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## Key findings

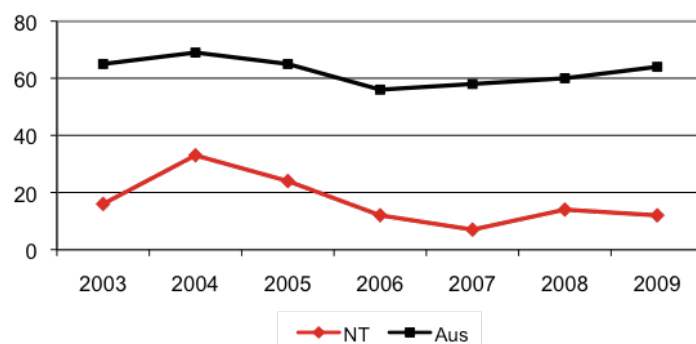
- Morphine is the main opioid used by IDU in the NT.
- Key expert descriptions of NT market characteristics help explain the preference for morphine.
- Oxycodone is emerging as the next most used opioid in the NT.

## Opioid use in the Northern territory

### Morphine or heroin?

Around Australia, heroin is the most commonly used illicit opioid (AIHW). This is not the case in the Northern Territory (NT). For example, the proportions of Illicit Drug Reporting System (IDRS) injecting drug users (IDU) reporting recent injection of heroin at the national level (Figure 1) have oscillated around 62%, compared to an average of 17% in the NT for the same period. These proportions show some similarity in movement over time, peaking in both the NT (33%) and Australia (69%) in 2004 then declining into 2006. Recent injection increased nationally in 2007 and has continued to do so into 2009, while recent injection continued to decline in the NT into 2007. In 2008 and 2009, recent injection of heroin in the NT has increased but not consistently.

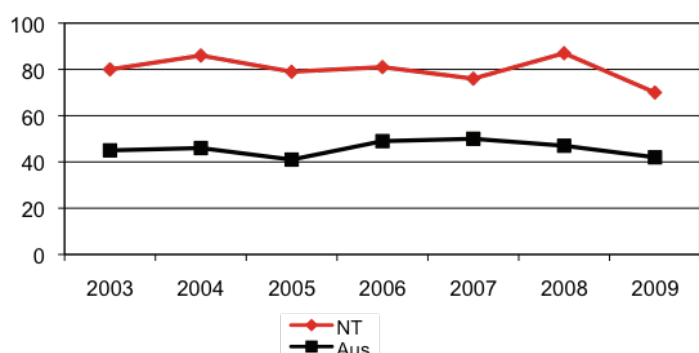
**Figure 1: Recent injection of heroin among IDU, 2003 to 2009, NT and Australia**



Source: Moon, 2010, Stafford, 2010.

In contrast, recent injection of illicitly obtained pharmaceutical morphine has been consistently higher among NT IDU (Figure 2). From 2003 to 2009 recent injection of morphine was reported by around 80% of NT IDU, although declining to a low for the period of 70% in 2009.

**Figure 2: Recent injection of morphine among IDU, 2003 to 2009, NT and Australia**



Source: Moon, 2010, Stafford, 2010.

This pattern of recent injection of heroin and morphine is typical of other characteristics of illicit opioid use reported by IDRS IDU: recent use of illicit morphine is higher in the NT (70% in 2009, Moon 2010) than nationally (40%, Stafford, 2010) and NT respondents (77% in 2009) are more likely to report morphine as the drug injected most often in the month before interview than is the case nationally (19%).

## Market characteristics

MS Contin is the main brand of morphine used by NT IDU over time (Table 1) followed by Kapanol. Both MS Contin and Kapanol are most often purchased in 100mg doses. NT IDU currently report a median price of \$80 for both.

**Table 1: Main brands and price of morphine, 2003 to 2009**

	2003	2004	2005	2006	2007	2008	2009
<b>MS contin</b>							
% IDU used	72	70	62	31	59	81	52
100mg median price (\$)	60	60	60	60	60	80	80
<b>Kapanol</b>							
% IDU used	5	8	13	4	8	12	13
100mg median price (\$)	50	50	60	60	60	80	80

Source: Moon, 2010.

Frequency of use, whether measured by median days or the proportion of recent users who used daily, has fluctuated and may be declining.

