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IN NEW SOUTH WALES PRISONS

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IN NEW SOUTH WALES PRISONS

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Summary

Previous work

This study follows an earlier study, *Bleach Availability and Risk Behaviours in Prison in NSW*, conducted in 1993 (see Appendix 1 for summary). That study also investigated access of NSW prisoners to disinfectants for syringe cleaning and the prevalence risk behaviours but it differed in that respondents were drawn from AIDS Education courses in prison.

The current study

This study recruited consecutive inmates nearing release from six prisons in 1994 thus enabling a representative sample to be drawn. However, data collection was deferred until after release from prison so as to reduce the likelihood of under reporting. It was possible for respondents to remain anonymous and to participate even if they had returned to country locations as interviews were conducted over the phone.

Aims

The aims of this study were to monitor: 1) the access inmates had to disinfectants, 2) the methods used to clean syringes, 3) any negative consequences of bleach provision and 4) risk behaviours in and out of prison.

Recruitment

The study was reasonably successful in the recruitment of respondents: approximately half (45%, n=229) of all inmates recruited in prison telephoned the Research Office for an interview within the allotted time after release from prison.

The sample was similar to the prison population as recorded by the Prison Census in 1992 (Eylard, 1993) in terms of mean age, proportion male and proportion who had committed Robbery, Fraud, Break and Enter, Other Theft and Drug Offences as their Most Serious Offence. The sample differed from the prison population on mean sentence length and proportion with a prior imprisonment, but this was to be expected as recruiting at exit would over represent those who experience shorter terms and more frequent incarcerations. However, the sample was compared to a discharge cohort from the Prison Census in 1992 (Kevin, 1992) and was found to be similar on median sentence length.

Background of sample

Approximately half (54%, n=102) of respondents reported that the offences for which they were imprisoned were committed to support a drug habit. Three quarters (76%) of respondents reported having a drug or alcohol problem prior to incarceration. It was encouraging that over half (61%) of these had received some sort of help for their drug and alcohol problems when last incarcerated.

Two thirds (64%, n=102) of the sample reported a history of drug injecting. Among those who identified as IDUs, two thirds (63%, n=65) reported sharing syringes in the community. Two thirds (66%) of IDUs reported injecting in prison at some time, and virtually all (91%, n=43) of these reported sharing syringes in prison. Almost half (46%) of the sample had been in methadone treatment in prison at some time. As

expected, most (85%) respondents had contact with the prison medical service and, in general, they rated the service as fair or better (60%, n=86).

Bleach availability in prison

About half (54%) of the inmates surveyed reported they were aware that bleach was provided to prisoners as a policy of the NSW Department of Corrective Services. Just over half (52%) of the sample attempted to obtain bleach while in prison. About half (42%, n=50) of these found that million tablets were easier to obtain than liquid bleach (26%, n=49). Overall, 56 percent of respondents found it easy to obtain one of the two forms of bleach available in prison. There was a significant improvement in easy access to bleach from 38% in 1993 (n=171) to 54% 1994 in NSW prisons.

Drug use, injecting and sexual behaviour before prison

In the three months before prison, three quarters (77%) of respondents reported using drugs, with cannabis (75%, n=102), heroin (41%, n=102) and amphetamines (36%, n=102) being the three most commonly used. Over half of all respondents (54%) reported injecting in the three month period prior to prison. The most common drug injected was heroin (40%, n=102) followed by amphetamines (26%) and cocaine (25%). Most injectors (64%, n=66) reported injecting at least daily yet few reported syringe sharing (11%, n=55) before prison. Of the six people who shared injecting equipment before entering prison, four cleaned syringes with bleach on about one third of sharing occasions (30%). Several different cleaning methods were used but none approximated the new cleaning guidelines (ANCA, 1993) which involve soaking equipment. The mean number of sharing partners was one. Virtually all of the sample (91%) was sexually active prior to being imprisoned. Most respondents reported having engaged in vaginal sex (89%), with one third (31%) and two thirds (59%) not using condoms with regular and casual partners respectively. Prostitution (2%) and sexual assault (2%) were rarely reported by respondents prior to prisons.

Drug use, injecting and sexual behaviour in prison

Over two thirds (69%) of respondents reported using drugs while in prison. The most commonly used drug was cannabis (66%, n=102), followed by heroin (34%), and prescribed methadone (27%). Over one third (37%) of the sample reported injecting in prison. Among the injectors, most (50%, n=60) reported injecting heroin.

The most commonly reported frequency of injecting in prison was monthly or less. Approximately one in three respondents (37%) injected in prison and most reported sharing syringes (82%). The mean number of sharing partners was 6.5. However, virtually all who shared syringes reported cleaning the syringes with bleach (97%, n=31). A variety of cleaning methods was used, with the most common ones being variations on the now discredited '2x2x2' method. Few respondents reported soaking (10%) or filling the syringe with bleach (13%) which approximated the revised method of cleaning which is considered necessary to decontaminate injecting equipment of HIV.

Many respondents (58%) were aware of instances of sexual assaults in prison. Most male respondents (79%) supported condom provision in prison. Five percent of respondents reported having sex in prison. No one reported using condoms. One

respondent reported he was sexually assaulted in prison.

Drug use, injecting and sexual behaviour since prison.

Over half (57%) of respondents had used drugs since being released from prison. Again the most commonly used drug was cannabis (47%), followed by heroin (19%). Almost half (42%, n=66) of the injectors had resumed injecting and some on a daily basis (21%). Only one IDU reported sharing syringes since release but bleach was not used to clean the injecting equipment. Two thirds (68%) reported that they were sexually active after release. About half (52%) had engaged in sex with new partners. Sexually active respondents reported no condom use with regular (68%, n=59) and casual (36%, n=24) partners while only one person reported paying for sex.

Partner Change

The level of partner change in and out of prison was examined. Respondents (n=102) reported sharing syringes with three new and three known IDUs. They engaged in sex with a total of 227 sexual partners, of whom 55% were new partners before prison. In prison, respondents reported that 87 percent of 136 sharing partners were new while five of the six sexual partners were new. After prison the only person who reported sharing syringes shared with an old sharing partner. Of the 101 sexual partners respondents reported since release, 52 percent were new sexual partners.

Self reported levels of infection

Most respondents had been tested for hepatitis B (78%, n=98), hepatitis C (73%, n=94) and HIV (95%, n=102). Self reported infection levels were 26 percent, 29 percent and 0 percent respectively.

Conclusion

This study was reasonably successful in obtaining a representative sample. Bleach was easier to obtain in NSW prisons in 1994 than in 1993. Inmates have started to adopt the new syringe cleaning guidelines. However, many respondents reported engaging in risk behaviour - primarily injecting inside prison and sexual behaviour outside prison. If HIV transmission was to occur in prison, this study indicates that it would be mainly through injecting drug use. HIV might then spread through heterosexual contact in the community after prisoners have been released.

Prison populations contain a preponderance of individuals with alcohol problems (Wright, 1993), drug dependencies (Marini et al., 1987), elevated prevalences of injecting (Crofts et al., 1995) and related infections such as HIV (Harding, 1987), hepatitis B and C (Crofts et al., 1995) and histories of sexual assault (Pinnuck & Kay, 1994). Many prison entrants have sexually transmissible diseases (Cohen et al., 1992) and other illnesses (Novick et al., 1977). Furthermore, drug withdrawal among prison entrants is very common (Turnbull & Stimson, 1994). While prison settings have the potential for transmitting infections such as HIV and even tuberculosis, they also present opportunities to provide treatment and prevention to a vast number of individuals, who are often disadvantaged.

In a previous study of prisoners in NSW, two thirds of one sample thought there was a relationship between their drug use and subsequent imprisonment (Kevin, 1992). However, alcohol and drug use does not stop once offenders are imprisoned. Although alcohol consumption is against prison rules, alcohol production and consumption has been documented in prison (Wright, 1993).

Risk Behaviour in prison

Equal proportions of Victorian prison entrants (46%) (Crofts et al., 1995) and NSW prisoners reported a history of injecting drug use (Potter & Conolly, 1990). Among the NSW injectors, one third (32%) had injected in prison with the vast majority (94%) sharing injecting equipment (Potter & Conolly, 1990). Furthermore it is becoming clear that risk behaviour among IDUs in the community is decreasing (Crofts, Webb-Pullman & Dolan, 1995) there has been little change in risk behaviour among IDU prisoners in NSW over the last few years (Crofts, Webb-Pullman & Dolan, 1995).

