



Unravelling Methamphetamine Use and its Impact in Australia

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CURRENT CONTEXT

- Increasing concern in Australia about methamphetamine use, often framed as 'ice' use
- Strong media interest
'An Epidemic of Negative Headlines'
- Pressure on health & community services to respond appropriately
- Family impact & social disruption



AIM

To examine patterns of methamphetamine use in Australia and associated risks and harms, with a specific focus on ice and other meth user profiles.



Prevalence of methamphetamine use, 2007 and 2013

2013 National Drug Strategy Household Survey

- 7.0% have used methamphetamine in their lifetime
- 2.1% have used methamphetamine in the past 12 months
- 1.4% have used crystal methamphetamine in the past 12 months

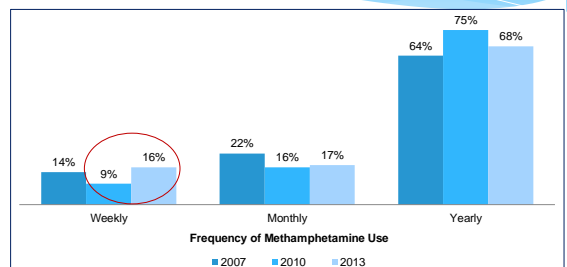
2007 National Drug Strategy Household Survey

- 6.3%* have used methamphetamine in their lifetime
- 2.3% have used methamphetamine in the past 12 months
- 1.2%* have used crystal methamphetamine in the past 12 months

* Statistically significant difference between 2007 & 2013 prevalence ($p < 0.05$)



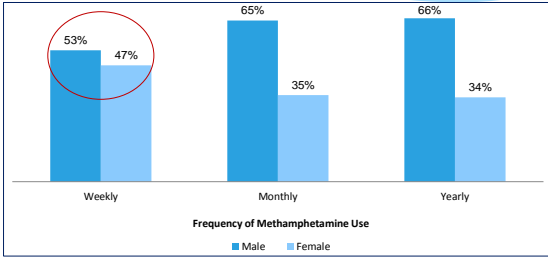
Frequency of methamphetamine use, 2007-2013



Source: Australian Institute of Health and Welfare (AIHW), 2007, 2010, 2013 National Drug Strategy Household Survey. (NCETA secondary analysis, 2015).



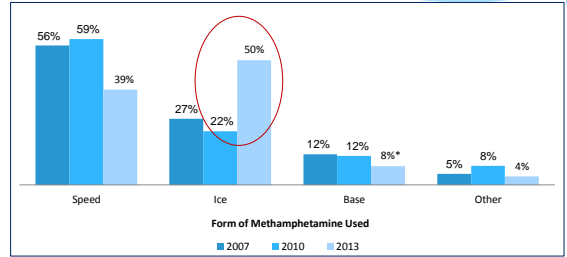
Gender differences in frequency of methamphetamine use, 2013



Source: Australian Institute of Health and Welfare (AIHW), 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).



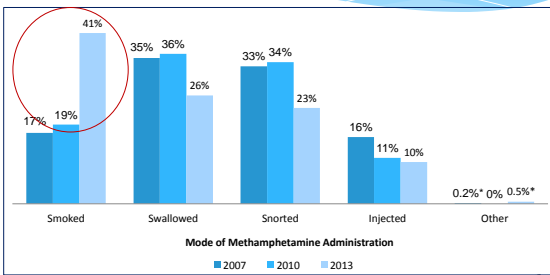
Main form of methamphetamine used in last 12 months, 2007-2013



Source: Australian Institute of Health and Welfare (AIHW), 2007, 2010, 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).
* Estimate may be unreliable due to small sample size



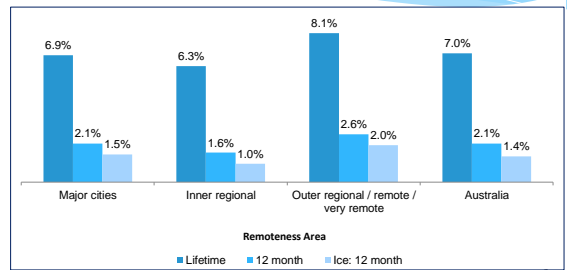
Main route of methamphetamine administration, 2007-2013



Source: Australian Institute of Health and Welfare (AIHW), 2007, 2010, 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).
* Estimate may be unreliable due to small sample size



Methamphetamine use by remoteness area, 2013



Source: Australian Institute of Health and Welfare (AIHW), 2013 National Drug Strategy Household Survey (NCETA secondary analysis, 2015).



