

Prepared by: Jenny Iversen, Kerri Shying and Lisa Maher, National Centre in HIV Epidemiology and Clinical Research, UNSW; on behalf of the Collaboration of Australian Needle and Syringe Programs.

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## Key findings

- Rates of public injecting, daily injecting, use of a new needle and syringe, and receptive sharing remained stable over the period 2004 to 2008.
- Approximately one third of Australian NSP Survey participants reported heroin and a further third reported methamphetamine as the last drug injected over the period 2004 to 2008.
- Heroin and methamphetamine were the two most common drugs last injected in all states and territories except Tasmania and the Northern Territory. In NSW, Victoria and the ACT heroin was the more prevalent drug last injected, whilst in QLD, SA and WA methamphetamine was more prevalent.
- Nationally, the proportion of survey participants reporting a pharmaceutical opioid as the last drug injected almost doubled over the last five years, from 8% in 2004 to 15% in 2008. Prevalence of pharmaceutical opioid injecting increased in all jurisdictions over the period 2004 to 2008, and pharmaceutical opioids were the most frequently reported drug last injected in the Northern Territory.
- Hepatitis C antibody prevalence was consistently high among respondents that reported last injecting heroin, cocaine, methadone or pharmaceutical opioids, lower among those last injecting methamphetamine and lowest among those last injecting steroids in all of the past five years.
- While there were very low rates of HIV antibody prevalence in all of the past five years, methamphetamine was the mostly commonly reported drug last injected among HIV antibody positive participants, the majority of whom identified as bisexual or homosexual males.

## Drug injection trends among participants in the Australian Needle and Syringe Program Survey, 2004–2008

### Introduction

The collaboration of Australian Needle and Syringe Programs (NSPs) has conducted sentinel surveillance of human immunodeficiency virus (HIV) and hepatitis C virus (HCV) antibody prevalence and associated risk behaviours among people who inject drugs annually since 1995. During a one to two week period in October, all clients attending selected NSPs are invited to complete a brief self-administered anonymous questionnaire and provide a capillary blood sample for HIV and HCV antibody testing.

This issue of the *Drug Trends Bulletin* reports national and jurisdictional drug injection trends from the Australian NSP Survey over the period 2004 to 2008. As can be seen in Table 1, the number of NSP clients surveyed varied between jurisdictions and across years, with between 1800 and 2270 participants recruited in each of the last five years. Over the period 2004 to 2008, the number of participating NSP sites increased from 43 to 52 and the response rate ranged from 36% to 50%.

**Table 1. Sample size distribution by jurisdiction, 2004–2008**

Jurisdiction	2004	2005	2006	2007	2008
ACT	28	39	52	22	31
NSW	646	729	683	701	899
NT	23	29	20	31	75
QLD	587	291	501	417	508
SA	255	211	200	220	196
TAS	107	137	150	168	57
VIC	228	194	195	243	308
WA	161	170	160	110	196
<b>Total</b>	<b>2035</b>	<b>1800</b>	<b>1961</b>	<b>1912</b>	<b>2270</b>
Response rate	50%	42%	36%	36%	36%
No of sites	43	52	45	52	52

## National Trends

### Demographic characteristics

Around two thirds of NSP survey respondents were male in each of the past five years. Over the same period, the majority of respondents (81% to 82%) identified as heterosexual, with 8% to 10% identifying as bisexual and 4% to 6% identifying as homosexual. The proportion of participants identifying as Aboriginal or Torres Strait Islander increased from 8% in 2004 to 11% in 2007 and 2008, while the proportion that reported their parents spoke a language other than English at home decreased from 11% in 2004 to 5% in 2008.

Both the median age and the median duration of drug injection increased between 2004 (32 and 11 years) and 2008 (36 and 15 years). This was accompanied by a decline in the proportion of young people (aged less than 25 years) and new initiates (those injecting for less than 3 years) over the same period. The median age of first drug injection remained stable at 18 years for all survey years.

### Injecting behaviour

In all of the past five years, just under half of the NSP survey respondents reported daily or more frequent drug injection in the month prior to survey. Reported use of a new needle/syringe for all injections in the month prior to survey completion remained stable at between 71% and 72% over the period 2004 to 2008. Receptive sharing in the month prior to the survey also remained relatively stable at between 13% and 18% over the last five years. Of those participants that reported receptive sharing, the majority had used a needle/syringe after one person, most commonly a partner or close friend.

Over the period 2004 to 2008, NSP survey participants most commonly reported injecting in their own home (86% to 89%) or injecting at a friend's place (41% to 43%) in the month prior to survey completion. Over the same period, around a quarter of the survey respondents identified having injected in the street (22% to 25%) or in a public toilet (22% to 24%), while a third (30% to 34%) reported having injected in a car in the previous month. Prevalence of at least one public injection in the month prior to survey completion remained stable over the past five years at between 39% and 41%.