An analysis of injecting equipment confiscated in a South Australian prison revealed that syringes were typically 1 ml, blood was visible in one quarter and over one half of the syringes showed signs of repeated use. Two thirds of the syringes were refashioned, most commonly cut in half (Seamark & Gaughwin, 1994). Such factors appear to have been ignored when guidelines for cleaning injecting equipment have been devised by the Government. In NSW, almost one quarter of prisoners under 26 years reported being sexually assaulted in one study (Heilpern, 1994).

Prisons are violent establishments. In NSW in 1993, there were over 1,400 assaults, representing 4.9 assault per 100 inmates, by inmates on officers or prisoners (Thompson, 1994). In 1990, a prison officer was assaulted by an inmate with a blood filled syringe and consequently seroconverted for HIV infection. Self harm by inmates can be a risk for staff and other inmates as the transmission of blood borne infections is possible due to exposure to large amounts of blood involved in such incidents. A spate of self mutilations, or 'slash-ups' was reported at a women's prison in NSW in 1994 (SMH, July 1994). Tattooing involving the shared use of tattoo needles can transmit blood borne infections in prison. In 1993, 16% of prisoners reported sharing tattoo needles (Dolan et al., 1994a).

Evidence of the effectiveness of infection prevention programs in prison
 There are indications that inmates on methadone maintenance are less likely to inject and share than IDUs not on methadone treatment (Dolan et al., 1995b). However, as in the community, methadone treatment needs to be given at a reasonable dose and

Prevention of HIV transmission in prison
 HIV prevention in prison rarely involves strategies other than education. For example, condoms and bleach are only provided in 18 and 13 countries respectively (Dolan et al., 1995a). Methadone maintenance treatment (MMT) is provided to prisoners in five countries and methadone detoxification in seven countries (Dolan & Wodak, 1996). In Switzerland, two prisons operate syringe exchange schemes for inmates (Rihs-Middel personal communication, 1995; Nelles and Harding, 1995).

A hepatitis B vaccination program among Spanish prisoners found that a reasonable proportion had a successful result when the duration between doses was shortened (Bayas et al, 1993). This has important implication in settings such as prisons as many inmates are incarcerated for brief periods.

The most notable association was the higher HCV level in HIV infected than HIV negative inmates (87 % vs 33%) (Vlahov et al, 1993). Hepatitis B infection was associated with a history of injecting drug use, age, time spent incarcerated and race (Hull et al, 1985). Another study found that length of prison sentence was associated with hepatitis B infection (Barry et al, 1990). While a history of injecting drug use was the predominant risk factor for hepatitis C in Norway, a history of tattooing was an independent risk factor (Holsen et al, 1993).

Prevalence and transmission of hepatitis B and C in prison
 The prevalence of hepatitis B among prison inmates was 33 percent in Victoria (Crofts et al, 1995), 47 percent in New Mexico (Hull et al, 1985) and 54 percent in Spain in 1989 (Acedo et al, 1989). Similar proportions of inmates are infected with hepatitis C in Maryland (38%, Vlahov et al, 1993), in Victoria (39%, Crofts et al, 1995) and in Norway (46 percent Holsen et al, 1993). Hepatitis C incidence was 1.1 per 100 person years in Maryland prison (Vlahov et al, 1993) and hepatitis B incidence was 0.8 per cent in New Mexico (Hull et al, 1985).

Prevalence and transmission of HIV in prison
 Until recently, published reports of HIV transmission in correctional facilities (CDC, 1986; Kelley, 1986; Espinoza, 1989; Horsburgh, 1990; Castro, 1991), suggested that transmission occurs infrequently. However, evidence to the contrary (Taylor, 1995; Dolan et al, 1994; Medley, 1992; Mutter et al, 1995) has started to emerge. An outbreak of HIV infection occurred in a Scottish prison, Glenochil, in early 1993 (Taylor et al, 1995). An annual follow-up found conditions had not changed and were similar to other Scottish prisons, suggesting that outbreaks could occur elsewhere or, indeed, again in Glenochil (Gore et al, 1995). Contact tracing from one HIV infected prison inmate in Pennsylvania found 142 people were linked to the index case through sexual or needle contact. Of these 142 individuals, 75 percent were former or current inmates while 89 percent were drug users (Waldron et al, 1995).

for sufficient duration in order to be effective. Although there are indications that inmates will use bleach to clean syringes (Dolan et al., 1994a) the effectiveness of bleach in decontamination has been seriously questioned (NIDA, 1993).

Condoms were regarded as highly effective in preventing HIV infection in a large study of heterosexual couples (de Vincenzi, 1994). Even in single sex institutions, inmates have been known to engage in heterosexual sex (Dolan, 1994) with staff or visitors (Turnbull et al, 1991). There are no published reports of condom provision being evaluated in a prison setting.

Mathematical modelling and the implications of partner change

Mathematical modelling can be used to predict the speed of HIV transmission among particular groups. The rate of partner change, or mixing, has primarily been studied for sex behaviour (Anderson, 1989). Recent evidence has emphasised the importance of mixing in the transmission of HIV: it is riskier for individuals to have sex with many partners, only some of whom are infected, than to have sex with the same number of times with one infected person (Kolata, 1995). The extent of spread of HIV depends on whether individuals mix with others who have similar rates of partner change. Two studies of modelling HIV transmission in prison settings have shown the range of HIV spread can vary greatly (Medley et al, 1992; Dolan et al, 1994).

Prison systems facilitate numerous contacts among inmates. For example in NSW, while the prison census population was only 6,000 in 1993, more than 15,000 people entered and left prison and there were over 20,000 internal transfers (Department of Corrective Service, 1994). The dynamic nature of prison populations provides an opportunity for high rates of both needle and sexual partner change.

Research issues pertaining to prison

Research into illegal or stigmatised behaviours such as injecting, sexual activity and tattooing in prison can be fraught with problems of data quality. Inmates are unlikely to provide information that, if their confidence was broken, may have legal consequences for them. However the prison population is a relatively well defined group allowing representative samples to be drawn readily. A previous study of NSW inmates abandoned surveying inmates about their own behaviour due to a lack of co-operation (Potter & Conolly, 1990). Another approach in prison research is to interview ex-prisoners about their last period of imprisonment (Turnbull et al 1991; Dolan et al, 1990). While this approach reduces the likelihood of under-reporting it may result in poor recall as imprisonment may not have been recent and it can be difficult to recruit representative samples.

The questionnaire covered the following areas: demographic characteristics, drug use and sexual behaviour in and out of prison, access to bleach in prison, contact with prison medical services, experience with methadone in prison, HIV and hepatitis testing and the rates of partner change in and out of prison. Callers were asked for

for an interview.

provided basic information on inmates who were enrolled and who did not telephone which was used to verify the authenticity of callers. The unique identifiers also three questions along with another variable were used to construct a unique identifier many times have you been in prison? How many months have you served this time? These agree to take part can you answer these questions now? Which year were you born in? How When you ring you will be asked to do a 15 minute questionnaire and then sent \$50. If you agree, I will give you a card with a toll free telephone number to ring soon after you get out. you after you have left prison and even if you have not used any services in prison. If you different types of services in prison and whether you have used them. But I want to talk to you are nearing release. I am from the University of NSW. I want to talk to prisoners about inmates were told the following by the interviewer: "You have been called up because

explanation. Inmates were escorted to a room where the interviewer waited. each prison and inmates on the lists were called for a visit without further the likelihood of the researchers knowing inmates' names. An interviewer visited three times each. The lists of inmates were sent to the six prisons thereby reducing The six prisons (selected by the Department of Corrective Services) were to be visited prisoners who were to be released from six prisons between July and September 1994. The NSW Department of Corrective Services generated monthly lists of consecutive

The aims of this study were to monitor: 1) the access inmates had to disinfectants, 2) the methods used to clean syringes, 3) any negative consequences of bleach provision and 4) risk behaviours in and out of prison.

Aims and methods

This study attempted to combine the advantages of recruiting respondents in prison (enabling a reasonable sample selection) and interviewing after release to minimise the likelihood of under-reporting. Interviews were conducted over the telephone which allowed respondents to take part even if they had returned to a country location and wished to remain anonymous.

The current study

A previous study in 1993, monitored bleach availability and risk behaviour among a group of inmates involved in AIDS education (Dolan et al, 1994a). The main short coming in that study was the sampling of respondents. Unsuccessful attempts were made to recruit inmates in educational courses unrelated to AIDS.