STUDY OBJECTIVE

To compare the demographic, patterns of use, and risky behaviours of 'ice' users with 'other' methamphetamine users among respondents to the 2013 National Drug Strategy Household Survey.

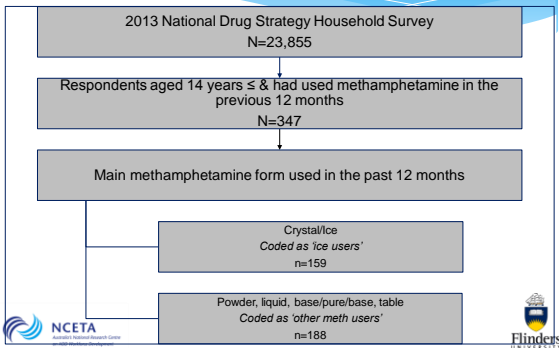


METHODS

- Secondary data analyses
 - Datasets:
 - 2013 National Drug Strategy Household Survey[☆]
 - National Hospital Morbidity Dataset
 - Alcohol and Other Drug National Minimum Dataset
- [☆] For the purposes of this presentation, the principle dataset used



Study Participants



Demographic characteristics: Ice and other methamphetamine users compared, 2013

		Total Sample (%)	Ice Users (%)	Other Meth. Users (%)	Significance Test ¹
Age	Mean age	30.1	28.8	30.9	t=-64.0, <.01
	Male	63.8	62.1	63.9	z=0.3, p=0.36
Gender	Female	36.2	37.9	36.1	
	Heterosexual	87.7	82.5	89.7	z=1.9, p=0.03
Sexual orientation	Other	12.3	17.5	10.3	
Rurality	Rural/remote	27.7	25.1	28.5	z=0.7, p=0.24
	Major city	72.3	74.9	71.5	
Marital status	Single	68.4	74.0	63.7	z=2.0, p=0.02
	Married/de facto	31.6	26.0	36.3	
Education	Did not finish high school	39.2	44.5	30.4	z=2.7, p<.01
	Finished high school	60.8	55.5	69.6	
Employment status	Not in paid work	35.6	41.6	34.9	z=1.3, p=0.10
	In paid work	64.4	58.4	65.1	

¹ One-tailed, 2 sample z test (or independent samples t-test for age) comparing ice and other methamphetamine users

Source: Australian Institute of Health and Welfare (AIHW), 2013 National Drug Strategy Household Survey, (NCETA secondary analysis, 2015).

Mean age of methamphetamine users, 2007-2013

	2007	2010	2013	Trend
Ice Users	29.5 years	28.9 years	28.8 years*	↓
Other Methamphetamine Users	28.6 years	30.0 years	30.9 years*	↑
All Methamphetamine Users	28.9 years	29.6 years	30.1 years*	↑

* Statistically significant difference between 2007 and 2013 (p<0.05)

Source: Australian Institute of Health and Welfare (AIHW), 2007, 2010, 2013 National Drug Strategy Household Survey, (NCETA secondary analysis, 2015).

Patterns of use: Ice and other methamphetamine users compared, 2013

		Total Sample (%)	Ice Users (%)	Other Meth. Users (%)	Significance Test ¹
Main form of meth. used in past 12 months	Ice	50.4	-	-	
	Other	49.6	-	-	
Frequency of use	Regular ²	32.1	45.5	23.3	z=4.4, p<.01
	Occasional ³	67.9	54.5	76.7	
Average amount used	0.6g or more	14.5	8.0	18.5	z=2.7, p<.01
	0.5g or less	85.5	92.0	81.5	

¹ One-tailed, 2 sample z test (or independent samples t-test for age) comparing ice and other methamphetamine users

