



Drug injection trends among participants in the Australian Needle and Syringe Program Survey, 2007-2011

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KEY FINDINGS

- Heroin was the most commonly reported drug last injected in all years 2007 to 2011 and accounted for approximately one third of respondents in each of the survey years. Heroin was the most common drug last injected in the Australian Capital Territory, New South Wales and Victoria in all years 2007 to 2011.
- Methamphetamine was the second most commonly reported drug last injected in all years 2007 to 2011 with prevalence ranging from 24% to 30%. Methamphetamine was the most common drug last injected in Queensland in all years 2007 to 2011.
- 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 2007 to 2011, significantly higher than any other jurisdiction.
- Over the period 2007 to 2011, the proportion of respondents reporting daily or more frequent injecting in the month prior to the survey remained stable at between 47% and 50%.
- HCV antibody prevalence declined significantly over the period, from 62% in 2007 to 53% in 2011, with the decline evident among both men (61% to 54%) and women (64% to 52%).
- Between 2007 and 2011 HIV antibody prevalence remained low at 1.5% or less nationally and at 2.5% or less in all states and territories.

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 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 2007 to 2011.

The number of participating sites (51-53) was stable throughout the survey period. The number of respondents varied from 1912 to 2697 and the response rate varied from 39% to 45%. (Table 1.)

Table 1. ANSPS sample size distribution by jurisdiction, 2007 – 2011

Jurisdiction	2007	2008	2009	2010	2011
ACT	22	31	63	97	100
NSW	701	899	830	680	694
NT	31	75	77	83	70
QLD	417	508	801	550	552
SA	220	196	248	216	213
TAS	168	57	122	106	68
VIC	243	308	334	445	506
WA	110	196	222	219	192
Total	1912	2270	2697	2396	2395
Response rate	39%	39%	45%	39%	41%
N° of sites	52	53	51	53	53

NATIONAL TRENDS

Demographic characteristics

The median age of survey respondents increased from 35 to 37 years over the period 2007 to 2011 (Figure 1) with a concurrent decrease in the proportion of young people (aged less than 25 years) from 10% in 2007 to 8% in 2011. 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% (Figure 2). The median age at first injection remained stable at 18 years between 2007 and 2011.

Figure 1. Median age and median years since first injection, 2007 – 2011

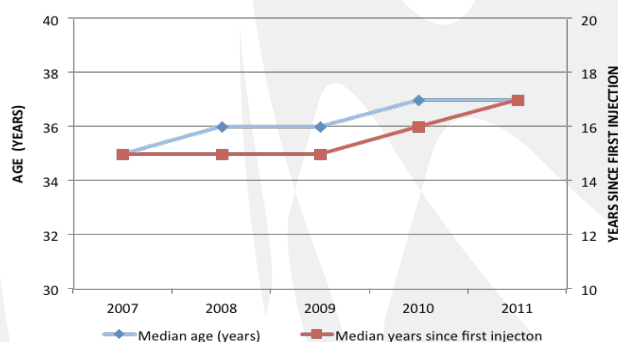
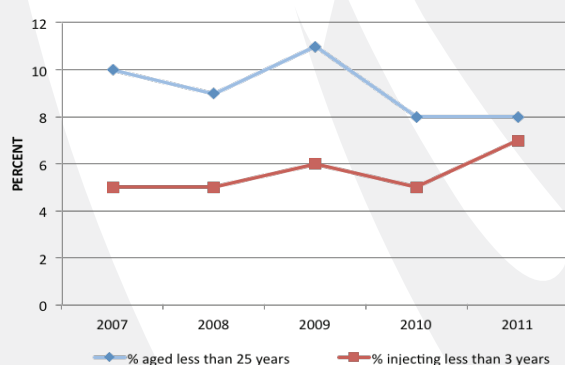


Figure 2. Proportion of young injectors and new initiates, 2007 – 2011



Approximately two thirds of survey participants were male in all years 2007 to 2011 and less than one percent identified as transgender. The majority of respondents identified as heterosexual with 9% identifying as bisexual and 4% as homosexual in 2011. The proportion of respondents from an Indigenous Australian background was stable at 11% to 12% over the period 2007 to 2011. The majority of respondents were born in Australia (84% to 87%), with the United Kingdom and Ireland (5%) and New Zealand (3%) the most common countries of birth outside Australia in 2011. Most respondents reported that their parents spoke English at home (range 93% to 95%). The