The first study

Respondents and non-respondents resembled the NSW prison population. This together with the reasonable response rate (45%) and large sample size suggests that the sample was reasonably representative (see Table 1). The study sample had served shorter terms (mean = 10 mths vs 44 mths) and had a higher proportion of prior imprisonments (74% vs 59%) than the prison population. However, recruitment at prison exit (or entry) reflects the throughput of inmates, approximately 15,000 in 1993, rather than the static population of 6,400 (Eylard, 1993). Recruitment at exit can be expected to over-represent short term prisoners who are more likely to experience multiple incarcerations. The median prison term of the sample was six months which

Between July and September 1994, eleven of the 18 planned visits were made. The interviewer attempted to visit 279 inmates. Fifty inmates could not be seen when visited because they: had been released (36%, n=50), had been transferred to another prison (22%), did not come when called (14%), could not be located (6%), were on another visit (4%), were sick (4%), were at work (4%) or had been deported (2%). A few inmates (8%) were not going to be released during the study period and therefore were not enrolled. Of the 229 inmates approached by the interviewer, all agreed to participate in the study and were given a card with instructions on when and where to call to be interviewed. 102 (45%, n=229) respondents telephoned the Research Centre during the study period - the majority (60%) called within one week of release.

Sample

Results

Three of the six designated prisons were in country locations and were difficult to reach on a regular basis and one country prison could only accommodate the interviewer on weekends. The main problems were delays in recruiting due to: prison staff being (understandably) too busy to escort inmates or the interviewer to a meeting, regular mustering of inmates, visiting inmates at work sites and postponing visits at short notice which meant some inmates were released before new visits were arranged. At one prison, some potential respondents were considered too dangerous by prison officers to be approached by the interviewer. Respondents were slow to ring the Research Office so the reimbursement was increased from \$20 to \$50. During the fieldwork, it was decided to reduce the number of respondents recruited from 500 to 200 due to slow recruitment.

Problems encountered

The study was approved by the Ethics Committee of the University of New South Wales and the New South Wales Department of Corrective Service.

a name and an address (not necessarily theirs) so a Postal Order could be sent. It was stressed that as we did not know their name we would not know whether they were now providing their name or another's.

was similar to the median sentence length of 6 to 12 months in a cohort discharged from the NSW Prison Census in 1992 (Kevin, 1993).

Table 1 Comparison of Respondents, Non Respondents and the Prison Population

	Respondents (n=102)	Non Respondents (n=127)	Prison Population (n=6732)
Mean age (years)	32	31	31
Male (%)	91	90	95
Aboriginal (%)	14	-	10
Prior imprisonment (%)	74	72	59
Sentence mean (mths)	10	11	44

Prison data sourced from National Prison Census 30 June 1992, NSW Prison Census August 1993 and Kevin, M (1993) Drug & Alcohol Exit Survey NSW Department of Corrective Services.

Most respondents reported being single (60%) or unemployed (61%) prior to prison entry. Approximately half (51%) had only completed secondary school. In terms of sexual orientation, the sample overwhelmingly (97%) identified as heterosexual. All male respondents identified as heterosexual. Among the female respondents, one identified as lesbian and two as bisexual. Respondents reported becoming sexually active at a mean age of 14 years. One quarter (23%, n=102) reported never having used condoms at any time. Seventeen percent reported unwanted sexual contact prior to the age of 16. Eight percent reported having homosexual sex after the age of sixteen.

The sample and the prison population had similar types of Most Serious Offence. It should be noted that Robbery with Major Assault is included under Robbery for the prison population and may account for the high proportion of released respondents reporting Assault as their most serious offence.

Very easy	25	10	14	5	38
	17	23	12	17	
Easy	17	23	12	17	56
Difficult	40	26	23	15	62
	18	42	51	51	
Unavailable	18	42	51	51	44
	Milton tablets % 1994 n=53 1993 n=144	Liquid bleach % 1994 n=53 1993 n=172	Either one 1994 n=78 1993 n=171		

Table 3 Reports of bleach availability by respondents

Half (54%, n=102) of the respondents were aware that it was Departmental policy to provide inmates with bleach. Half (52%, n=102) of the respondents had attempted to obtain bleach or Milton tablets in prison. Over half (56%, n=78) of respondents reported having easy access to either disinfecting tablets or liquid bleach. Reports from the current study were compared to the 1993 study in table 3.

Access to disinfectants

Other offences	5	11
Drug offences	12	12
Driving/traffic	12	4
Other theft	15	10
Break enter	14	15
Fraud	4	5
Robbery	14	15
Sex offence	3	8
Assault	20	11
Homicide	3	8
Respondents (%) (n=102)		Prison Population (%) (n=6732)

Table 2 Comparison of Most Serious Offence

Changes in bleach availability

There was a significant improvement in the availability to inmates of disinfectants since 1993 (covered by the First Study). In 1993, only approximately one third of prisoners reported easy access to disinfectants (38%, n=171) whereas now 56 percent reported easy access to bleach (Chi sq=7.4, df=1, p<0.01).

Three prisons were surveyed in both studies. Easy access to both forms of disinfectant improved considerably in two prisons although there was a small decrease in liquid bleach availability in the third prison. However, Milton tablets remain much easier to obtain than liquid bleach.

Table 4 Reasons why bleach could not be obtained

	Milton tablets 1994 % (n=40)		Liquid bleach 1994 % (n=50)		1993 % (n=94)	
Not available	33	34	40	60		
Officer reluctance	20	13	12	13		
Clinic reluctance	13	10	10	2		
Avoid search	5	6	4	0		
Don't know/didn't ask	28	35	28	21		

Reasons given by inmates for their inability to obtain bleach appear in Table 4. It is of concern that some respondents still reported that disinfectants were unavailable because medical or custodial staff were reluctant to supply them. Approximately one quarter did not know why Milton tablets (28%) or liquid bleach (28%) were unavailable. Somewhat more respondents reported that Milton tablets (33%) or liquid bleach (40%) were unavailable.

The data obtained with regard to the accessibility of disinfectants were broken down by the prison in which respondents spent most time. In addition respondents were asked about their experience in other prisons where they had spent more than one month of their sentence. Reports were mixed from most major prison sites. These data have been aggregated and summarised for seven major prisons in order to rank and measure the degree of ease inmates experienced in obtaining disinfectants (see page 40). From respondents' reports, two institutions - Prison 12 and Prison 13 - stand out as being difficult or impossible places to obtain disinfectant.

Negative consequences of bleach provision

Respondents were asked if there were any problems associated with bleach provision in prison. Few respondents reported an awareness of inmates drinking bleach (3%), throwing bleach in someone's eyes (1%) or injecting it (4%). A substantial proportion reported that inmates were searched (25%), or had their name recorded (23%) when requesting bleach. Many (41%) respondents thought other inmates had injected or shared syringes because bleach was available.

Alcohol and drug problems

Three quarters (76%) of all respondents reported a having a drug or alcohol problem prior to prison. Of the inmates with a drug or alcohol problem, most (60%, n=77) respondents reported receiving some kind of help in prison. The nature of this assistance was most commonly counselling (30%) and methadone (23%). A few respondents reported joining a Self Help group (9%).

Almost two thirds (64%) of all respondents had a history of injecting, while over half (54%) reported being incarcerated for an offence committed to support a drug habit. Of the respondents with a history of injecting (n=65), the mean ages of first injection and daily injecting were 18 years (range 12-32 yrs) and 18 years (range 13-38 yrs) respectively. Almost two thirds of injectors (63%) reported sharing syringes in the community at some time. Two thirds of injectors (66%) reported injecting in prison in the past, the vast majority of these (91%, n=43) had shared syringes in prison at some time.

The comparison of drug use is based on reports relating to the three month period before imprisonment, the entire period During imprisonment and period between release and interview for After prison. It is emphasised that 60 percent of respondents contacted the Research Office within one week of release. Therefore the data obtained may be an underestimate of drug usage occurring after release from prison.

Three quarters of respondents (77%) reported using drugs prior to prison and virtually all of these (75%, n=102) had used cannabis. Similar proportions reported using heroin (41%), amphetamines (36%) and cocaine (30%). One quarter of the sample reported being on methadone (24%) prior to prison while one in eight (13%) reported using methadone prescribed for someone else.

Over two thirds of respondents reported using drugs (mainly cannabis) in prison. Over one third of respondents reported injecting in prison. This mainly involved heroin but a few respondents reported injecting amphetamines. There was an increase in the numbers using tranquillisers in prison compared to the Before prison. Over half of the respondents reported using drugs since release. This mainly involved cannabis. About one in four respondents had injected drugs since release - mainly heroin. Few (13%) respondents reported being in methadone treatment after prison.