### National and jurisdictional trends in last drug injected

Table 2 illustrates national trends in drugs last injected during the most recent injecting episode. National and jurisdictional trends for the most commonly reported drugs identified by survey participants are described in the following section.

**Table 2: Drug last injected among NSP survey respondents, 2004–2008**

	2004 n=2035	2005 n=1800	2006 n=1961	2007 n=1912	2008 n=2270
Anabolic Steroids (%)	1	1	2	1	2
Cocaine (%)	2	3	2	2	2
Heroin (%)	36	34	26	31	34
Methadone (%)	7	9	9	10	8
Methamphetamine (%)	33	32	38	30	28
Pharmaceutical opioids (%)	8	9	12	14	15
Buprenorphine (Subutex) (%)	2	3	5	5	5
Other drugs (%)	9	4	4	6	3
Not reported (%)	2	4	3	2	2

### Heroin

The proportion of NSP survey respondents reporting heroin as the last drug injected was relatively stable at approximately one third of respondents in all of the past five years. Heroin was the most commonly reported drug last injected in New South Wales and Victoria and the second most commonly reported drug last injected in Queensland and South Australia in all survey years. In Western Australia and the Australian Capital Territory heroin was also the first or second most frequently reported drug last injected. Reports of heroin as the drug last injected were rare in Tasmania and the Northern Territory over the period 2004 to 2008.

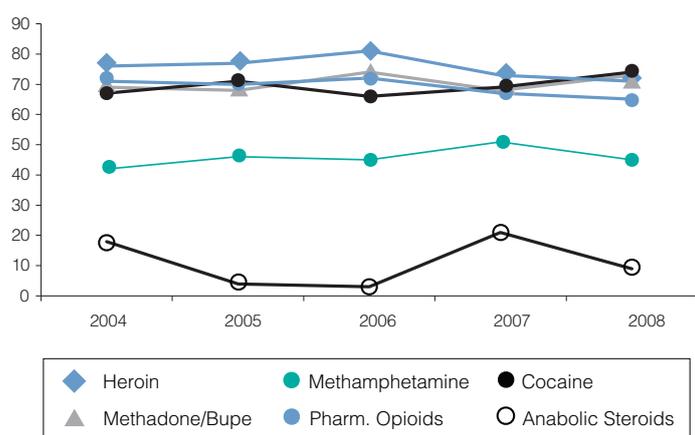
As can be seen in Figure 1, there were high rates of hepatitis C antibody prevalence among participants reporting heroin as the drug last injected over the past five years (range 68% to 74%). Although heroin was the most commonly reported drug last injected in all years except 2006, of the 33 participants that tested HIV antibody positive in 2008, just 4 (12%) reported last injecting heroin.

### Methamphetamine

Nationally, the proportion of respondents who reported methamphetamine as the drug last injected was also relatively stable at between 28% and 38% over the period 2004 to 2008. Methamphetamine was the most commonly reported drug last injected in Queensland and South Australia and the second most commonly reported drug last injected in New South Wales and Victoria in all survey years. Methamphetamine injection was also highly prevalent as the first or second most frequently reported drug last injected in all other states and territories.

Hepatitis C antibody prevalence ranged from 42% to 51% among participants reporting methamphetamine as last drug injected (Figure 1). In 2008, more than half of the 33 participants that tested HIV antibody positive reported methamphetamine as the last drug injected.

**Figure 1: Hepatitis C antibody prevalence (%) by last drug injected, 2004–2008**



### Methadone and buprenorphine

Nationally, the proportion of respondents reporting methadone as the last drug injected remained stable at between 7% and 10% over the last five years while the proportion reporting buprenorphine as the last drug injected increased from 2% (in 2004) to 5% (in 2008). Methadone was the first or second most commonly reported drug last injected in Tasmania in all years where it was reported by between 21% and 42% of survey participants. Reports of methadone injection were lowest in Victoria where less than 3% of respondents reported last injecting methadone in all of the last five years, however reports of buprenorphine as the last drug injected were highest in this state, with between 7% and 11% of respondents reporting last injecting this drug over the same period. Whilst there were increased reports of buprenorphine injecting over the last five years in all states and territories, increases were most noticeable in the Australian Capital Territory and in Western Australia where prevalence increased from 0% to 10% and from 2% to 10% respectively.

