Unit
Hospital based services	Bunbury Regional Hospital
Mental health services	South West Mental Health Service

Education and training

Drug education for users	
Drug education for the community	Drug Information and Counselling Services (DICS)
Drug education for service providers	
Cultural education and training for staff	

Injecting equipment

Needle exchange/distribution services	WASUA mobile exchange service recently began operating (August 2001). Bunbury Regional Hospital and South West Public Health Unit do not distribute Fitpacks to public.
Vending machines	
Pharmacies	

Counselling and treatment

Community Drug Service Team	South West Community Drug Service Team managed by St John of God Healthcare
Aboriginal A&D counselling	
Non-Aboriginal A&D counselling	Drug Information and Counselling Service (DICS); Community Drug Service Team
Aboriginal residential treatment	
Non-Aboriginal residential treatment	
Pharmacotherapies	
Prison education and treatment	

Emergency and after hours services

Refuges and emergency accommodation	
Street and bus patrols	Geraldton Community Patrol (Yamatiji Patrol)
Telephone information and counselling	Next Step—Alcohol and Drug Information Service (ADIS) and Parents Drug Information Service (PDIS)—operates statewide
After hours crisis care	

Alternatives to use

Youth services	
Aboriginal alternatives	
Non-Aboriginal alternatives	
Community and family support services	
Other Aboriginal services	

 SERVICES AVAILABLE IN GERALDTON
Health services

Aboriginal health services	Geraldton Regional Aboriginal Medical Service (GRAMS)
Mainstream health services	Public health services provided through Geraldton Health Service and Midwest Public Health Unit
Hospital based services	Geraldton Regional Hospital
Mental health services	Geraldton Mental Health Services; GRAMS Mental Health services

Education and training

Drug education for users	
Drug education for the community	Midwest Life Education Centre (Inc); Parents Reaching Youth through Drug Education (PRYDE)
Drug education for service providers	
Cultural education and training for staff	

Injecting equipment

Needle exchange/distribution services	Fitpacks available through Mid West Public Health Unit. COMPARI Inc. (CDST) does distribute through an "off the record" agreement with MWPHU. Geraldton Regional Hospital does not distribute Fitpacks to the public.
Vending machines	
Pharmacies	

Counselling and treatment

Community Drug Service Team	Managed through COMPARI Inc (Community Mobilisation for the Prevention of Alcohol Related Injury Inc.)
Aboriginal A&D counselling	
Non-Aboriginal A&D counselling	COMPARI Inc. (CDST); Drug Arm
Aboriginal residential treatment	
Non-Aboriginal residential treatment	Midwest Alcohol Rehabilitation Service Inc—Rosella House (primary focus is alcohol but will accept IDU)
Pharmacotherapies	Methadone program; Naltrexone program
Prison education and treatment	Keeping Safe program

Emergency and after hours services

Refuges and emergency accommodation	Wonthella House
Street and bus patrols	Yamatji Patrol (alcohol focus)
Telephone information and counselling	Next Step—Alcohol and Drug Information Service (ADIS) and Parents Drug Information Service (PDIS)—operates statewide
After hours crisis care	

Alternatives to use

Youth services	
Aboriginal alternatives	
Non-Aboriginal alternatives	
Community and family support services	
Other Aboriginal services	