	Before % n=102 use inject	During % n=102 use inject	After % n=102 use inject
Any drug	77	54	69
Heroin	41	40	34
Own methadone	24	7	27
Others methadone	13	8	5
Amphetamines	36	26	14
Cocaine	30	25	5
Tranquillisers	18	1	23
Cannabis	75	-	66
Other	9	1	2

Table 5
Drugs used and injected before, during and after prison

With regard to sharing behaviour after prison only one IDU reported sharing which precluded aggregated analysis. This respondent reported sharing a total of ten injections (of amphetamine) with one previously known partner. For each of those ten injections, the needle and syringe was cleaned with hot then cold water.

Respondents were asked to compare sharing behaviour in and out of prison. In a four week period, IDUs estimated that they had injected a mean of 61 times (total of 3,333 injections) before prison and a mean of 2.5 times (total of 1287 injections) during their most recent imprisonment. Only 11% of IDUs reported sharing before prison whereas 82% of IDUs reported sharing in prison. In terms of the proportion of injections shared, IDUs shared 1.9% of injection before prison and 58.5% of injections during prison. The mean number of sharing partners was 1.3 and 6.5 before and during prison respectively. Respondents were asked whether the IDUs they shared with were new sharing partners ie ones they had never shared with before. While 50% (three of six) of the IDUs respondents had shared with were new sharing partners before prison, over 80% of the 157 IDUs shared with in prison were new sharing partners. Only one third of injections shared before prison were cleaned with bleach compared to 80% of those shared in prison.

Sharing behaviour of injectors

	Before (n=66) %	During (n=66) %	After (n=66) %
No injecting	15	42	58
monthly or less	5	33	5
weekly or less	6	15	5
more than weekly	11	6	11
daily	11	2	12
2-3 times a day	23	0	3
4 or more x a day	29	2	6

Table 6 Frequency of injecting

Awareness of self harm and drug overdoses among other inmates

Three fifths (61%) of respondents were aware of other prisoners deliberately harming themselves. Estimates varied between 1 and 45 cases known to respondents with a mean of 6.8 incidents. Respondents were aware of a total of 398 cases of self harm - however, this may have involved an unknown number of respondents reporting the same incident. These reports have been broken down by main prison of incarceration in table 9.

Techniques for cleaning injecting equipment

Injectors who reported sharing injecting equipment were asked how they cleaned the last syringe they shared in and out of prison (not necessarily in the three months prior to prison). Before prison, five respondents reported cleaning shared injecting equipment, two used hot water, two flushed the syringe with bleach several times and only one respondent reported filling the syringe with bleach for a period of time. Inside prison, the most common cleaning method was multiple flushing with bleach (62%). The next most common cleaning methods were filling syringes with bleach (13%) and soaking syringes in bleach (10%)(see table 8).

	Before	During
Injectors per 4 wks mean	60.8	2.5
Shared	11% (n=55)	82% (n=38)
Injectors shared after	1.9% (n=3333)	58.5% (n=1287)
Total number of sharing partners	8	157
Mean no. of partners per sharer	1.3	6.5
% of sharing partner who were new	50.0 (n=6)	86.6 (n=157)
% of shared injections cleaned with bleach	30.2 (n=63)	79.5 (n=753)

Table 7 Sharing, Before and During Prison

Prison	Cases	Mean	Median	Range
Prison 1	3	2	2	1-3
Prison 2	20	3.8	3	1-12
Prison 3	9	5.9	4	1-18
Prison 7	1	1	1	1
Prison 10	1	15	15	15
Prison 12	1	1	1	1
Prison 13	6	26.5	32	5-45
Prison 14	1	3	3	3
Prison 15	15	5.5	4	1-14
Prison 16	1	1	1	1

Table 9 Reports of self harm

Cleaning technique	Before prison % (n=5)	In prison % (n=31)
15 minute soak	-	10
Filled with Milton	20	13
3x2x3x2x3x2	-	7
Rinsed with bleach	-	7
3x3x3	20	23
2x2x2	20	32
Hot then cold water	40	10

Table 8 Cleaning techniques

In terms of locality, approximately half (50%) of sharing partners in the community were from the same suburb, town or city as the respondent. In prison, no sharing partners were from the same suburb or town while only one fifth (19%) were from the same city. In prison, almost three quarters (71%) of those shared with were either from a different city or region or from an unknown locality as compared to less than one third (31%) of sharing partners in the community (see table 11).

Sharing partners	Community (n=15)	Prison (n=17)
time known partner (mths)	mean = 74 median = 48	mean = 13 median = 6
last occasion of sharing (mths)	mean = 46 median = 36	mean = 3 median = 2

Table 10 Comparison of sharing partners in the community and in prison

Respondents who had injected were asked about the people with whom they had shared injecting equipment. Sharing partners in the community were known to the respondents for a mean of 74 months as compared to 13 months for sharing partners in prison. The last occasion of sharing in prison was an average of three months ago whereas the last sharing event in the community occurred over four years ago (see table 10).

A unique characteristic of the prison environment is the extremely high level of intermingling of inmates from diverse socio-economic, ethnic, generational and geographic backgrounds. This phenomenon is reinforced by the estimated 20,000 internal movements (Department of Corrective Services, 1994) within the prison system annually.

Mixing of respondents

When respondents were specifically asked about other inmates taking an overdose, over half (55%) reported an awareness of this occurring in prison. Respondents (n=55) reported being aware of an average of 4.4 cases of drug overdose (range 1-35) per prison. Reports of cases of drug overdose totalled 241 which may also have involved some duplicate reporting.

There were no reports of self harm from six Prisons. The most common type of self harm that respondents reported was lacerations or 'slash ups' (91%, n=62), followed by hanging (53%). A few respondents reported that inmates had swallowed razor blades (6%), banged their head against walls (3%), electrocuted themselves (1%) or had taken a drug overdose (5%).

Table 11 Locality of Sharers

Locality of sharers	Community (n=19)	Prison (n=21)
No Sharing	5	3
Same Suburb/Town	7	0
Same City	6	6
Different City/Region	5	14
Unknown Locality	3	8

(Based on a sample of 26 sharing partners of 19 respondents in the community and 31 sharing partners of 21 respondents in prison)

Sexual behaviour before, during and after prison

In the three months prior to imprisonment, most respondents (91%, n=102) were sexually active. They reported having sex with a mean of 2.5 partners (median 1), representing a total of 227 sexual partners. Of these, 125 (55%) were new sexual partners. Male respondents reported heterosexual contact only. One fifth (22%) of female respondents (n=9) reported homosexual contact. More respondents reported having regular partners (77%, n=102) than casual partners (40% n=102). Most respondents reported never using condoms with regular partners (69% n=79) or casual partners (41% n=41). The most common sexual activity was vaginal sex (89%, n=102) followed by oral sex (66%). A sizeable minority reported engaging in anal sex (19%). A few respondents reported being forced (2%) or paid (2%) to have sex.

Over half (58%, n=102) of the sample were aware of sexual assaults in prison. Awareness ranged from one to seven such incidents with a mean of two assaults. The vast majority (79%, n=86) of male respondents thought condoms should be available in prison. Only one person thought condoms were easily obtained in prison. Only six respondents reported being sexually active in prison. Of these, 3 female prisoners (one third of female respondents) reported homosexual contact. Of the three male respondents reporting sexual activity, one reported being raped, one reported having sex with a female visitor and one reported having oral sex with a transgender inmate.

Two thirds (68%, n=101) of respondents reported sexual contact since release with a mean of 1.5 partners (median 1) representing a total of 101 partners. Of these partners, 53 (52%) were new sex partners. As with sexual behaviour prior to imprisonment, male respondents reported heterosexual contact only. One female

Although access to bleach has improved in 1994 compared to the previous year,

around the world is disturbing (Dolan, Wodak & Penny, 1995). The New South Wales prison system is the only one in the world that has allowed repeated independent monitoring of an HIV prevention measure, bleach provision, for inmates. While the bleach program still has problems, the Department's willingness to be scrutinised on repeated occasions is highly commendable. There is only one evaluation of another HIV prevention program in a prison system in the world (Nelles and Harding 1995). It is a trial needle and syringe exchange scheme in Switzerland. The lack of evaluation of HIV prevention programs in prisons around the world is disturbing (Dolan, Wodak & Penny, 1995).

Conclusions and recommendations

Respondents were asked about being tested for HIV, hepatitis B and hepatitis C. Most had been tested for hepatitis B (78%), hepatitis C (73%) or HIV (95%). Of those tested, one quarter (26%, n=76) reported having hepatitis B, slightly more reported hepatitis C (29%, n=68) while no one (n=97) reported having HIV infection.

