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Drug injection trends among participants in the Australian Needle and Syringe Program Survey, 2008-2012

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KEY FINDINGS

- Heroin was the most commonly reported drug last injected in all years 2008 to 2012 and accounted for approximately one third of respondents in each survey year. Between 2008 and 2012, prevalence of heroin as the last drug injected was higher in Victoria than in any other jurisdiction and was the most common drug last injected in this state, as well as in the Australian Capital Territory and New South Wales.
- Methamphetamine was the second most commonly reported drug last injected and accounted for approximately one quarter of respondents in each of the survey years from 2008 to 2012. Methamphetamine was the most common drug last injected in Queensland in all of the past five years.
- Pharmaceutical opioids were the third most commonly reported class of drugs last injected in all of the past five years, with prevalence stable at between 14% and 16%. In the Northern Territory pharmaceutical opioids were the most commonly reported drug last injected during the period 2008 to 2012, significantly higher than any other jurisdiction.
- The proportion of respondents who reported last injecting performance and image-enhancing drugs (PIEDs) has increased significantly over the period 2008 to 2012, although the increase in prevalence was confined to New South Wales and Queensland.
- Approximately half of all respondents reported daily or more frequent injecting in the month prior to the survey in all years 2008 to 2012.
- Re-use of needles and syringes declined significantly from 28% in 2008 to 22% in 2012. Receptive sharing of needles and syringes remained stable, ranging from 13% to 15% over the same period.
- Between 2008 and 2012 HIV antibody prevalence remained low at 1.5% or less nationally and at 3% or less in all states and territories.
- HCV antibody prevalence declined significantly over the period, from 62% in 2008 to 53% in 2012.

The Australian Needle and Syringe Program Survey (ANSPS) functions as a strategic early-warning system designed to monitor blood borne viral infections and associated risk behaviour among people who inject drugs (PWID). This bulletin summarises drug injection trends among ANSPS participants between 2008 and 2012.

INTRODUCTION

The collaboration of Australian Needle and Syringe Programs has conducted annual sentinel surveillance of human immunodeficiency virus (HIV) and hepatitis C virus (HCV) antibody prevalence and associated risk behaviours among PWID since 1995. Each year during a one to two week period, all clients attending selected Needle and Syringe Programs (NSPs) are invited to participate in the ANSPS by completing a brief self-administered survey and providing a capillary blood sample. ANSPS methodology is described in detail elsewhere (MacDonald, 1997) and ANSPS samples have demonstrated representativeness of the broader NSP client population (Topp 2008).This Drug Trends Bulletin supplement reports national and jurisdictional drug injection trends from the ANSPS for the period 2008 to 2012.

The number of participating sites (51-52) was stable throughout the five year survey period. The number of respondents ranged from 2270 to 2697 and the response rate ranged from 39% to 46% (Table 1.)

Table 1. ANSPS sample size distribution by jurisdiction, 2008 to 2012

Jurisdication	2008	2009	2010	2011	2012
ACT	31	63	97	100	78
NSW	899	830	680	694	712
NT	75	77	83	70	50
QLD	508	801	550	552	624
SA	196	248	216	213	203
TAS	57	122	106	68	75
VIC	308	334	445	506	463
WA	196	222	219	192	186
Total	**2270**	**2697**	**2396**	**2395**	**2391**
Response rate	39%	45%	39%	41%	46%
No of sites	51	51	52	52	52

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NATIONAL TRENDS

Demographic characteristics

Approximately two thirds of survey participants were male in all years 2008 to 2012 and less than one percent identified as transgender. The majority of respondents identified as heterosexual with 9% identifying as bisexual and 3% as homosexual in 2012.

The median age of survey respondents increased from 36 to 38 years over the period 2008 to 2012 with a concurrent decrease in the proportion of young people (aged less than 25 years) from 9% in 2008 to 7% in 2012 ($\chi 2$ trend $p<0.001$) (Figure 1). While the median years since first injection increased from 15 years to 17 years over the period, the proportion of new initiates (those reporting their first injection in the past three years) increased from 5% to 7% ($\chi 2$ trend $p=0.002$) (Figure 2). The median age at first injection was 18 years in all survey years between 2008 and 2012.

The proportion of respondents from an Indigenous Australian background was stable at 11% to 12% over the period 2008 to 2012. The majority of respondents were born in Australia (84% to 87%), with the United Kingdom and Ireland (4%) and New Zealand (4%) the most common countries of birth outside Australia in 2012. The vast majority of respondents (range 93% to 95%) reported that their parents spoke English at home. The proportion of participants reporting imprisonment during the year prior to the survey was stable at between 9% and 13% over the period 2008 to 2012, and among this group, approximately one third (range 31%-34%) reported injecting while in prison.