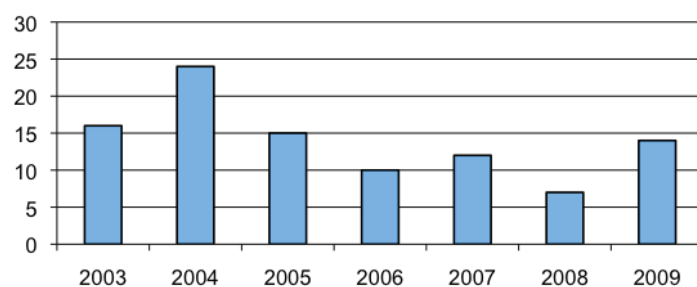
**Table 2: Selected characteristics of morphine use in the NT, 2003 to 2009**

	2003	2004	2005	2006	2007	2008	2009
Median days illicit use	180	172	140	90	74	150	90
% daily illicit use	45	41	37	45	45	52	38

Source: Moon, 2010.

Since 2003, heroin was reported as 'very easy' to obtain in only one year (17% of IDU in 2008). The proportions reporting morphine as 'very easy' to obtain are shown in Figure 3.

**Figure 3: IDU reporting morphine as 'very easy' to obtain, 2003 to 2009**

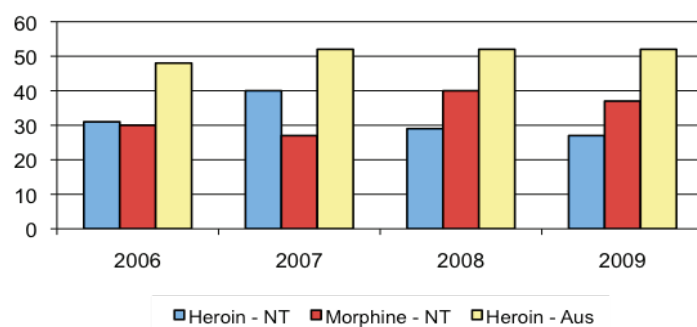


Source: Moon, 2010.

## Why not heroin?

Around half of IDU nationally reported heroin as their drug of choice from 2006 to 2009 (Figure 4). The NT shows a different pattern. In 2006 and 2007 NT IDU reported heroin as their drug of choice. More recently, in 2008 and 2009, this proportion declined while morphine became the main drug of choice.

**Figure 4: Drug of choice, morphine and heroin, NT and Australia 2006 to 2009**



Source: Moon, 2010, Stafford, 2010.

Nationally, IDU reports of their drug of choice are consistent with their behaviour. That is, between 2006 and 2009 IDU preferred heroin and used heroin more often than other opioids (Figure 4). In contrast, in 2006 and 2007 NT IDU preferred heroin but mainly used morphine. This pattern has changed more recently, with NT IDU now reporting a preference for the opioid they mostly use, morphine.

In the NT, those who report heroin as their drug of choice but have mainly used some other drug in the last month explained that this difference was due to the poor availability of heroin in the NT. This account is consistent with IDU reports of availability shown above.

Why is it hard to get heroin in Darwin? Key experts note that Darwin:

- has an economically small illicit drug market compared other jurisdictions,
- is not known as a point of importation of illicit drugs and is a long way from the Southern capitals,
- does not produce illicit drugs locally in any quantity,
- has an 'active' illicit trade in small quantities of pharmaceutical morphine originally obtained licitly.

In relation to this last point, it is recognised by key experts and IDU that most of the illicit morphine in the NT comes from prescription theft or fraud, or from chronic pain sufferers. Key experts also note that some of the morphine on the NT market comes from pharmacy theft.

Together, these are taken to create a market where it would be difficult to make a profit from dealing in heroin and where the risk of apprehension is high.

### Why morphine?

As noted above, increased proportions of NT IDU have recently reported morphine as their drug of choice. This suggests that it may be no longer the case that the majority of recent morphine users do so reluctantly, that is, mainly because they cannot obtain heroin. Qualitative reports from IDU support this possibility, listing reasons for their preference. On the one hand there are perceived benefits from the morphine used being a pharmaceutical product, namely, that morphine doses are more predicable in their effects than heroin and that the purity of pharmaceutical morphine is reliable. These qualities are seen to make morphine use less likely to result in

overdose or other negative health consequences.

IDU also report a perception that their interactions with morphine dealers in Darwin are less risky, than their interactions with heroin dealers in larger capitals. In some cases this is presented as a reason for a move to Darwin while in others it is seen as an unanticipated but desirable effect of moving to Darwin.