HIV and other infections

Almost half (46%, n=65) of IDUs had been on methadone in prison. They served a mean prison term of 37 weeks. The mean maximum dose was 85 mgs and mean minimum was 35 mg. Respondents (n=11) on methadone reported a mean number of 5.1 injections (median 0, range 0 - 50) and that most (93%) injections were shared. One third of respondents (38%, n=29) reported being on methadone for part of their sentence. They reported not being on methadone for a mean of 20.6 weeks (median of 8 weeks). They reported injecting a mean of 4.1 times (median 3 range 2-10) when not on methadone and 86 percent of these injections were shared. Given the small sample sizes it would be unwise to generalise from these results.

Methadone treatment in prison

The vast majority (84%) of the sample reported contact with the prison medical service. Three fifths (60%, n=86) of these respondents rated the service as fair or better.

Corrections health service

respondent reported homosexual contact. Among the sexually active respondents, no condom use was reported by over half (68%, n=59) of the respondents with regular partners and by one third (36%, n=24) of respondents with casual partners. Again the two most common sex acts were vaginal sex (91%) and oral sex (74%, n=69), but some respondents reported anal sex (13%). One male respondent reported paying for sex since being released from prison.

access should be further improved. Plans to introduce alternative methods of distributing bleach, such as dispensing machines, have not been carried out. It is recommended that plans to introduce bleach dispensing machines are implemented.

Our earlier study of bleach availability revealed that outdated methods of cleaning were still being used by inmates. The current study showed that the new cleaning guidelines were reaching inmates. To date, syringe cleaning information has concentrated on HIV but not hepatitis B or C. Also cleaning instructions are based on cleaning injecting equipment that has not been tampered with. It is common for needles and syringes in prison to have been tampered with to aid in their concealment and to prolong the usefulness of the needle. It is recommended that research be carried out to ascertain whether a decontamination method can be found that is suitable for the prison environment. Such a method should be quick to implement, destroy hepatitis and HIV without damaging the equipment and be effective with tampered injecting equipment as typically found in prison.

Although the methodology of this study was an improvement compared to the first bleach study, there were still several shortcomings. For example, just under half of the inmates invited to take part actually contacted the Research Office for an interview within the allocated time period. The reasons for this low participation rate are unknown, but may be related to the level of financial incentive involved. With only half the inmates recruited, differences between respondents and non respondents would be expected. However no differences were found on basic demographics. Alternatively it could be argued that individuals with complaints about prison conditions - access to bleach for example - were more likely to ring the office. Yet most respondents reported favourable dealings with one of the main service providers (Corrections Health Service). Perhaps the real issue is whether respondents who engaged in risk behaviour in prison were more or less likely to phone for an interview. Either case could easily be argued. However, it can be assumed that as respondents were interviewed over the telephone in the community and were able to remain anonymous, under reporting of risk behaviour was probably less than in the first study. Also interviewing respondents after they returned to country locations provided a sample which better reflected the prison population than the previous recruitment methods.

We are confident that our sample accurately reflected the proportion of IDUs in prison. For instance, 26% and 29% of respondents reported having hepatitis B and C respectively while similar proportions - 33% and 39% - of all prison entrants were found to be infected in Victoria. These infection levels are approximately half that among IDUs in the community supporting our finding that approximately one in every two prisoners is an injector.

The level of injecting in prison (37%, n=102) was higher than in the 1993 study (26%, n=176). This does not necessarily mean that there has been an increase in risk behaviour in prison as different recruitment strategies were used. However, given that the sample in the current study was more likely to provide a better representation of the prison population than the previous study, it is of some concern

that risk behaviours in the current study was reported more commonly than those found in the first study. The most common risk behaviour was injecting with shared injecting equipment.

There was little evidence in this study of methadone diversion - one of the arguments against the provision of methadone in prison. However, evidence from another study suggests that methadone maintenance can reduce the level of injecting and syringe sharing in prison (Dolan et al, 1995). It should be noted that the capacity of the NSW prison methadone program has increased with plans for further increases. Improvements in this HIV prevention strategy are welcomed.

Many respondents reported having drug or alcohol problems prior to imprisonment (76%), a history of drug injecting (64%) and being imprisoned for committing offences to support a drug habit (54%). The fact that so many individuals with drug (and alcohol) problems are sent to prison suggests that the connection between drug use, crime and imprisonment requires close and serious attention. Furthermore, three quarters of respondents had been previously imprisoned which suggests that imprisonment is not an effective way of dealing with some drug or alcohol dependent individuals. The annual costs of keeping one prisoner (\$40,000) would suggest that alternatives to custody need considering. It is recommended that, where possible, offenders be diverted from the criminal justice system to non custodial sentencing options including drug rehabilitation or be given community service orders.

Some inmates reported engaging in anal sex in prison, but none reported using condoms. Some respondents reported using condoms in the community and therefore it could be assumed that they may also use them in prison if given the opportunity. Furthermore, most male inmates thought condoms should be made available to prisoners. It is recommended that inmates be given confidential access to condoms in prison. A trial program of condom provision planned for 1996 is welcomed.

Compulsory HIV testing of prison entrants in NSW ceased in 1995 and was replaced by voluntary testing for HIV, hepatitis B and C. The change away from compulsory HIV testing to comprehensive voluntary testing is welcomed as is the new program of vaccinating prisoners against hepatitis B.

Tattooing is common among prisoners, yet it is often overlooked as a risk behaviour for the transmission of blood borne infections. It is recommended that attention be targeted at tattooing, with the promotion of safe tattooing among inmates.

The study attempted to gauge the level of mixing or intermingling that occurs in the NSW prison population. The investigation into an outbreak of HIV in a Scottish prison found that within six months, 10 percent of inmates had been released while thirty percent had been transferred to another institution thus indicating the swiftness with which HIV infection could be transmitted through and beyond a prison system (Taylor et al, 1995). The present study found considerable movement within the NSW prison system with respondents reported being housed in numerous different

prisons. It is recommended that efforts be made to reduce the number of inmate movements within the system whenever possible.

Many respondents reported an awareness of a number of other inmates deliberating harming themselves, being sexually assaulted or suffering drug overdoses. While these incidents are typical of institutions such as prisons, the number of reports suggests that alternative measures are needed to reduce these incidents. It is recommended that inmates who are sexually vulnerable or at risk of self harm be given the opportunity to be housed separately with equivalent conditions so that this form of segregation is not seen, nor experienced, as punishment.

Given the shortcomings in the bleach program demonstrated in this study and concerns about biological effectiveness of bleach decontamination of HIV, other prevention measures need further consideration. We recommend that consideration be given to a pilot study of a strict one-for-one syringe exchange program in prison while recognising the strong opposition of correctional officers. A feasibility study on syringe exchange in prison has recently been completed in NSW (Rutter et al, 1995).

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Appendix 1 Summary of the first study of bleach availability

This study investigated the access of NSW prisoners to disinfectants for syringe decontamination and the prevalence of injecting drug use, syringe sharing, tattooing and sexual activity in prison. Self completion surveys were administered to all prisoners in AIDS education courses from May to December 1993.

The sample compared closely to the prison population as recorded by the 1991 National Census of Prisoners (Walker et al, 1992). The mean age in the census population and the sample was 30 years (sd=8.4 yrs; n=180). Half of the prisoners in the census (49%) were in prison for the first time, compared to 43 percent of those in the study sample. Reports of the most serious offences were similar in the census and the study sample: robbery (12% in census vs 28% in sample); break and enter (17% vs 11%); assault (12% vs 15%); sex offences (8% vs 11%); drug dealing (8% vs 7%); drug possession (1% vs 1%) and homicide (8% vs 11%). The mean duration of prison sentence (5 years) was identical and the proportion serving more than ten years (14%) in the sample was similar to those in the census (19%). Therefore we believe that our sample was representative.

Over one third (38%, n=171) of respondents reported having easy access to either disinfecting tablets or liquid bleach in the four weeks before the survey, with disinfecting tablets (33%, n=144) being more accessible than liquid bleach (22%, n=172). In eight of the 12 prisons surveyed, less than half of the respondents reported that access to disinfectants was easy. Although it was difficult for some respondents to obtain disinfectants, over two thirds (71%, n=150) reported that they could obtain disinfectants when needed. Indeed, the second most common use of disinfectants was cleaning injecting equipment. Respondents were aware of a mean of 10 injectors but only aware of a mean of four syringes on their wing - a strong indication that inmates were sharing syringes. Two thirds of respondents reported a history of drug injecting (64%, n=177) and almost half (45%, n=170) of all respondents had injected in prison at some time. One quarter (26%, n=176) of respondents reported that they had injected in the prison where they were surveyed, one fifth (20%, n=176) reported sharing syringes and just under one fifth (19%, n=177) reported cleaning syringes with a disinfectant when sharing.