Figure 1. Median age and median years since first injection, 2008 to 2012

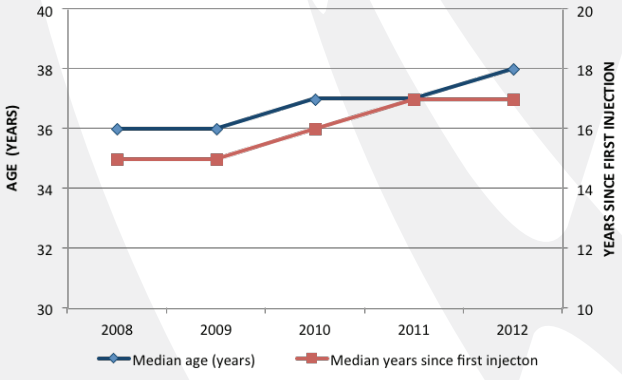
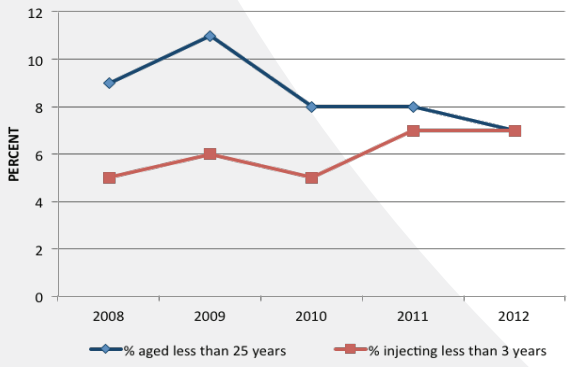


Figure 2. Proportion of young injectors and new initiates, 2008 to 2012

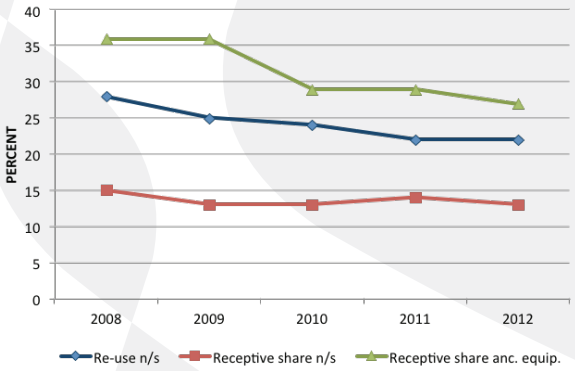


Injecting risk behaviour

Over the period 2008 to 2012, approximately half the respondents reported daily or more frequent injection in the month prior to the survey (47% to 50%). In 2012, respondents that reported last injecting an opioid were more likely to report daily or more frequent injection than respondents who last injected other drugs (59% vs. 44%, $p<0.001$). Prevalence of at least one public injection (injection in a car, beach, park, street or squat) in the month prior to survey completion was stable over the period 2008 to 2012 (range 42% to 45%). In 2012, 15% of respondents reported being present when someone injected for the first time.

Reuse of needles and syringes (including one's own) in the month prior to survey participation declined significantly from 28% in 2008 to 22% in 2012 ($\chi 2$ trend $p<0.001$). Receptive sharing of needles and syringes in the last month was stable over the period 2008 to 2012 (range 13% to 15%), while receptive sharing of other drug preparation equipment also declined significantly from 36% in 2008 to 27% in 2012 ($\chi 2$ trend $p<0.001$). Spoons and water were the most common receptively shared other drug preparation items in each of the past five years.

Figure 3. Prevalence of re-use and receptive sharing of needles and syringes and other drug preparation equipment, 2008 to 2012

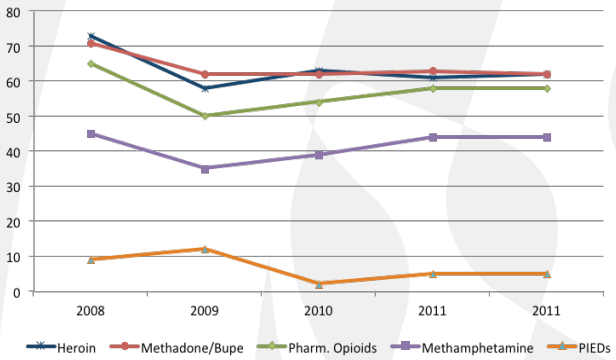


HIV and HCV antibody prevalence

Between 2008 and 2012, HIV antibody prevalence remained low at 1.5% or less nationally and at 3% or less in all states and territories. No respondents in Tasmania or the Australian Capital Territory tested HIV antibody positive in any of the past five years.

Over the period 2008 to 2012, HCV antibody prevalence declined significantly from 62% in 2008 to 53% in 2012 ($\chi 2$ trend $p<0.001$). HCV antibody prevalence was highest among participants aged 35 years and over and among those who first initiated injecting drugs more than ten years prior to survey participation. HCV antibody prevalence was higher among participants reporting opioids as the drug last injected than among those reporting methamphetamine as the drug last injected in all survey years 2008 to 2012 (Figure 4).