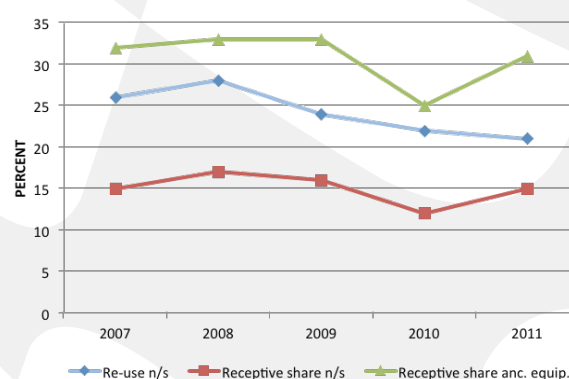
proportion of participants reporting imprisonment during the year prior to the survey declined from 13% in 2007 to 10% in 2011 (χ^2 trend $p < 0.001$), and among respondents recently imprisoned, approximately one in three (range 31%-37%) reported injecting in prison.

Injecting risk behaviour

The proportion of respondents reporting daily or more frequent injection in the month prior to the survey remained stable at between 47% and 50% over the survey period 2007 to 2011. In 2011, daily injecting was significantly more common among respondents that reported last injecting an opioid compared to those last injecting a stimulant (62% vs. 38%, $p < 0.001$). Prevalence of at least one public injection (injection in a car, beach, park, street or squat) in the month prior to survey completion declined from 46% in 2007 to 42% in 2011 (χ^2 trend $p = 0.043$).

Reuse of needles and syringes (including one's own) in the month prior to survey participation declined from 26% in 2007 to 21% in 2011 (χ^2 trend $p < 0.001$). Recent receptive sharing of needles and syringes was stable, ranging from 12% to 17% over the same period. Around a third of ANSPS respondents reported receptive sharing of ancillary equipment in all years 2007 to 2011 with spoons and water the most common receptively shared ancillary items in each of the past five years.

Figure 3. Prevalence of re-use and receptive sharing of needles and syringes and ancillary equipment, 2007-2011

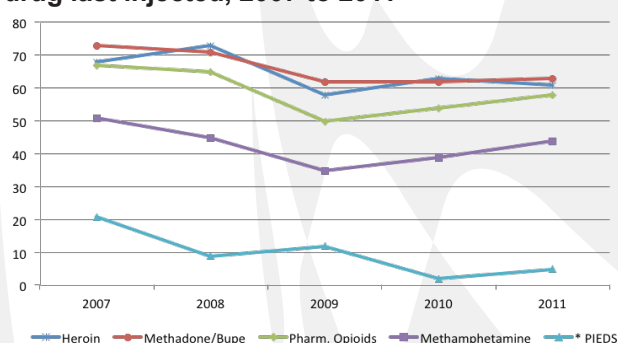


HIV and HCV antibody prevalence

Between 2007 and 2011, HIV antibody prevalence remained low at 1.5% or less nationally and at 2.5% or less in all states and territories. HIV antibody prevalence was highest among male participants reporting homosexual identity where prevalence ranged from 23.5% to 37.5% over the period 2007 to 2011.

HCV antibody prevalence declined significantly over the period, from 62% in 2007 to 53% in 2011 (χ^2 trend $p < 0.001$) with significant declines evident among both men (61% to 54%) and women (64% to 52%). 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. In all years between 2007 and 2011, HCV antibody prevalence was higher among participants reporting heroin or pharmaceutical opioids as the drug last injected than among those reporting methamphetamine as the drug last injected (Figure 4).

Figure 4. Hepatitis C antibody prevalence (%) by drug last injected, 2007 to 2011



*PIEDs = performance and image-enhancing drugs

National and jurisdictional trends in drug last injected

Table 2 illustrates national trends in drugs most recently injected by survey respondents during 2007 – 2011.