Although less than one third of respondents who had injected (30%, n=46) reported that disinfectants were easy to obtain, most (96%, n=24) of the respondents who shared syringes in prison had used disinfectants to clean injecting equipment. Nearly two thirds of respondents who shared syringes (62%, n=35) followed the cleaning method they had been instructed to use - the '2x2x2' procedure. One sixth (16%, n=176) of respondents reported sharing tattooing equipment in prison and two thirds (63%, n=27) of these cleaned the equipment with bleach. Only a few respondents (4%, n=178) reported having had anal sex in prison. Overall 40 percent of respondents reported having engaged in one of three HIV risk behaviours in prison: one quarter reported injecting, one sixth reported sharing tattooing implements and one twelfth reported having engaged in oral or anal sex while in prison.

Nearly half (48%, n=181) of the respondents reported that they had committed an

offence in order to support their drug use and many respondents (69%, n=181) reported having a drug or alcohol problem prior to imprisonment. Some respondents reported having hepatitis B (9%, n=172), hepatitis C (16%) and HIV infection (3%, n=150). A mathematical model was developed and estimated that the potential for HIV to be transmitted within a prison environment is considerable (Dolan et al, 1994c).

The study found that three years after the distribution of disinfectants began, most (62%) inmates still found it difficult to gain access to them. Even if an acceptable and effective form of disinfectant was identified, operational problems may still compromise the effectiveness of a syringe cleaning program for prisoners in NSW. The study was unable to identify any single reason for the difficulty prisoners faced in accessing disinfectants as a range of reasons emerged. Some of these reasons appeared to be related to the change over from disinfecting tablets to the liquid bleach formula.

Although there were problems with the bleach availability program, it should be noted that the NSW Department of Corrective Services was the first in the world to allow the independent monitoring of a such a program for prisoners. Research to develop more effective syringe decontamination is urgently required and alternative methods of distributing disinfectant are needed.

Despite low levels of unprotected anal intercourse, condoms should be provided to inmates to reduce the potential of sexually transmissible diseases. Alternatives to custody may need to be considered for offenders with drug and alcohol problems. Serious consideration needs to be given to a pilot strict one-for-one syringe exchange program in a NSW prison evaluated against specific pre-determined objectives. However, the occupational and safety implications must be addressed before such a scheme is implemented.

CONTACT & PAYMENT SHEET

The telephone line no. 8 is reserved for ex-prisoners to ring the research office to be interviewed. Callers need to be screened. Read the following to all callers.
Hello this is the University of New South Wales. Are you calling to be interviewed?

IF YES continue, IF NO terminate call asap

When you were visited in prison and asked to take part in this study you should have been given a card with a number on it. Can you read me that number?

prison	birthyr	times in	mths in
A	B	C	D
—/	—/	—/	—

CHECK NUMBER APPEARS ON THE LIST Yes.....1 No.....2

☐

IF NO SEE WRONG NUMBER SHEET ON WALL
IF YES CONTINUE

CONSENT SECTION - READ TO CALLER

You are eligible to be interviewed. All inmates who are released from some prisons between July and September have been asked to take part. Any information you provide will not be given to the Department of Corrective Services or to any other Department or individual. The reasons for the study are to see how easy it is for people to access services in prison and to look at the level of drug use by prisoners. We hope that this information will lead to an improvement in services for prisoners. This interview will last about 20 minutes and will cover areas such as: your background, drug use and sexual behaviour. At the end I will ask you for some details so that we can send payment to you. This information will be kept separate from your interview and will be destroyed immediately payment is made.

For most of the questions you will be able to answer with a Yes or No. Occasionally you will have to say a number.

Please ask any one in the room to leave while you are interviewed.

AT THE END OF THE INTERVIEW Can you give me a name and an address so I can send a postal order?

I.name _____ address _____

BLEACH IN PRISON

SECTION I DEMOGRAPHIC CHARACTERISTICS

RESULTS

(n=102)

2. When did you last go into prison R:1983-1994 Term $\times$ = 10mths %

3. When did you last come out of prison? R:May-Dec 1994 $\times$ 10 days released

4. Are you male 91 %
female 9
or transgender 0
unknown 0

5. Are you single 60 %
married or in a defacto relationship 27
separated 8
divorced 5
widowed 0
unknown 0

6. Are you an aboriginal or Torres Strait Islander ?

Yes 1 No 2 DK 9 YES = 14%

7. What was the highest level of education you reached?

%
Tertiary (degree/diploma) 2
Technical & Trade (apprenticeship) 3
Post secondary undefined 2
Completed secondary (certificate level) 44
Part secondary 49
Primary only 0
No formal schooling 0
Unknown 0

8. What was your employment status when you last went to prison? (n=102)

%
Employed 26
Unemployed 61
Home duties 2
Student 1
Other (pensioner) 10
Unknown

Mean Age = 32 yrs
Prior imprisonment = 74% mean = 3.9 times
Sentence length = 10 months

SECTION 2 RISK BEHAVIOUR HISTORY

14. In terms of sexual orientation are you
 straight 97
 gay 1
 transgender 0 %

15. How old were you when you first had penetrative sex
 (vaginal or anal) ?

16. Have you ever used condoms when having sex ?

No penetrative sex ... 0 Yes 77 %
 No 23 % DK

17. Before the age of 16 did anyone pressure you to have sexual
 contact when you did not want to ?

Yes 1 No 2 DK 9

18. After the age of 16 have you had sex with someone of the
 same sex as you ?

Yes 1 No 2 DK 9

19. Were you aware of anyone deliberately harming themselves
 when you were last in prison ?

Yes 1 No 2 DK 9

20. How many different individuals harmed themselves ?

21. How did they harm themselves ? (n=60)

slashing up	91%	banging head against wall	3
hanging	53%	electrocution	1
swallowing blades	6%	overdosing	5

22. Were you aware of anyone overdosing on drugs when last in prison ?

Yes 1 No 2 DK 9

23. How many different individuals overdosed in prison ?

BLEACH IN PRISON

24. Did you have a drug or alcohol problem before you last went to prison ?
 Yes 1 No 2 DK 9
 (n=102)
 Yes = 76%
 RESULTS

25. What help did you get for your drug or alcohol problem in prison ? n=76
 No problem N/A
 counselling 30%
 self help 9%
 did not want help 0
 other 5%
 methadone 23%
 no help 39%
 unknown 0

26. Have you ever had a tattoo done in prison ?
 Yes 1 No 2 DK 9
 Yes = 38%

27. Have you ever had sex with another person in prison ?
 Yes 1 No 2 DK 9
 Yes = 4%

28. Have you ever injected drugs ?
 Yes 1 No 2 DK 9
 Yes = 64%

IF NO GO TO NEXT SECTION

29. How old were you when you first injected drugs ?
 = 18
 Median=17
 Mode=15;16
 R: 12-32
 (n=65)
 yrs

30. How old were you when you started injecting on a daily basis ?
 = 18
 Median = 18
 R: 13-38
 (n=65)

31. Have you ever shared syringes in the community (not in prison)
 Yes 1 No 2 DK 9
 (n=65)
 Yes = 63%

32. Have you ever injected drugs in prison ?
 Yes 1 No 2 DK 9
 (n=65)
 Yes = 66%

33. Have you ever shared syringes in prison ?
 Yes 1 No 2 DK 9
 (n=43)
 Yes = 91%

BLEACH IN PRISON

SECTION 3 DRUG USE BEFORE PRISON

RESULTS

I want to ask you about the 3 mths before you last went to prison which were

1) _____ 2) _____ 3) _____ yr

34. In the three months before you last went to prison, did you use ?

USE	Inject	(n=102) %	41	24	13	36	30	18	75	77	9	1
1. heroin	2. your methadone	3. others methadone	4. amphetamines	5. cocaine	6. tranquillizers	7. cannabis	8. ANY USE	9. other	77	Any Injection	9	1
40	7	8	26	25	1	54						

IF NO INJECTION GO TO THE NEXT SECTION

35. Which drug were you injecting most often before prison ?
(use code from last question)

n=66 injectors
%
nothing = 15
heroin = 52
your methadone = 2
speed = 23
coke = 6
H&C = 3