9.0 REFERENCES

- Aboriginal Legal Service of Western Australia. (1995) *Telling Our Story: A Report By The Aboriginal Legal Service Of Western Australia (Inc) On The Removal Of Aboriginal Children From Their Families In Western Australia*. Perth: Aboriginal Legal Service of Western Australia.
- Atkinson, D., Bridge, C. & Gray, D. (1999) *Kimberley Regional Aboriginal Health Plan. Aboriginal Health in the Kimberley: Current Circumstances and Future Directions*. Perth: The University of Western Australia.
- Australian Bureau of Statistics. (1998) *1996 Census Of Population And Housing: Aboriginal And Torres Strait Islander People, Western Australia*. Cat. No. 2034.5. Canberra: Australian Bureau of Statistics.
- Australian National Council on AIDS. (1995) *Report on the Aboriginal and Torres Strait Islander Forum on Sexual Health*, Alice Springs, N.T., 14–17 May 1995. Canberra: Australian National Council on AIDS.
- Brady, M. (1992) *The Health of Young Aborigines: A Report on the Health of Aborigines aged 12 to 25*. Hobart: National Clearinghouse for Youth Studies.
- Codde, J., Roberts, M. & Gill, L. (1997) *Determination of population estimates for health zones and health services by age, sex and Aboriginality 1981-1995*. Statistical Series No 49 ISSN No: 0816-2999. Perth: Health Information Centre, Health Department of Western Australia.
- Collard, K. (2000) Aboriginal culture, in Dudgeon, P., Garvey, D. & Pickett, H. (eds) *Working with Indigenous Australians: A Handbook for Psychologists*. Perth: Gunada Press, Curtin Indigenous Research Centre.
- Commonwealth Department of Health and Family Services. (1996) *Partnerships in Practice National HIV/AIDS Strategy 1996-97 to 1998-99*. Canberra: Australian Government Publishing Service.
- Commonwealth Department of Human Services and Health. (1996) *National Drug Strategy Household Survey: Urban Aboriginal and Torres Strait Islander Peoples Supplement 1994*. Canberra: Australian Government Publishing Service.
- Crofts, N., Webb-Pullman, J. & Dolan, K. (1996) *An Analysis of Trends over Time in Social and Behavioural Factors Relating to the Transmission of HIV Among Injecting Drug Users and Prison Inmates*. Canberra: Australian Government Publishing Service.
- Edwards, G., Frances, R. & Lehmann, T. (1999) *Community Report: Injecting Drug Use Project*. Melbourne: Victorian Aboriginal Health Service Cooperative.
- Gray, D., Morfitt, B., Ryan, K. & Williams, S. (1997) The use of tobacco, alcohol and other drugs by young Aboriginal people in Albany, Western Australia. *Australian and New Zealand Journal of Public Health* 21: 71-6.
- Hargreaves, K. & Lenton, S. (2001) *West Australian Drug Trends 2000: Findings of the Illicit Drug Reporting System*. NDARC Technical Report Number 110. Sydney: National Drug and Alcohol Research Centre.

- Hunter, E. (1993) *Aboriginal Health and History*. Melbourne: Cambridge University Press.
- Human Rights and Equal Opportunity Commission. (1997) *Bringing them home: National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from their Families*. Sydney: Stirling Press.
- Kahn, M., Hunter, E., Heather, N. & Tebbutt, J. (1990) Australian Aborigines and alcohol: a review. *Drug and Alcohol Review* 10:351-66.
- Klee, H. (1992) A new target for behavioural research—amphetamine misuse. *British Journal of Addiction* 87:439-446.
- Larson, A. (1996) *What Injectors Say About Drug Use: Preliminary Findings from a Survey of Indigenous Injecting Drug Users*. Brisbane: Australian Centre for International and Tropical Health and Nutrition, University of Queensland.
- Larson, A. & Currie, D. (1995) *Injecting Drug Use by Indigenous People in Brisbane: Perspectives of Service Providers and the Community*. Brisbane: Australian Centre for International and Tropical Health and Nutrition, University of Queensland.
- Larson, A., Shannon, C. & Eldridge, C. (1999) Indigenous Australians who inject drugs: results from a Brisbane study. *Drug and Alcohol Review* 18: 53-62.
- Lette, H., Wright, M. & Collard, S. (2000) Aboriginal youth: mental health, in Dudgeon, P., Garvey, D. & Pickett, H. (eds) *Working with Indigenous Australians: A Handbook for Psychologists*. Perth: Gunada Press, Curtin Indigenous Research Centre.
- Loxley, W. (1998) *Young Injecting Drug Users and the Risk of HIV/AIDS: Psychosocial and Environmental Constraints on Safer Drug Using and Sexual Behaviour*. NCRPDA Monograph No. 1. Perth: National Centre for Research into the Prevention of Drug Abuse, Curtin University of Technology.
- Loxley, W., Carruthers, S. & Bevan, J. (1995). *In The Same Vein: First Report Of The Australian Study Of HIV And Injecting Drug Use*. Perth: National Centre for Research into the Prevention of Drug Abuse, Curtin University of Technology.
- Loxley, W., Davidson, P., Heale, P. & Sullivan, P. (2000) *Drawing Blood: Injecting Drug Users, Blood Borne Viruses, Testing and Vaccination*. Perth: National Drug Research Institute, Curtin University of Technology.
- Loxley, W., Marsh, A., Hawks, D. & Quigley, A. (1992) HIV risk behaviour among injecting drug users in Perth: the Australian National AIDS and injecting drug use study. *Medical Journal of Australia* 156: 687-692.
- Loxley, W. & Ovensden, C. (1995) Friends and lovers: needle sharing in young people in Western Australia. *AIDS Care* 7(3):337-351.
- Macintyre, S. (2000) Prevention and the reduction of health inequalities. *British Medical Journal* 320 (7246):1399-1400.
- McLennan, W. & Madden, R. (1999) *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples*. Cat No. 4704.0 Canberra: Australian Bureau of Statistics.
- Meyerhoff, G. (2000) *Injecting Drug Use in Urban Indigenous Communities: A Literature Review with a Particular Focus on the Darwin Area*. Darwin: Danila Dilba Medical Service, Education and Training Centre. www.daniladilba.org.au