Table 2. Drug last injected among ANSPS respondents, 2007-2011

	2007 n=1912	2008 n=2270	2009 n=2697	2010 n=2396	2011 n=2395
Heroin (%)	31	34	34	34	33
Methamphetamine (%)	30	28	24	26	27
Pharmaceutical opioids (%)	14	15	16	16	15
Methadone (%)	10	8	9	7	7
Buprenorphine (%)	5	5	5	4	4
PIEDs (%)	1	2	2	2	5
Cocaine (%)	2	2	2	1	1
Other drugs (%)	6	3	4	7	5
Not reported (%)	2	2	2	<1	<1

Heroin

Nationally, heroin was the most commonly reported drug last injected from 2007 to 2011 with around one third (range 31% to 34%) of respondents last injecting this drug. At the jurisdictional level, heroin was the

most common drug last injected in all years 2007 to 2011 in three of the eight jurisdictions (Australian Capital Territory, New South Wales and Victoria). Heroin was also the most common, or second most common, drug last injected in Western Australia and South Australia. Prevalence of heroin as the drug last injected was highest in Victoria (range 54% to 61%) in all years 2007 to 2011, with reports of heroin injection rare in Tasmania and the Northern Territory.

Methamphetamine

Nationally, methamphetamine was the second most commonly reported drug last injected in all survey years 2007 to 2011 with prevalence ranging from 24% (in 2009) to 30% (in 2007). Jurisdictionally, methamphetamine was the most common drug last injected in Queensland in all years between 2007 and 2011 with prevalence ranging from 27% (in 2010) to 35% (in 2007). In South Australia, methamphetamine was the most commonly reported drug last injected in all survey years except 2011 when it was the second most common drug last injected (range 35% in 2011 to 51% in 2008). Methamphetamine was the first or second most commonly reported drug last injected in all survey years 2007 to 2011 in all remaining jurisdictions.

Pharmaceutical Opioids

Nationally, pharmaceutical opioids were the third most commonly reported class of drugs last injected in all years 2007 to 2011, with prevalence stable at between 14% and 16%. In the Northern Territory pharmaceutical opioids were the most commonly reported drug last injected, with the proportion of respondents who reported last injecting pharmaceutical opioids ranging from 49% to 63%, significantly higher than any other jurisdiction. Pharmaceutical opioids were the most common drug last injected in Tasmania in 2010 (33%) and 2011 (34%), and the second most common drug last injected in Queensland in the same years (26% in 2010 and 24% in 2011).

Methadone and Buprenorphine

Nationally, the proportion of ANSPS respondents who reported last injecting methadone declined from 10% in 2007 to 7% in 2011 (χ^2 trend $p = 0.031$). In Tasmania, where prevalence of methadone injection is the highest of all jurisdictions, methadone was the most commonly reported drug last injected between 2007 and 2009, with prevalence ranging from 32% to 42%) and the second most predominant drug last injected (behind pharmaceutical opioids) in 2010 and 2011, with rates ranging from 28% to 31%. In the ACT, the proportion

of respondents who reported last injecting methadone increased from 0% in 2007 to 12% in 2011 (χ^2 trend $p=0.030$).

Nationally, the proportion of respondents reporting buprenorphine as the drug last injected remained stable at between 4% and 5% across all survey years from 2007 to 2011. Prevalence of buprenorphine as the drug last injected was highest in Victoria (range 4% to 11%), the Australian Capital Territory (range 7% to 10%) and Western Australia (range 4% to 9%).

Other drugs

While relatively small proportions of survey respondents reported last injecting performance and image-enhancing drugs (PIEDs) nationally, the number of respondents who last injected PIEDs increased from 20 (1%) in 2007 to 109 (5%) in 2011. In New South Wales, the number of respondents who last injected PIEDs increased from 12 (2%) in 2007 to 64 (9%) in 2011 (χ^2 trend $p<0.001$) and in Queensland the number of respondents who last injected PIEDs increased from 5 (1%) in 2007 to 41 (7%) in 2011 (χ^2 trend $p<0.001$). Among the sub-sample of males who were new initiates to injecting in 2011 more than half (53%) reported last injecting PIEDs.

National prevalence of cocaine as the drug last injected remained low at between 1% to 2% during the survey period 2007 to 2011. 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 in all years between 2007 and 2011, heroin was the most commonly reported drug last injected by ANSPS respondents, methamphetamine was the second most common drug last injected and pharmaceutical opioids were the third most common drug last injected. Prevalence of methadone as the last drug injected was 10% or less across all survey years with a decline occurring between 2007 and 2011. In the same survey period, prevalence of performance and image-enhancing drugs as the drug last injected increased from 1% to 5%, although numbers remain relatively small (range 20 - 109).

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