36. In the three months before you went to prison, how often did you inject?

none	once a month or less	once a week or less	more than once a week	once a day	2-3 times a day	more than 3 times a day	don't know but did inject
15	5	6	11	11	23	30	0
(n=66) %							

BLEACH IN PRISON

NOW JUST ABOUT THE FOUR WEEKS BEFORE PRISON

Current Injectors

(n=55)
 $\bar{x} = 60.6$
 Median=56
 Total no. of injections=3333

38. How many of those [answer from last question] injections were with a syringe that had been used by someone else ?
 [this answer can not be more than last]
 Median = 0
 $\bar{x} = 1.14$
 $R=0-36$
 six respondents shared total 63 injections (2% of all injections) 11% of injectors

39. For how many of those [answer from last question] shared injections was the syringe cleaned with bleach before you used it ?
 four respondents cleaned with bleach
 total of 19 injections
 67% of sharers
 30% of shared injections
 (n=55)

40. How many different people used a syringe before you in the four weeks before you went to prison ?
 six respondents shared with eight others
 $\bar{x} = 1.3$
 Median = 1
 $R: 1-3$

41. How many of these people had you never shared with before ?
 (n=3)
 total 4 partners
 $\bar{x} = 1.3$

(Note: reps 50% of all partners)
 Median = 1
 $R: 1-2$
 Four of the eight partners were new sharing partners
 Three of the six sharers shared with new people

42. How did you clean the last syringe you shared before going to prison ?

2x2x2 = 1
 3x3x3 = 1
 Hot then cold water = 2
 Millon = 1

BLEACH IN PRISON

SECTION 4 SEXUAL BEHAVIOUR BEFORE IMPRISONMENT

RESULTS

43. How many people did you have sex with in the 3 months before prison ?

(n=102)
sexually active 91 %

$\bar{x} = 2.5$

Median = 1

R: 1-20

Total = 227 partners

IF NONE GO TO NEXT SECTION

44. Were they women 95%
men 5%
or both 0
or tranny 0

(n=93)

45. How many were new sex partners in that 3 mth period ?

(n=91)

$\bar{x} = 2.9$

Median = 2.5

Total = 125

55 % new partners

46. How often did you use condoms when having sex with your regular partner in the three months before you went to prison ?

(n=79) of sexually active %

..... % (n=102)
No reg part/no penetrative sex 23
every time 14
often 2
sometimes 4
rarely 3
never 54

69

47. How often have you used condoms when having sex with your casual partners in the three months before you went to prison ?

(n=41) sexually active %

..... % (n=102)
No cas part/ no penetrative sex 60
every time 18
often 1
sometimes 2
rarely 2
never 17

41

 BLEACH IN PRISON

RESULTS

48. Can you tell me if you had any of these types of sex in the 3 mths before prison
- | | |
|---------------------------|----|
| None | 9 |
| masturbation with another | 12 |
| oral sex | 66 |
| vaginal sex | 89 |
| anal sex | 19 |
| other sex | 2 |
| don't know | |
- (n=102) %
49. Did any of the sex involve payment or force by either person ?
- | | |
|------------|----|
| No sex | 9 |
| Payment | 2 |
| Force | 2 |
| both | 1 |
| No | 87 |
| don't know | 1 |
- (n=102) %
50. Were you paid for sex in the last year ?
- | | |
|------------|----|
| no sex | 12 |
| Yes | 2 |
| No | 86 |
| don't know | 0 |
- (n=102) %

BLEACH IN PRISON

SECTION 5 BLEACH

RESULTS

51. Which prison did you spend the most time in ? (n=102)

Bathurst	6	%
Maitland	3	
Mannus	9	
Mulawa	38	
Norma Parker		
Oberon	2	
Parklea	19	
Parramatta	1	
Silverwater	1	
St.Heliers	1	
Special purpose	2	
Kirkconnell		
Lithgow		

IF LONG BAY ASK WHICH PRISON

Reception centre	
Special care unit	2%
Crisis support unit	
Lifestyles	1%
Other	
Remand Centre	
Special Care Centre	

52. When you were last in prison did you know that it is a policy of Depart of Corrective Services to provide inmates with bleach ?

Yes 1 No 2 DK 9

YES = 54%

53. Did you try to get bleach or milton tablets in the main prison ?

Yes 1 No 2 DK 9

YES = 52%

IF NO Why not ? (n=50)

no need	56%	
didn't ask	16%	
clinic reluctance	10%	
officer reluctance	2%	

IF YES How easy was it to get Milton tablets in the main prison ? (n=53)

Not available	17	%
Difficult	40	
Easy	17	
Very easy	25	
Don't know/didn't ask	2	

Prison No.	Total reports	Easy access %	Prison No.	Total reports	Easy access %
12	12	8	2	60	48
13	18	28	8	33	52
3	29	38	1	9	78
15	42	38			

58. Can you tell me all the other prisons you have been in for more than one month since Jan 1993 ? How easy was it to get bleach or million tablets in [each prison] ?

57. Were you aware of any prisoners (n=102) %

drinking bleach 3

throwing it in someone's eyes 1

injecting it 4

getting searched if they asked for bleach 24

name recorded if they asked for bleach 22

injecting or sharing because bleach was available 41

other reason

I WANT TO ASK ABOUT ANY PROBLEMS WITH BLEACH IN PRISON

EASY TO GET EITHER ONE = 56%

not available	40%	no need	6%
officer reluctance	12%	avoid searches	4%
clinic reluctance	10%	Didn't ask/DK	28%

56. 'IF NOT EASY' Why couldn't you get liquid bleach ? (n=50)

55. How easy was it to get liquid bleach in the main prison ? (n=49)

Not available 51

Difficult 23

Easy 12

Very easy 14

not available	33%	avoid search	5%
officer reluctance	20%	didn't ask/DK	28%
clinic reluctance	13%		

54. 'IF NOT EASY' Why couldn't you get million tablets ? (n=40)

BLEACH IN PRISON

RESULTS

BLEACH IN PRISON

SECTION 6 DRUG USE IN PRISON

59. While you were last in prison did you use

Use	
Inject	(n=102)
1. heroin	34
2. your methadone	27
3. others methadone	5
4. amphetamines	14
5. cocaine	5
6. tranquilizers	23
7. cannabis	66
8. ANY USE	69
9. Other	2
	0

IF NO INJECTION GO TO THE NEXT SECTION

60. Which drug were you injecting most often ?

(use code from last question)

(n=60) %
none = 4
heroin = 51
Amphetamine = 1
Cocaine =

61. How often did you inject when last in prison ? .. (n=60) %	
none	42
once a month or less	33
once a week or less	15
more than once a week	6
once a day	2
2-3 times a day	0
more than 3 times a day	2
don't know but did inject	0

62. How many times did you inject in prison ? $\bar{x}=33.9$ R=1-208 Median=10
[Prompt how many times a mth]

(n=38)
 $\bar{x}=3$
MEDIAN = 10
R: 1-208

63. How many of those [answer from last question] injections were with a syringe that had been used by someone else
[this answer can not be greater than the last one]

(n=38) (31 shares)
82% share
 $\bar{x}=2$
Median =
R: 0-19

BLEACH IN PRISON

64. For how many of those [answer from last question] shared injections was the syringe cleaned with bleach in prison ? _____

RESULTS (n=31)
 $\bar{x}$ = 19.3
 Median=5
 R: 0-190
 TOTAL=599 (79.5% of total shared were cleaned)

65. How many different people used a needle before you in prison ? _____

(n=24)
 $\bar{x}$ = 6.5
 Median=5.5
 R: 1-15
 SUM=157 Partners

66. How many of those were people you had never shared with before prison ? _____

(n=20)
 $\bar{x}$ = 6.8
 Median=5.5
 R: 1-15
 SUM=136 (96.6%) of Partners

67. How did you clean the last syringe you shared in prison ?
 (n=31) %
 2x2x2 32
 3x3x3 23
 15min soak 10
 hot then cold H2O 10
 filled with millon 13
 rinse bleach 7
 3x2x3x2x3x2 7

= Total 1287 Injections n=38 term = 12.4 months (x)
 therefore mean no of injections monthly = 2.7

= Total 753 Injections (58.5% of all injections)

38 injectors reported 1,287 injections in prison or a mean of 2.7 injections per month

of the 1,287 injections, respondents reported sharing 753 or 58%

of the 753 shared injections, on 599 occasions needles and syringes were cleaned with bleach (79%)