- 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*. Canberra: Ministerial Council on Drug Strategy.
- Najman, J. & Smith, G. (2000) The embodiment of class-related and health inequalities: Australian policies. *Australian and New Zealand Journal of Public Health* 24(1):3-4.
- National Aboriginal Health Strategy Working Party. (1989) *A National Aboriginal Health Strategy*. Canberra: Australian Government Publishing Service.
- National Health and Medical Research Council. (1991) *Guidelines on Ethical Matters in Aboriginal and Torres Strait Islander Health Research*. Canberra: National Health and Medical Research Council.
- Next Step Specialist Drug and Alcohol Service (2001) *Drug Information and Support Services*. Available online – <http://www.nextstep.health.wa.gov.au/druginfo/index.htm>
- NIASHS. (1997) *The National Indigenous Australians' Sexual Health Strategy 1996-97 to 1998-99. A report of the ANCARD Working Party on Indigenous Australians' Sexual Health*. Canberra: Australian Government Publishing Service.
- Perkins, J., Sanson-Fisher, R., Blunden, S., Lunnay, D., Redman, S. & Hensley, M. (1994) The prevalence of drug use in urban Aboriginal communities. *Addiction* 89:1319-31.
- Putnins, A. (1997) "At risk" youth and tattoos. *Youth Studies Australia* 16(2):13-15.
- Royal Commission into Aboriginal Deaths in Custody (Johnson, E. Commissioner). (1991a) *Royal Commission into Aboriginal Deaths in Custody: National Report*, 5 vols. Canberra: Australian Government Publishing Service.
- Royal Commission into Aboriginal Deaths in Custody (Dodson, P. Commissioner) (1991b) *Regional Report of Inquiry into Underlying Issues in Western Australia*, 2 vols. Canberra: Australian Government Publishing Service.
- Saggers, S. & Gray, D. (1998) *Dealing with Alcohol: Indigenous Usage in Australia, New Zealand and Canada*. Melbourne: Cambridge University Press.
- Shoobridge, J. (1998) The health and psychological consequences of injecting drug use in an Aboriginal community, in Dyer, K. & Addy, D. *New Perspectives: Proceedings of the 1997 NCETA Research Seminar Program*. Bedford Park, SA: National Centre for Education and Training on Addiction.
- Shoobridge, J., Vincent, N., Allsop, S. & Biven, A. (1998) *Using Rapid Assessment Methodology to Examine Injecting Drug Use in an Aboriginal Community: A Collaborative Project Conducted by the Aboriginal Drug and Alcohol Council, the Lower Murray Nungas Club, and the National Centre for Education and Training on Addiction. Final Report*. Adelaide: National Centre for Education and Training on Addiction and the Aboriginal Drug and Alcohol Council of SA.
- Scrimshaw, S. & Hurtado, E. *Rapid Assessment Procedures for Nutrition and Primary Health Care: Anthropological Approaches to Improving Programme Effectiveness*. Los Angeles: UCLA Latin American Center Publications.
- Sputore, B., Gray, D., Bourbon, D. & Baird, K. (1988) *Evaluation of Kununurra-Waringarri Aboriginal Corporation and Ngnowar-Aerwah Aboriginal Corporation's*

- Alcohol Projects*. Perth: National Centre for Research into the Prevention of Drug Abuse, Curtin University of Technology.
- Sputore, B., Gray, D. & Sampi, C. (2000) *Review of the Services Provided by Jungarni-Jutiya Alcohol Action Council Aboriginal Corporation*. Perth: National Drug Research Institute, Curtin University of Technology.
- Topp, L., Darke, S., Bruno, R., Fry, C., Hargreaves, K., Humeniuk, R., McAllister, R., O'Rielly, B. & Williams, P. (2001) *Australian Drug Trends 2000: Findings of the Illicit Drug Reporting System (IDRS)*. NDARC Monograph Number 47. Sydney: National Drug and Alcohol Research Centre.
- Unwin, E., Codde, J. & Swensen G. (1997) *Hospitalisation Due To Drugs Other Than Tobacco Or Alcohol In Western Australia 1991 – 1995*. Perth: Western Australian Drug Abuse Strategy Office and Health Information Centre, Health Department of Western Australia.
- Western Australia, Community Drug Summit Office. (2001) *Addressing Illicit Drug Use Among Aboriginal People, Including the Provision of Treatment Programs for Drug Dependent Aboriginal People*. Issues Paper No. 3. Perth: Community Drug Summit Office, Health Department of Western Australia.
- Western Australian Drug Abuse Strategy Office. (2001) *Directory of Programs and Services Concerned With Alcohol and Other Drug Problems in WA*. Available online: <http://www.wa.gov.au/drugwestaus/html/contents/programs-services/providers/providers.html>