There were high rates of hepatitis C antibody prevalence among respondents reporting both methadone and buprenorphine as the last drug injected in all of the last five survey years (Figure 1). Hepatitis C antibody prevalence ranged from 66% to 76% among respondents reporting methadone as the last drug injected and from 61% to 76% among respondents reporting last injecting buprenorphine. Of the 33 respondents that tested HIV antibody positive in 2008, 3 (9%) reported last injecting either methadone or buprenorphine.

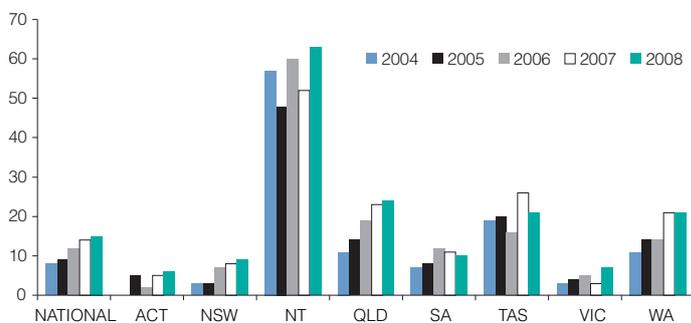
### Pharmaceutical Opioids

At the national level, the proportion of NSP survey participants that reported a pharmaceutical opioid as the last drug injected increased from 8% in 2004 to 15% in 2008. An increase in the proportion of respondents that reported a pharmaceutical opioid as the last drug

injected occurred in all states and territories over the last five years, with the most notable increases observed in Queensland and Western Australia where prevalence increased from 11% to 24% and from 11% to 21% respectively (Figure 2). In 2008, pharmaceutical opioids were the third most frequently reported drug last injected in Queensland, South Australia, Tasmania, Western Australia and Victoria. Pharmaceutical opioids were the most commonly reported drug last injected in the Northern Territory in all of the last five years. The proportion of respondents that reported they had last injected a pharmaceutical opioid ranged from 48% to 63% in the Northern Territory which was significantly higher than any jurisdiction.

Hepatitis C antibody prevalence was high among this group in all of the last five years, ranging from 62% to 69% (Figure 1). In 2008, 4 (12%) of the 33 participants that tested HIV antibody positive reported a pharmaceutical opioid as the last drug injected.

**Figure 2: Proportion of participants (%) reporting pharmaceutical opioids as the last drug injected by jurisdiction, 2004–2008**



### Other drugs

Cocaine was reported as the last drug injected by a small number of NSP survey respondents nationally, ranging from between 2% and 3% over the last five years. Cocaine injecting was most prevalent in New South Wales where between 4% and 6% of respondents reported last injecting this drug over the period 2004 to 2008. In 2008, there were no reports of cocaine as the last drug injected in the Australian Capital Territory, Tasmania, Western Australia or the Northern Territory. Hepatitis C antibody prevalence was high among survey respondents that reported cocaine as the last drug injected, ranging from 60% to 67% over the past five years (Figure 1). In 2008, none of the 53 respondents that reported last injecting cocaine were HIV antibody positive.

Anabolic steroids were also reported as the last drug injected by a small number of participants (2% or less) over the last five years. There were no reports of anabolic steroids as the last drug injected in the Australian Capital Territory or the Northern Territory in any of the past five years. Hepatitis C antibody prevalence was low among survey respondents that reported last injecting anabolic steroids,

ranging from 3% to 20% over the period 2004 to 2008 (Figure 1). In 2008, none of the 35 respondents that reported last injecting anabolic steroids were HIV antibody positive.

## Summary

Whilst patterns of drug injection varied between individual states and territories, heroin and methamphetamine remained the two most commonly injected drugs among participants in the Australian NSP Survey. Over the past five years there has been an increase in the proportion of respondents reporting a pharmaceutical opioid as the last drug injected in all jurisdictions. In 2008, pharmaceutical opioids were the third most commonly identified drug last injected nationally with 15% of NSP survey respondents reporting last injecting this drug.

Over the last five years, hepatitis C antibody prevalence was consistently high at between 66% and 81% among respondents that reported last injecting heroin, cocaine, methadone or pharmaceutical opioids. Over the same period, hepatitis C antibody prevalence was lower among those respondents that reported methamphetamine as last drug injected (range 42% to 51%), and lowest (range 3 to 21%) among those respondents that reported the last drug injected as anabolic steroids. While HIV antibody prevalence was low at 1.5% or less in all of the past five years, methamphetamine was the mostly commonly reported drug last injected among this group, the majority of whom were males that identified as bisexual or homosexual.

## References

1. National Centre in HIV Epidemiology and Clinical Research (2009). Australian NSP Survey: Prevalence of HIV, HCV and injecting and sexual behaviour among IDUs at needle and syringe programs – National data report 2004-2008. Sydney: National Centre in HIV Epidemiology and Clinical Research, University of New South Wales.