BLEACH IN PRISON

SECTION 7 SEXUAL BEHAVIOUR DURING IMPRISONMENT

RESULTS

68. Were you aware of any sexual assaults in prison ?
 Yes . . . 1 No . . . 2 Dont Know . . . 9
 (n=102) Yes = 58%

IF YES

69. How many different individuals were assaulted ?
 Median = 2
 R: 1-7
 SUM=114
 (n=55)

ONLY ASK MEN Q 3 & 4 WOMEN GO TO Q5

70. Do you think condoms should be available in prison ?

Yes . . . 1 No . . . 2 Dont Know . . . 9
 (n=86 Males) Yes = 79%

71. How easy was it to get condoms in the main prison ? (n=93)

Not available . . . 51
 Difficult . . . 3
 Easy . . . 1
 Very easy . . . -
 Dont know . . . 44

72. How many people did you have sex with when last in prison ?
 IF NONE GO TO NEXT SECTION

6 respondents had sex with 1 person; 1 respondent had sex with 2 people
 Were they women 1

33% yes (n=9 female)
 3% yes (n=93 male)

the 3 women had sex with women; 1 male had sex with 1 woman; 2 males had sex with men

74. How many of those were new sexual partners in prison ?
 One person reported having sex with an old partner

BLEACH IN PRISON

RESULTS

(see below)

75. What kinds of sex did you have when last in prison ?

- 0 None
- 1 masturbation with another
- 2 oral sex
- 3 anal sex
- 4 vaginal sex
- 5 other

76. How often did you use condoms when having sex with your regular partner in prison ?

- 0 No reg part/no penetrative sex
- 1 every time
- 2 often
- 3 sometimes
- 4 rarely
- 5 never

77. How often did you use condoms when having sex with your casual partners in prison ?

- 0 No cas part/ no penetrative sex
- 1 every time
- 2 often
- 3 sometimes
- 4 rarely
- 5 never

78. Did any of the sex involve payment or force by either person ?

- 1 Payment
- 2 Force
- 3 Both
- 4 Neither

No-one reported using condoms

One male reported being raped

One male reported having sex with a female visitor

One male reported oral sex with a transgender inmate

BLEACH IN PRISON

SECTION 8 DRUG USE AFTER IMPRISONMENT

RESULTS

You said you came out of prison ---wks ago [Q.1]

These questions refer only to the time since release

79. Have you used any of the following drugs since release?

USED (n=102)

INJECT (n=102)

1. heroin 19

2. your methadone 13

3. others methadone 1

4. amphetamines 12

5. cocaine 9

6. tranquilizers 3

7. cannabis 47

8. ANY USE 57

9. Other 7

80. Which drug were you injecting most often ? (n=65) %

none = 58

Heroin = 24

Speed = 12

Cocaine = 5

81. How often have you injected since release ? (n=66) %

Median = once a day

none 58

once a month or less 5

once a week or less 5

more than once a week 11

once a day 12

2-3 times a day 3

more than 3 times a day 6

don't know but have injected 2

82. How many times have you injected since release ?

[Prompt every day ? how many times a day]

(n=26)

$\bar{x}$ = 7.3

Median = 5.5

R: 1-28

SUM = 189

IF NONE GO TO NEXT SECTION

BLEACH IN PRISON

83. How many of those [answer from last question] injections were with a syringe that had been used by someone else ? _____ [answer can not be greater than last]
84. For how many of those [answer from last question] shared injections was the syringe cleaned with bleach ? _____
85. How many different people used a needle before you since release ? _____
86. How many of those were people you had never shared with before ? _____
87. How did you clean the last syringe you shared since release ? _____
- _____
- _____
- _____

DONT TAKE 2X2X2 AS ANSWER ASK FOR EACH STEP TO BE STATED

Only one respondent reported sharing. He shared 10 injections (speed) with one known previous partner. Needle cleaned with hot and cold water only.

RESULTS
see below

BLEACH IN PRISON

SECTION 9 SEXUAL BEHAVIOUR AFTER PRISON

These questions refer only to the time since release

88. How many people have you had sex with since release ?

IF NONE GO TO NEXT SECTION

68% had sex

Median=1

sum=101

89. Were they women . . . 93% men . . . 7% or both or tranny (n=69)

90. How many were new sexual partners in that period ? (n=24)

$\bar{x} = 2.2$

Median=1

R: 1-12

53 new partners

of sexually active (n=69) %

16

74

91

13

0

What kinds of sex did you have since release ? (n=102) %

32

11

masturbation with another

51

oral sex

63

vaginal sex

9

anal sex

0

other

How often have you used condoms when having sex with your regular partner since release ? (n=101)

42

No reg part/no penetrative sex

14

every time

0

often

2

sometimes

1

rarely

9

never

How often have you used condoms when having sex with your casual partners since release ? (n=102)

77

No cas part/ no penetrative sex

10

every time

1

often

2

sometimes

1

rarely

9

never

Did any of the sex involve payment or force by either person ?

No sex . . . 31% Payment . . . 1% No . . . 68% Force 0 Both . . . 0 Neither

BLEACH IN PRISON

SECTION 10 PRISON MEDICAL SERVICES

RESULTS

95. Did you have any contact with the medical services in prison ? (n=101)

Yes . . . 1 No . . . 2 Dont Know . . . 9
Yes = 85%

IF NO GO TO SECTION 11 ON THIS PAGE

96. Overall how did you find the prison medical services (n=86)

%	0	2	4	13	5	27
	No contact	good	fair or better	very bad		

SECTION 11 METHADONE only those who have injected [see pg 4 Q12]

97. Have you ever been on methadone in prison ? (n=65)

Yes = 46%

Yes . . . 1 = 46% No . . . 2 = 54% Dont Know . . . 9

IF NO GO TO NEXT SECTION

98. When you were last on the prison methadone program how long were you in prison ? n=29 x=4.182 R=36.8 median=26wks

99. What was your maximum dose of methadone that time ? n=29 x=85 R=35-150 median=85
100. What was your minimum dose of methadone that time ? n=29 x=35 R=0-140 median=10
IF MINIMUM DOSE WAS NOT ZERO GO TO Q 7

101. How many weeks were you not on methadone when in prison ? n=11 x=20.6 R=1-52 median=8

102. How many times did you inject when you were not on methadone in prison ? n=7 x=4.1 R=2-10
median=3

103. What percentage of those injection did you share syringes ? n=7 x=85.7 R=0-100 median=100
How many times did you inject when you were on methadone ? n=28 x=5.1 R=0-50 sum=142 median=0

104. What percentage of those injection did you share syringes ? n=11 x=93.2 R=50-100 median=100

SECTION 12 HIV and other infections

105. Have you ever been tested for hepatitis B ?

Yes 1 No . . . 2 DK . . . 9
(n=98)
Yes = 78%

106. IF YES What was the last result ? (n=76) %

negative	1	70
positive	2	26
didn't get result	3	4

107. Have you ever been tested for hepatitis C ? (n=94)

Yes . . . 1 No . . . 2 DK . . . 9
Yes = 73%

108. IF YES What was the last result ? (n=68) %
 negative 1 = 69
 positive 2 = 29
 didn't get result 3 = 2

109. Have you ever been tested for HIV (n=102)

Yes 1 No 2 DK 9

Yes = 95%

110. IF YES What was the last result ? n=97 %

negative 91.8
 positive 0
 didn't get result 8.2

IF NOT HIV POSITIVE GO TO NEXT SECTION

111. What was the date of your first HIV positive result?

no-one was HIV positive

112. Do you know how you became infected ?
 Sharing syringes 1 through heterosexual sex 2
 through homosexual sex 3 from blood products 4

113. Were you infected inside or outside prison ?
 inside 1 how do you know ?
 outside 2

SECTION 13 MIXING only those who have injected [see PAGE 4 Q12]

114. What was your most recent job ? _____

115. What was your postcode before prison ? _____

116. When was the last time you used a syringe after another in the community _____ with yr ?

117. On that occasion how many people used before you ?

118. For each person who used before you then: Person

how long had you known person

which suburb was person from

was person male or female ?

if male was person () gay ?

was person () HIV positive ?

BLEACH IN PRISON

what was their most recent job ?

119. Can you tell me when was the last time you used a syringe
after someone else in prison _____ with _____ yr ?

120. On that occasion how many people used before you ?

121. For each person who used before you then: Person

how long had you known person

which suburb was person from

was person () male or female ?

if male was person () gay ?

what was person () HIV status ?

what was their most recent job ? _____

TAKE NAME & ADDRESS FOR PAYMENT SEE CONTACT SHEET