² Monthly or more often

³ At least yearly but less than monthly

Risky behaviours: Ice and other methamphetamine users compared, 2013

		Total Sample (%)	Ice Users (%)	Other Meth. Users (%)	Significance Test ¹
Undertook at least one risky activity	Yes	60.4	67.5	55.6	z=2.2, p=0.01
	No	39.6	32.5	44.4	
Other illicit drug use	Yes	91.9	91.3	93.9	z=0.9, p=0.18
	No	8.1	8.7	6.1	
Smoking status	Smoker	64.8	68.9	57.6	z=2.2, p=0.02
	Non-smoker	35.2	31.1	42.4	
Drinking status	Risky drinker	68.5	68.0	73.2	z=1.1, p=0.14
	Low risk drinker	31.5	32.0	26.8	
Ever treated for alcohol/drug use	Yes	28.3	32.1	20.9	z=2.2, p=0.01
	No	71.7	67.9	79.1	
Psychological distress	High-very high	28.2	30.8	22.6	z=1.7, p=0.04
	Low-moderate	71.8	69.2	77.4	
Unsuccessfully tried to reduce/cease use	Yes	11.7	15.2	6.9	z=2.5, p=0.01
	No	88.3	84.8	93.1	

¹ One-tailed, 2 sample z test (or independent samples t-test for age) comparing ice and other methamphetamine users

Source: Australian Institute of Health and Welfare (AIHW), 2013 National Drug Strategy Household Survey, (NCETA secondary analysis, 2015).

Predictors of ice use (Logistic regression, reference category: other methamphetamine users)

	p	OR	95% CI	
			Lower	Upper
Undertook at least one risky activity (RC: No)				
Yes	0.00	2.52	1.40	4.55
Average amount used (RC: 0.5g or less)				
0.6g or more	0.00	0.22	0.08	0.59
Rurality (RC: Major cities)				
Rural/remote	0.03	0.49	0.25	0.94
Education (RC: Finished high school)				
Did not finish high school	0.04	1.92	1.05	3.53

Source: Australian Institute of Health and Welfare (AIHW), 2013 National Drug Strategy Household Survey, (NCETA secondary analysis, 2015).

Health Service Utilisation

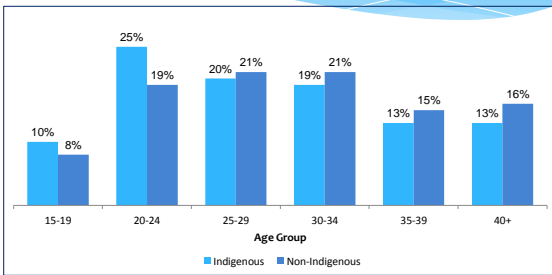
AOD treatment specialist services

Report growing episodes of care for methamphetamine

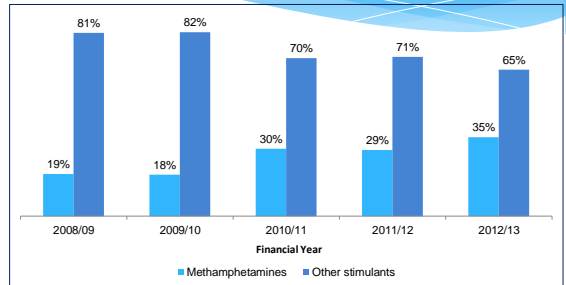
- In 2009/10, <1% of episodes of AOD specialist treatment were for meth (**n=1,240**)
- In 2012/13, >3% of episodes of AOD specialist treatment were for meth (**n=4,043**)



Methamphetamine treatment: Indigenous status by age, 2012/13



Hospital separations: methamphetamine vs other stimulants, 2008/09-2012/13



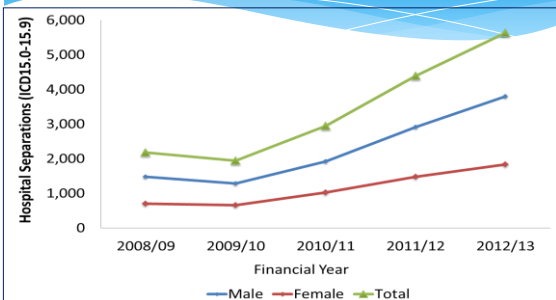
Source: Australian Institute of Health and Welfare (AIHW), 2012/13 Alcohol and Other Drug Treatment Services National Minimum Data Set (NCETA secondary analysis, 2015).



Source: Australian Institute of Health and Welfare (AIHW), 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).