The demographic characteristics of the NT IDU sample show some change over time (Table 3). While the sample has been consistently around 70% male, the mean age has increased, as has the proportion of indigenous respondents.

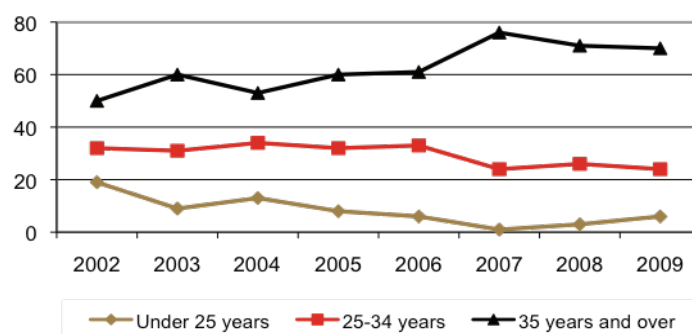
**Table 3: NT IDU sample characteristics, 2003 to 2009**

	2003	2004	2005	2006	2007	2008	2009
Mean age	37	36	38	38	41	40	40
% male	69	75	71	70	66	72	69
% indigenous	13	17	15	16	21	18	20

Source: Moon, 2010.

The age profile in particular appears to show a trend change, with the proportion of those aged 35 years and over increasing over time while those aged less than 35 has declined (Figure 5). Some IDU have suggested that older, longer-term NT residents are more 'used to' morphine and place greater weight on the perceived lower risks associated with morphine use.

**Figure 5: Age profile, NT IDU, 2003 to 2009**



Source: Moon, 2010.

Although morphine remains the main opioid used in the NT, its use has declined into 2009 (Figure 2 and Table 2). Illicit physopentone and methadone syrup use has fluctuated among the IDU over time while buprenorphine use as declined. Apart from an uncertain increase in heroin use (Figure 1), illicit oxycodone use has shown an increase over time and may be emerging as the second most used opioid in the NT (Table 4).

**Table 4: Other illicit opioid use in the NT 2005 to 2009**

	2005	2006	2007	2008	2009
% Methadone syrup	21	16	17	25	15
% Physeptone	32	26	26	36	22
% Buprenorphine	20	14	5	18	5
% Buprenorphine-naloxone	na	0	2	4	8
% Oxycodone	11	11	28	31	41

Source: Moon, 2010.

## Related harms

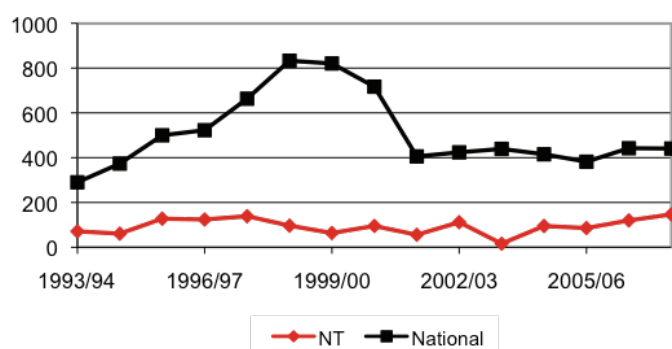
The relative high use of morphine and absence of heroin in the NT combined with the nature of the NT illicit drug market as described by key informants, may have an impact on harms related to illicit drug use (O'Reilly, 2007). For example, self-reported crime among the NT IDU has been consistently lower than found nationally, Table 5, as has the rate per million persons of opioid-related admissions to NT hospitals, Figure 6.

**Table 5: Self-reported total criminal activity in the month before interview, 2003 to 2009**

	2003	2004	2005	2006	2007	2008	2009
% NT	28	39	31	26	29	35	20
% Australia	49	48	46	45	42	41	45

Source: Moon, 2010, Stafford, 2010.

**Figure 6: Opioid-related admissions to NT and Australian hospitals by financial year, rate per million persons, 1993/94-2007/08**



Source: Roxburgh and Burns cited Moon, 2010.

## Conclusions

This bulletin has presented selected trends in the illicit pharmaceutical opioid market in the Northern Territory. Injecting Drug User survey findings are corroborated and to some extent explained by key expert information about characteristics peculiar to the NT market. The suggestion is made that the relative absence of heroin in the Northern Territory has contributed to lower than national illicit drug related harms. It is also noted that morphine use may be declining while there is a parallel increase in the use of Oxycodone.

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