Figure 4. Hepatitis C antibody prevalence (%) by drug last injected, 2008 to 2012



National and jurisdictional trends in drug last injected

Table 2 illustrates national trends in drugs most recently injected by survey respondents over the period 2008 – 2012.

Table 2. Drug last injected among ANSPS respondents, 2008 to 2012

	2008 n=2270	2009 n=2697	2010 n=2396	2011 n=2395	2012 n=2391
Heroin (%)	34	34	34	33	33
Methamphetamine (%)	28	24	26	27	26
Pharmaceutical opioids (%)	15	16	16	15	14
Methadone (%)	8	9	7	7	7
Buprenorphine (%)	5	5	4	4	4
Bup-naloxone (%)	-	1	2	2	2
PIEDs (%)	2	2	2	5	7
Cocaine (%)	2	2	1	1	1
Other drugs (%)	3	4	7	5	6
Not reported (%)	2	2	<1	<1	<1

Heroin

Nationally, heroin was the most commonly reported drug last injected in all of the past five years, with one third of respondents last injecting this drug. At the jurisdictional level, heroin was the most common drug last injected in all years 2008 to 2012 in three of the eight jurisdictions (Australian Capital Territory, New South Wales and Victoria). Heroin was also the first or second most common drug last injected in Western Australia and South Australia. In all years 2008 to 2012, prevalence of heroin as the drug last injected was highest in Victoria (range 58% to 65%) with reports of heroin injection rare in Tasmania and the Northern Territory.

Methamphetamine

Methamphetamine was the second most commonly reported drug last injected nationally in all survey years 2008 to 2012, and prevalence ranged from 24% to 28%. Among jurisdictions, methamphetamine was the most common drug last injected in Queensland in all years between 2008 and 2012 (range 26% to 34%), and the first or second most commonly reported drug last injected over the same time period in all other jurisdictions except Tasmania.

Pharmaceutical Opioids

Pharmaceutical opioids were the third most commonly reported class of drugs last injected nationally in all years 2008 to 2012, and prevalence was stable at between 14% and 16%. In the Northern Territory pharmaceutical opioids were the most commonly reported drug last injected in all years 2008 to 2012, and prevalence was significantly higher than any other jurisdiction (range 49% to 70%). Pharmaceutical opioids were the most common drug last injected in Tasmania between 2010 and 2012 (33% to 40%) and the second most common drug last injected in Queensland in 2010 (26%) and 2011 (24%).

Methadone and Buprenorphine

Nationally, the proportion of ANSPS respondents who reported last injecting methadone was stable between 2008 and 2012 (range 7% to 9%). In Tasmania, where prevalence of methadone injection is the highest of all jurisdictions, methadone was the first or second most commonly reported drug last injected between 2008 and 2011 (range 28% to 42%), although prevalence was lower in 2012, at 17%. Prevalence of methadone injection was lowest in Victoria, where <3% of respondents reported last injecting this drug in all years 2008 to 2012.

The proportion of respondents who reported buprenorphine as the drug last injected remained stable at between 4% and 5% nationally across all survey years from 2008 to 2012. Prevalence of buprenorphine-naloxone as the last drug injected was low at 2% or less nationally in all years 2008 to 2012.

Other drugs

Nationally, there was a significant increase in the proportion of survey respondents who reported last injecting performance and image-enhancing drugs (PIEDs), from 2% (n=35) in 2008 to 7% (n=162) in 2012 ($\chi 2$ trend $p<0.001$). However, the increase in prevalence was confined to New South Wales (2% to 12%) and Queensland (1% to 11%), with prevalence of PIEDs as the last drug injected 2% or less in all other jurisdictions in all years 2008 to 2012. Nationally, the majority (55%) of respondents who were new to injecting (less than 3 years since first injection) reported last injecting PIEDs in 2012, and in New South Wales and Queensland more than three quarters of new initiates reported last injecting PIEDs (76% and 78% respectively).

National prevalence of cocaine as the drug last injected remained low at 2% or less during the period 2008 to 2012. The proportion of respondents who reported cocaine as the drug last injected was highest in New South Wales (range 2% to 6%) and there were no reports of cocaine as the drug last injected in Tasmania in any of the past five years.

SUMMARY

Although patterns vary across jurisdictions, nationally, heroin was the most commonly reported drug last injected by ANSPS respondents (33% to 34%), methamphetamine was the second most common drug last injected (24% to 28%) and pharmaceutical opioids were the third most common drug last injected (14% to 16%) in all years 2008 to 2012. Prevalence of methadone as the last drug injected also remained stable at between 7% and 9% over the same period. While the prevalence of PIEDs as the drug last injected increased from 2% to 7% nationally, jurisdictional increases were confined to New South Wales and Queensland.

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