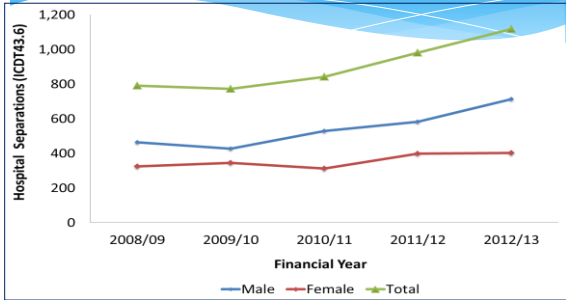
Hospital separations: stimulants, 2008/09-2012/13



Source: Australian Institute of Health and Welfare (AIHW), 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).



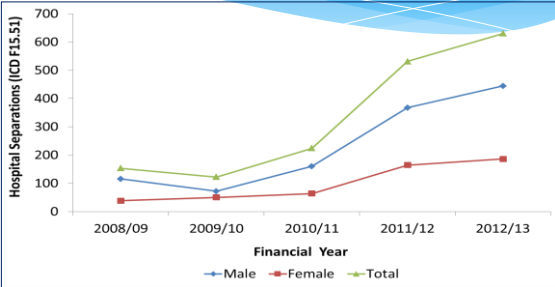
Hospital separations: poisonings due to psychostimulants, 2008/09-2012/13



Source: Australian Institute of Health and Welfare (AIHW), 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).



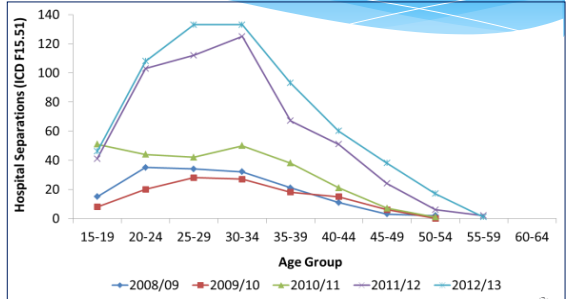
Hospital separations: psychotic disorders due to methamphetamines, 2008/09-2012/13



Source: Australian Institute of Health and Welfare (AIHW), 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).



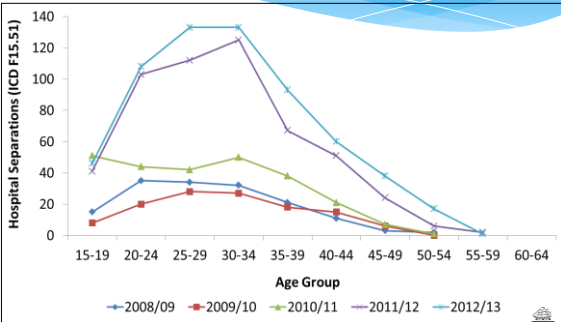
Hospital separations: psychotic disorders due to methamphetamines by age, 2008/09-2012/13



Source: Australian Institute of Health and Welfare (AIHW), 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).



Hospital separations: psychotic disorders due to methamphetamines by age, 2008/09-2012/13



Source: Australian Institute of Health and Welfare (AIHW), 2008-2013 National Hospital Morbidity Database (NCETA secondary analysis, 2015).



DISCUSSION

- Important not to see either the causes or the responses to meth/ice issues in isolation
- Comprehensive/holistic responses are needed
- Consideration needed of concurrent patterns of use:
 - Alcohol: high levels of stimulant use associated with risky drinking and night time economy ... *'Wide-awake drunkenness'* (Pennay et al 2014)
 - Cannabis: Potential displacement effect, shifting from cannabis to meth to avoid drug detection.



Reducing Stigma

In order to minimise potential harms from methamphetamine use, encourage people into treatment, and ensure the provision of appropriate evidence based care, it is crucially important to not stigmatise drug use.

Stigmatising users reduces the prospect that those who need care will seek it.

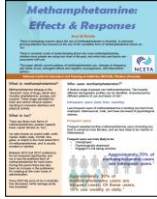
Strong supportive messages are needed that highlight that treatment is effective and can be provided in various forms.

CONCLUSION

- Ice use is more prevalent among vulnerable populations of methamphetamine users, exacerbating inherent risks & harms.
- Compared to other meth users, ice users:
 - Are significantly:
 - Less likely to have completed their education
 - More likely to undertake risky behaviours & to live in rural/remote areas
 - Use less amounts, but more frequently.
- Effective tailored interventions are required that reflect the needs of different sub-populations of users.



RESOURCES



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THANK YOU

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